

# Great Lakes Water Authority

## Industrial Pretreatment Program



October 30, 2017



# Great Lakes Water Authority

## Industrial Pretreatment Program

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The Great Lakes Water Authority (GLWA) seeks to be recognized as a Control Authority for implementation and enforcement of the Industrial Pretreatment Program (IPP) within the Great Lakes Water Authority's Service Area in Southeastern Michigan.

### *Background*

The City of Detroit and its Water and Sewerage Department has previously developed and received approval from the State of Michigan of its Industrial Pretreatment Program on September 30, 1985 and as revised on June 26, 1997. In its latest manifestation, the IPP consists of two separate documents, namely:

1. An IPP **Program Document** describing the specific obligations, actions, and requirements necessary to fulfill regulatory requirements;
2. An IPP **Practice Manual**, describing the procedures, practices and techniques and examples of forms necessary to implement the approved program.

As a result of the City of Detroit's municipal bankruptcy, the City of Detroit, the counties of Macomb, Oakland, and Wayne, and the State of Michigan officially united to form the Great Lakes Water Authority (GLWA), which was launched on January 1, 2016. The IPP responsibilities for implementation and enforcement of the City of Detroit's Industrial Pretreatment Program (IPP) were assumed by the GLWA, as agent for the City of Detroit and Water & Sewerage Department.

### *Development of a Great Lakes Water Authority Industrial Pretreatment Program*

As a new entity, the GLWA seeks to establish its own Industrial Pretreatment Program and be recognized as a Control Authority in its own right. This document constitutes the GLWA's submission in satisfaction of the requirements of 40 CFR 403.8 (f) and 40 CFR 403.9 (b), which are summarized below:

| Program Requirement           | Reference Document(s)                                  | Document Tab |
|-------------------------------|--------------------------------------------------------|--------------|
| Legal Authority               | Statement from General Counsel                         | 1            |
|                               | Copy of Rules of 11/30/2016                            | 2            |
| Funding Description           | See Copy of Rules of 11/30/2016                        | 3            |
| Enforcement Response Plan     | Copy of Plan                                           | 4            |
| Organization Description      |                                                        | 5            |
| List of Users                 | Report of users meeting criteria of 40 CFR 403.3(v)(1) | 6            |
| Procedures for Implementation | See Procedures & Sample Forms                          | 7            |

To this end, we have adopted rules to describe the Legal Authority necessary to support an IPP, and developed this Program document to describe the procedures necessary to implement the program requirements listed in Rule 323.2306(a).

The GLWA IPP document is understood to be an enforceable component of its NPDES Permit, which is supported by a myriad of additional documents, including but not limited to ordinances or rules, community delegation agreements, a State delegation agreement, and service contracts with certain wholesale customers comprising the system; Industrial User files; and Standard Operating Procedures (SOP) which are separate from this program document. The GLWA may, from time to time, modify the procedures established in its practice manuals and SOPs to the extent those modifications do not impact GLWA's IPP Program obligations under applicable law. These materials, as amended, will be available to the regulatory agencies and the general public for review.

The GLWA is committed to implement and enforce this Industrial Pretreatment Program to protect the Wastewater Treatment Plant, the Wastewater Collection System, as well as all persons and communities and the environment of Southeastern Michigan.

**GENERAL COUNSEL  
LETTER**



**Office of the General Counsel**  
735 Randolph Street, Suite 1900  
Detroit, Michigan 48226

October 30, 2017

Mr. Robert Kaplan  
Acting Regional Administrator  
United States Environmental Protection Agency, Region V  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3507

**Re: Great Lakes Water Authority Industrial Pretreatment Program**

Dear Mr. Kaplan:

The Office of the General Counsel (the "Office") for the Great Lakes Water Authority ("GLWA") participated in the drafting of the 2016 GLWA's Industrial Pretreatment Program Rules ("GLWA's IPP Rules"). The Office has reviewed its provisions to determine their adequacy for purposes of compliance with the requirements of 40 C.F.R. § 403.8 (f). Based on said review, and as set forth and discussed in more detail below, GLWA concludes that it has adequate legal authority to comply with the specific provisions of 40 C.F.R. § 403.8 (f). The Rules can be located on the GLWA website: [www.glwater.org/our-system/environmental-rules](http://www.glwater.org/our-system/environmental-rules).

GLWA's IPP Rules were enacted for purposes of compliance with the Federal Clean Water Act of 1977 and the General Pretreatment Regulations of June 26, 1978, 40 C.F.R. Part 403. GLWA's IPP Rules regulate the discharge of industrial and commercial wastes into the wastewater treatment system operated by GLWA. GLWA's IPP Rules apply to all industrial and commercial users whose wastewater is treated by GLWA, either directly to those users who are located within GLWA or through contract to those users who are served through suburban communities or other governmental entities. A discussion of the specific provisions of GLWA's IPP Rules follows.

The Preamble states the purpose of GLWA's IPP Rules, and Chapter I sets forth the definitions of terms used in the IPP Rules.

Chapter II addresses the authority for GLWA's IPP Rules and for enforcement of its provisions. This section provides that GLWA's IPP Rules will apply to every industrial and commercial user whose wastewater is treated at the GLWA's Water Resource Recovery Facility. Further, Chapter II prohibits the discharge of waste which do not conform to specified criteria or effluent standards, including Federal Categorical Pretreatment Standards and state requirements and limitations. Section II-602 also sets forth acceptable measuring and sampling



methods and procedures, and addresses various other matters affecting direct or indirect discharges of wastes into the Authority's wastewater treatment system. The user fees and charges are established by the GLWA Board in accordance with the provisions of Act No. 233, Public Acts of Michigan 1955, as amended ("Act 233"). Section II-602 sets forth the reporting requirements as to pollutants regulated by the Rules, or by EPA or State of Michigan regulations.

Section II establishes industrial waste permit requirements, and sets forth the application and modification criteria and procedures, as well as permit duration and transfer requirements.

Section II-1001 sets forth the enforcement options and procedures to be used by the GLWA Board, through the GLWA Chief Executive Officer, to mandate compliance with the provisions of GLWA's IPP Rules or with any industrial waste permit issued thereunder. These enforcement options range from cooperative conciliation conferences to a formal hearing before the GLWA Board and discontinuation of services to the violator.

Chapter VIII and Section II-1004 set forth the legal actions available to the GLWA Board for violations of the IPP Rules or of state or federal regulations. The remedies set forth include both injunctive relief and fines for each offense. Penalties for falsification of information are also included.

Section II-901 establishes the confidentiality of information gathered by GLWA employees pursuant to GLWA's IPP Rules.

The specific requirements of 40 C.F.R. §403.8 (f) (1) are met by the sections of IPP Rules referenced below:

| <b><u>40 C.F.R. 403.8 (f)(1)</u></b>                                                                                                                                                                                                                                                                                                   | <b><u>2016<br/>GLWA IPP<br/>Rules</u></b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| (i) Deny or condition new or increased contributions of pollutants or changes in the nature of the pollutants to the POTW by industrial users.                                                                                                                                                                                         | Section II-201-206                        |
| (ii) Require compliance with applicable pretreatment standards and requirements by industrial users.                                                                                                                                                                                                                                   | Section II-201-206                        |
| (iii) Control through permit...the contribution to the POTW by each industrial user to ensure compliance with applicable pretreatment standards and requirements together with permit conditions for each user                                                                                                                         | Section II-201-303                        |
| (iv) Require (A) the development of a compliance schedule by each industrial user for the installation of technology required to meet applicable pretreatment standards and requirements and,<br>(B) the submission of all notices and self-monitoring reports from industrial users as are necessary to access and assure compliance. | Section II-505<br>&<br>Section II-602     |

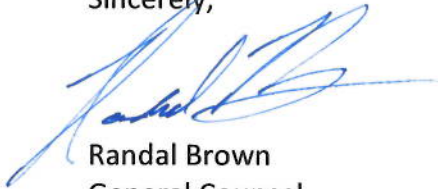
| <b><u>40 C.F.R. 403.8 (f)(1)</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b><u>2016<br/>GLWA IPP<br/>Rules</u></b>    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| (v) Carry out all inspection, surveillance and monitoring procedures necessary to determine, independently of information supplied by industrial users, compliance or non-compliance with applicable pretreatment standards.                                                                                                                                                                                                                                                                                                                                                                                                                    | Section II-500-605                           |
| (vi) (A) Obtain remedies for non-compliance by any industrial user with any pretreatment standard or requirement, including injunctive relief and civil or criminal penalties for noncompliance.<br><br>(B) Include in the pretreatment requirements enforced the duty to comply with all inspection and monitoring activities, with all IPP Rules and regulations of the POTW, and with all reporting requirements. Include authority and procedures for the POTW to immediately halt or prevent discharge which endanger the health or welfare of persons, which endanger the environment, or which interfere with the operation of the POTW. | Section II-1001 &<br><br>Section II-203-1102 |
| (vii) Comply with confidentiality requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Section II-901                               |

GLWA receives and treats wastewater from a number of politically independent communities which are located outside of the GLWA's corporate limits. GLWA provides sewage service to these communities through contracts with the appropriate municipal or governmental authorities. Some of those contracts are for services to only the contracting municipality. The remainder are for services to several communities who receive service through contracts with the municipal or governmental authority which is a party to the contract with GLWA. In accordance with Michigan Public Act 233, GLWA has undertaken to amend the contracts to require the contracting authorities to themselves adopt and enforce appropriate IPP Rules and regulations, or to require the political entities contracting with them for sewage services to adopt and enforce appropriate IPP Rules and regulations pertaining to the discharge industrial and commercial wastes into the sewers. The contract amendments require that such IPP Rules and regulations be consistent with, and at least as stringent as, the provisions of GLWA's IPP Rules.



As discussed above, the provisions of GLWA's IPP Rules, in conjunction with the provisions of applicable federal and state statutes and regulations, give the Great Lakes Water Authority the necessary legal authority to develop and implement the procedures required by 40 C.F.R. §403.8 (f)(2).

Sincerely,



Randal Brown  
General Counsel

Cc: W. Wolfson, Chief Administrative and Compliance Officer  
S. Kuplicki, Manager-Operations IWC



**FUNDING  
DESCRIPTION**

**GLWA: IWC Funding Description for**  
**Industrial Waste Control Activities**

The GLWA, in order to implement and enforce an Industrial Pretreatment Program, and perform other related duties as required by the NPDES Permit MI 0022802 and the Clean Water Act, must have a revenue source which insures adequate funding. The GLWA hereby adopts the following method of funding these regulatory activities:

- a) An IWC Water Meter Charge shall be established by the Board to recover the costs incurred in administering, implementing and enforcing the regulatory activities and obligations under the NPDES Permit MI 0022802 and the Clean Water Act, and any rules adopted by the GLWA Board.
- b) The IWC Water Meter Charge shall be based on the size of the water meter on a proportional basis and assessed on any non-residential water meter with the following exceptions:
  - 1) The IWC Water Meter Charge shall not be assessed on any meter dedicated for Fire Protection purposes only;
  - 2) The IWC Water Meter Charge shall not be assessed on any meter dedicated for Irrigation purposes only;
  - 3) The IWC Water Meter Charge shall not be assessed on any meter from a multi-family residential dwelling; public or private elementary and secondary school which are part of a government school district; colleges, universities, professional schools, junior colleges and technical institutes; and local, state and federal government facilities.
- c) GLWA member communities shall periodically report the quantity, number and size of non-residential meters, and any exempt meters (as described in paragraph 2).
- d) The GLWA shall prepare a bill to each GLWA Member Community using the information provided in paragraph 3 and forward the bill for payment either through the Wholesale Sewer Contract Customer (if applicable) and/or GLWA Member Community, indicating the terms and conditions of payment.
- e) Each GLWA Member Community is responsible for assessing these fees on applicable Users and collection thereof in accordance with the delegation and service agreements; and for reporting changes in the number of meters reported in paragraph 3.
- f) The GLWA reserves the right to collect any and all outstanding amounts in accordance with applicable law.

The origin of this charge was the federal Court Order dated July 27, 1981. Through this order, the Great Lakes Water Authority, as successor of the Detroit Water and Sewerage Department, recovers the cost of the Industrial Waste Control Division budget through the assessment of a meter charge placed on all

water meters of 5/8"  $\Phi$ , or greater than 5/8"  $\Phi$  in all communities serviced by the GLWA's Wastewater System.

The Industrial Waste Control Division is responsible for the implementation and enforcement of regulatory programs that currently include, but are not limited to, the following:

- Industrial Pretreatment Program (as defined by NPDES Permit MI0022802)
- Surcharge Program
- Hauled in Waste Program
- Special Discharge and Groundwater Program
- Best Management and Pollution Prevention Plans (Mercury, FOG control, etc.)

These programs are in response to state and federal requirements.

For purposes of this information statement, a commercial and industrial user shall mean a person who contributes, causes or permits wastewater to be discharged into the POTW, including, but not limited to, a place of business, endeavor, arts, trade or commerce, whether public or private, commercial or charitable but excludes single family and multi-family residential dwellings with discharges consistent with domestic waste characteristics.







## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE   | NATURE OF NON-COMPLIANCE                                                      | NATURE OF VIOLATION                               | ENFORCEMENT RESPONSE(S)                                |
|--------------------------|-------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------|
| Discharge (Unauthorized) | No record of survey, permit application or<br>Baseline Monitoring Report w/CA | Minor User                                        | None, if survey form filed within<br>60 days of notice |
|                          |                                                                               | Failure to notify                                 | Notice of Violation if > 60 days                       |
|                          |                                                                               |                                                   |                                                        |
|                          | Categorical &/or NonCategorical SIU                                           | Failure to notify                                 | NOV & Citation: Penalty                                |
|                          |                                                                               | Reporting                                         | Show Casue Order                                       |
|                          |                                                                               |                                                   | Cease & Desist Order if > 180<br>days                  |
|                          | NO HARM TO POTW                                                               |                                                   | Civil Litigation Referral                              |
|                          |                                                                               | Other (Groundwater, Septage, Stormwater,<br>etc.) | Notice of Violation                                    |
|                          |                                                                               |                                                   |                                                        |
|                          | HARM TO POTW                                                                  | All                                               | Civil                                                  |
|                          |                                                                               |                                                   | Notice of Violation                                    |
|                          |                                                                               |                                                   | Cease & Desist Order                                   |
|                          | Unpermitted wastestream                                                       |                                                   | Civil Litigation Referral                              |
|                          |                                                                               |                                                   | Notice of Violation                                    |
|                          |                                                                               |                                                   | Cease & Desist Order                                   |
| Discharge (Authorized)   | Categorical &/or NonCategorical SIU                                           | Criminal intent                                   | Criminal Litigation Referral                           |
|                          |                                                                               |                                                   |                                                        |
|                          |                                                                               |                                                   |                                                        |
|                          | Unpermitted wastestream                                                       | Failure to notify                                 | NOV & Citation: Penalty                                |
|                          |                                                                               |                                                   | Show Casue Order                                       |
|                          |                                                                               |                                                   | Cease & Desist Order if > 180<br>days                  |
|                          | Categorical &/or NonCategorical SIU                                           | Reporting                                         | Civil Litigation Referral                              |
|                          |                                                                               |                                                   |                                                        |
|                          |                                                                               |                                                   |                                                        |

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| TYPE OF NON-COMPLIANCE | NATURE OF NON-COMPLIANCE                                                           | NATURE OF VIOLATION | ENFORCEMENT RESPONSE(S)                                                             |
|------------------------|------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|
| Discharge (Authorized) | <b>Failure to report Production-based Information Changes</b>                      | Failure to notify   | NOV & Citation: Penalty                                                             |
|                        | Categorical SIU (Subject to Production Standards)                                  | Reporting           | Show Casue Order<br>Cease & Desist Order if > 180 days<br>Civil Litigation Referral |
|                        | <b>Failure to report change in Sample Location or Methods</b>                      | Failure to notify   | NOV & Citation: Penalty<br>Show Casue Order                                         |
|                        | Categorical &/or NonCategorical SIU                                                | Reporting           | Cease & Desist Order if > 180 days<br>Civil Litigation Referral                     |
|                        | <b>Failure to report other changes in operationg condition</b>                     | Failure to notify   | NOV & Citation: Penalty<br>Show Casue Order                                         |
|                        | Categorical &/or NonCategorical SIU                                                | Reporting           | Cease & Desist Order if > 180 days<br>Civil Litigation Referral                     |
|                        | <b>Failure to notify of spill, upset, bypass, self-monitoring violation, other</b> | Failure to notify   | NOV & Citation: Penalty<br>Show Casue Order                                         |
|                        | Categorical &/or NonCategorical SIU                                                | Reporting           | Cease & Desist Order if > 180 days<br>Civil Litigation Referral                     |
|                        |                                                                                    |                     |                                                                                     |
|                        |                                                                                    |                     |                                                                                     |
|                        |                                                                                    |                     |                                                                                     |
|                        |                                                                                    |                     |                                                                                     |

NOTICE & REPORTING

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE | NATURE OF NON-COMPLIANCE                            | NATURE OF VIOLATION                                           | ENFORCEMENT RESPONSE(S)                                                                          |
|------------------------|-----------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Discharge (Authorized) | Failure to submit timely permit re-application form |                                                               |                                                                                                  |
|                        | Categorical &/or NonCategorical SIU                 | Termination of discharge by permit expiration date            | None, based on confirming inspection w/l 30 days<br>Administrative Order w/ Stipulated Penalties |
|                        |                                                     | Continuation of Discharge after permit expiration date        | Cease & Desist Order                                                                             |
|                        | Failure to submit 90-day report                     |                                                               | Notice of Violation<br>Cease & Desist Order                                                      |
|                        | Categorical SIU                                     |                                                               |                                                                                                  |
|                        | Failure to submit Six Month Report                  |                                                               |                                                                                                  |
|                        | Categorical &/or NonCategorical SIU                 | Inadequate Report (lack of analytical data or certifications) | Notice of Violation                                                                              |
|                        |                                                     | Failure to Report (>45 days)                                  | NOV & Citation: Penalty if > 45 days                                                             |
|                        | Failure to meet other Permit Condition              |                                                               | Notice of Violation<br>Show Cause Order                                                          |
|                        | Categorical &/or NonCategorical SIU                 | Infrequent or isolated                                        | Cease & Desist Order if > 180 days<br>Civil Litigation Referral                                  |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE         | NATURE OF NON-COMPLIANCE                                                                  | NATURE OF VIOLATION                                               | ENFORCEMENT RESPONSE(S)                                                                        |
|--------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Discharge Violation (Sampling) | Exceedance of Daily Permit Limitation (any amount)<br>Categorical &/or NonCategorical SIU | Infrequent or isolated                                            | Notice of Exceedance<br>Notice of Violation                                                    |
|                                |                                                                                           | Infrequent but Exceedance<br>Magnitude > 110%                     | Notice of Violation<br>Conference<br>Administrative Order                                      |
|                                |                                                                                           | Recurring Exceedance (No<br>pattern evident)                      | Notice of Violation<br>Conference<br>Administrative Order                                      |
|                                |                                                                                           | Recurring Exceedance (Pattern<br>evident)                         | Notice of Violation<br>Conference<br>Administrative Order<br>Civil Litigation Referral         |
|                                |                                                                                           | Recurring Exceedance (Pattern<br>evident) & Triggers SNC Criteria | NOV & Citation: Penalty<br><br>Conference<br>Administrative Order<br>Civil Litigation Referral |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE         | NATURE OF NON-COMPLIANCE                                         | NATURE OF VIOLATION                                            | ENFORCEMENT RESPONSE(S)                                                                    |
|--------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Discharge Violation (Sampling) | Exceedance of Categorical Average Permit Limitation (any amount) | Categorical SIU                                                | Infrequent or isolated<br>Notice of Exceedance<br>Notice of Violation                      |
|                                |                                                                  | Infrequent but Exceedance Magnitude > 110%                     | Notice of Violation<br>Conference<br>Administrative Order                                  |
|                                |                                                                  | Recurring Exceedance (No pattern evident)                      | Notice of Violation<br>Conference<br>Administrative Order                                  |
|                                |                                                                  | Recurring Exceedance (Pattern evident)                         | Notice of Violation<br>Conference<br>Administrative Order<br>Civil Litigation Referral     |
|                                |                                                                  | Recurring Exceedance (Pattern evident) & Triggers SNC Criteria | NOV & Citation: Penalty<br>Conference<br>Administrative Order<br>Civil Litigation Referral |
|                                | Exceedance of Instantaneous Limit (pH, Temp.)                    | Categorical &/or NonCategorical SIU                            | Infrequent or isolated<br>Notice of Exceedance<br>Notice of Violation                      |
|                                |                                                                  | Infrequent but Exceedance Magnitude > 110%                     | Notice of Violation<br>Conference<br>Administrative Order                                  |
|                                |                                                                  |                                                                |                                                                                            |
|                                |                                                                  |                                                                |                                                                                            |
|                                |                                                                  |                                                                |                                                                                            |



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| TYPE OF NON-COMPLIANCE           | NATURE OF NON-COMPLIANCE                                                                             | NATURE OF VIOLATION                                             | ENFORCEMENT RESPONSE(S)                                                                    |
|----------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Discharge Violation (Sampling)   | Exceedance of Instantaneous Limit (pH, Temp.)<br>Categorical &/or NonCategorical SIU                 | Recurring Exceedance (No pattern evident)                       | Notice of Violation<br>Conference<br>Administrative Order                                  |
|                                  |                                                                                                      | Recurring Exceedance (Pattern evident)                          | Notice of Violation<br>Conference<br>Administrative Order                                  |
|                                  |                                                                                                      | Recurring Exceedance (Pattern evident) & Triggers SNC Criteria  | NOV & Citation: Penalty<br>Conference<br>Administrative Order<br>Civil Litigation Referral |
| Inspection Violations (Observed) | Failure to properly operate or maintain Pretreatment Facility<br>Categorical &/or NonCategorical SIU | No violation of Pretreatment Limitations; infrequent & isolated | Notice of Noncompliance<br>Notice of Violation<br>Conference                               |
|                                  |                                                                                                      | Violation of Pretreatment Limitations; Infrequent & Isolated    | Notice of Noncompliance<br>Notice of Violation<br>Conference                               |
|                                  |                                                                                                      | No violation of Pretreatment Limitations; Recurring or pattern  | Notice of Violation<br>Conference                                                          |
|                                  |                                                                                                      | Violation of Pretreatment Limitations; Recurring or pattern     | Notice of Violation<br>Conference<br>Administrative Order<br>Civil Litigation Referral     |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE           | NATURE OF NON-COMPLIANCE                                                           | NATURE OF VIOLATION                                        | ENFORCEMENT RESPONSE(S)                                                                            |
|----------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Inspection Violations (Observed) | Wastestream is diluted in lieu of treatment<br>Categorical &/or NonCategorical SIU | Non-intentional or accidental                              | Notice of Noncompliance<br>Notice of Violation<br>Conference                                       |
|                                  |                                                                                    | Intentional                                                | Notice of Violation<br>Show Cause Order<br>Civil Litigation Referral                               |
|                                  | Entry Denial<br>Categorical &/or NonCategorical SIU                                | Based on Report from Field<br>Monitoring Crew or Inspector | Phone Call<br>Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order |
|                                  |                                                                                    |                                                            |                                                                                                    |
|                                  | Improper sampling procedure (Observed)<br>Categorical &/or NonCategorical SIU      | Based on Report from Field<br>Monitoring Crew              | Phone Call<br>Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order |
|                                  |                                                                                    | Self-Monitoring                                            | Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order               |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE           | NATURE OF NON-COMPLIANCE                                                                                                | NATURE OF VIOLATION    | ENFORCEMENT RESPONSE(S)                                                              |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------|
| Inspection Violations (Observed) | Inadequate recordkeeping<br>Categorical &/or NonCategorical SIU                                                         | Infrequent or isolated | Notice of Noncompliance<br>Notice of Violation<br>Conference                         |
|                                  |                                                                                                                         | Recurring or pattern   | Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order |
|                                  | Failure to report all self-monitoring results<br>in addition to SMR requirements<br>Categorical &/or NonCategorical SIU | Infrequent or isolated | Notice of Noncompliance<br>Notice of Violation<br>Conference                         |
|                                  |                                                                                                                         | Recurring or pattern   | Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order |
|                                  | Failure to meet compliance date(s)<br>Categorical &/or NonCategorical SIU                                               | Infrequent or isolated | Notice of Noncompliance<br>Notice of Violation<br>Conference                         |
|                                  |                                                                                                                         | Recurring or pattern   | Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order |
|                                  | Failure to inform of Authorized<br>Representative Change<br>Categorical &/or NonCategorical SIU                         |                        |                                                                                      |
|                                  |                                                                                                                         |                        |                                                                                      |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE           | NATURE OF NON-COMPLIANCE                                                                      | NATURE OF VIOLATION                   | ENFORCEMENT RESPONSE(S)                                                         |
|----------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------|
| Inspection Violations (Observed) | Reporting false information<br>Categorical &/or NonCategorical SIU                            | SIU or SIU Employee:<br>Unintentional | Notice of Noncompliance<br>Notice of Violation & Citation                       |
|                                  |                                                                                               | SIU or SIU Employee: intentional      | Notice of Violation<br>Adminsitrative Order                                     |
|                                  | Tampering with Control Authority<br>Sampling Equipment<br>Categorical &/or NonCategorical SIU |                                       |                                                                                 |
|                                  |                                                                                               | SIU or SIU Employee:<br>Unintentional | Notice of Violation<br>Show Cause Order                                         |
|                                  |                                                                                               | SIU or SIU Employee: intentional      | Notice of Violation & Citation<br>Show Cause Order<br>Civil Litigation Refferal |
|                                  |                                                                                               |                                       |                                                                                 |



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## *Chapter 7: Organization of the GLWA Industrial Pretreatment Program*

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The Great Lakes Water Authority in seeking recognition as the “Control Authority” for purposes of implementation, administration and enforcement of its Industrial Pretreatment Program has allocated staffing to implement, administer and enforce the program. The Board of the GLWA has adopted Rules to specify the legal requirements for an Industrial Pretreatment Program in accordance with 40 CFR 403.8(f)(1).

### **1.0 Control Authority Responsibility**

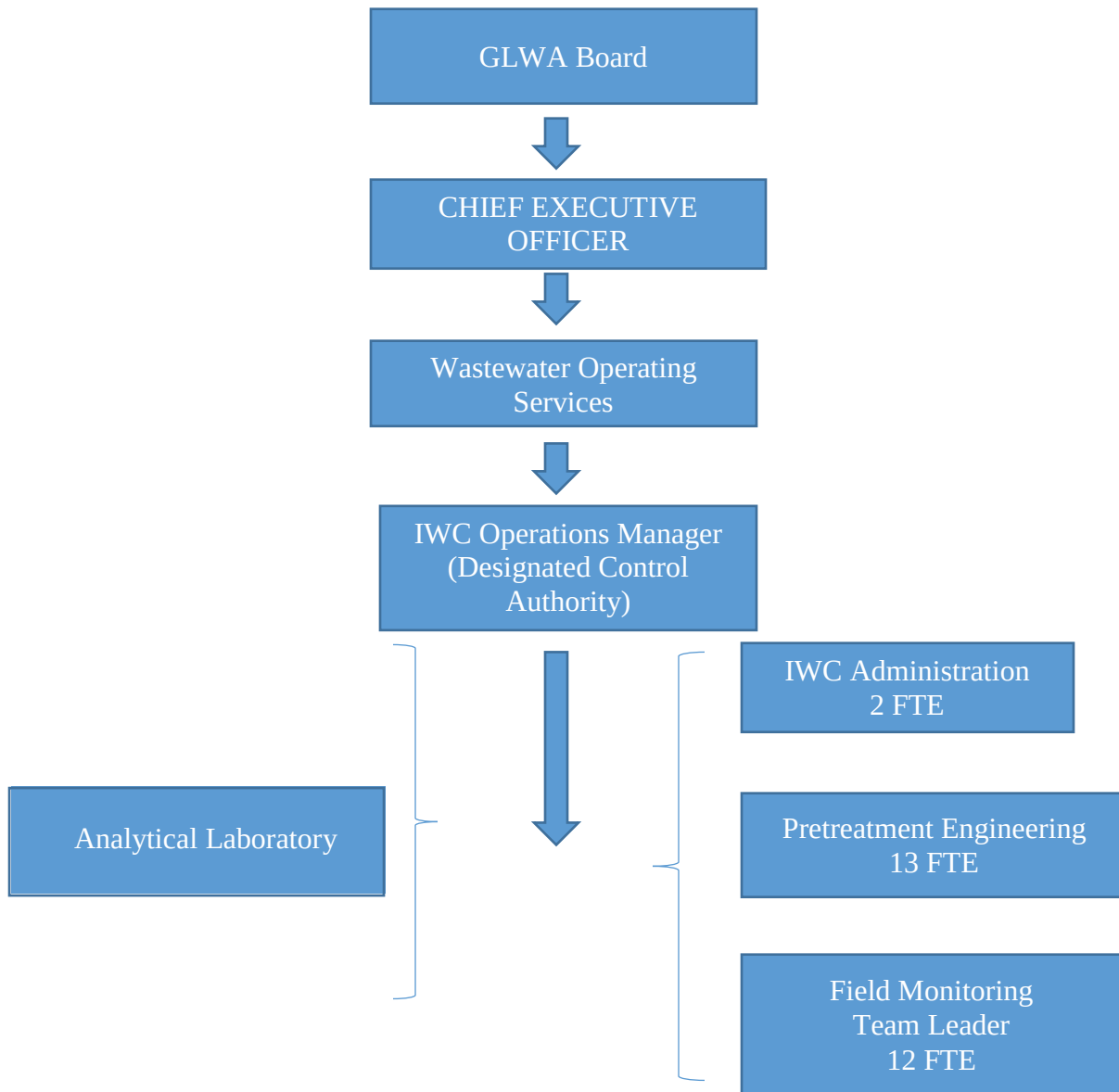
The Board of the GLWA has assigned and authorized the Industrial Waste Control Operations Manager to be the person responsible for carrying out the administration, duties, and enforcement responsibilities as the Control Authority, consistent with the intent of rules adopted on November 30, 2016. The Industrial Waste Control Operations Manager will direct staff, apply resources and use the legal authority granted by the GLWA’s Board rules, or as may be delegated by the State of Michigan, to carry out the purpose and intent of the enforcement program described herein.

### **2.0 Delegation of Authority – Industrial Waste Control Division Staff**

The organizational structure of the Industrial Waste Control Operations is comprised of the following titles and delegated responsibilities by the Industrial Waste Control Operations Manager. The Control Authority will exercise its best efforts to maintain staffing at 90% of these levels.

| <b>Position</b>                | <b>No. of FTE</b> | <b>Responsibilities &amp; Roles</b>                                                        | <b>Reporting To:</b>           |
|--------------------------------|-------------------|--------------------------------------------------------------------------------------------|--------------------------------|
| IWC Operations Manager         | 1                 | Designated Control Authority                                                               | Wastewater Operations Director |
| IWC Engineer                   | 10                | Inspections, Report Review, Enforcement, Survey, Permit Evaluation, Program Implementation | IWC Operations Manager         |
| Engineering Technicians        | 3                 | Support IWC Engineers in data collection, evaluation and processing                        | IWC Operations Manager         |
| Team Leader – Field Monitoring | 1                 | Supervise Collection of Field Samples and Records                                          | IWC Operations Manager         |
| Investigators                  | 11                | Collect Field Sample Collection, Record Field Observations and Follow COC                  | Team Leader – Field Monitoring |
| Office Support Specialists     | 2                 | Administrative assistance, Records Maintenance and Data Processing                         | IWC Operations Manager         |
| Totals =                       | 28                |                                                                                            |                                |

The organizational structure is presented below.







## PROCEDURES

The General Pretreatment Regulations (40 CFR Part 403) require that the GLWA identify and locate Industrial Users which may be subject to the Pretreatment Program; identify the character and volume of pollutants contributed; and notify Users of applicable Pretreatment Standards; requirements under sections 204(b) and 405 of the (Clean Water) Act; and subtitles C and D of RCRA (Resource Conservation and Recovery Act). These objectives are generally achieved through the Source Identification, Information and Management process described below.

### 1.0 Industrial User Identification

The GLWA Pretreatment Program includes procedures to identify and locate Industrial Users for regulation. These are:

#### **Method 1: Industrial User Responsibilities**

The GLWA requires Industrial Users to provide information about their operations and discharges to the sewer system. Industrial Users are most knowledgeable of their operations and the potential impact of their discharges on the collection system and wastewater treatment process. As such, users have an obligation to supply the GLWA with information about their processes and discharges.

Industrial Users subject to the National Categorical Pretreatment Standards can fulfill this obligation by submitting a complete Baseline Monitoring Report (BMR) in accordance with 40 CFR 403.12. Industrial Users not subject to the National Categorical Pretreatment Standards can fulfill this obligation by submitting a complete survey and/or permit application to the GLWA.

#### **Method 2: GLWA Identification**

The GLWA seeks to identify Industrial Users who may be subject to the Pretreatment Program through its Survey Process. These Industrial Users are generally understood to include those “... *industries identified in the Standard Industrial Classification Manual, Bureau of the Budget, 1967, as amended and supplemented, under the category of “Division D—Manufacturing” and such other classes of significant waste producers as, by regulation, the Administrator deems appropriate.*” 33 USC 1362 (18)”.

Whether an Industrial User is self-identified through method 1 or by the GLWA, basic information is documented and maintained, which includes information concerning raw materials and products used or produced; descriptions of the facility processes and operations; wastewater flow and pollutant characteristics; as well as identification information (Contact name and facility address),

and may include additional information necessary to classify an Industrial User as a ***Minor User*** or a ***Significant Industrial User***.

The information provided and/or collected is maintained in an inventory of Industrial and Commercial dischargers which may be subject to the Pretreatment Program. These Users will generally discharge wastewater other than sanitary and cooling water, and the wastewater may contain *Pollutants of Concern* (toxic and/or compatible pollutants). This information will be made available to the Approval Authority on request.

## 2.0 **Survey Process**

The GLWA will perform an IU survey as an ongoing activity to identify, classify and evaluate Industrial Users who discharge non-domestic wastewater to the Detroit Sewer System, for compliance with applicable law and, using sufficient care, maintain a compilation, index or inventory that reflects the current classification of the Industrial User.

The **Survey Process** includes the activities of the GLWA's Regulatory personnel in identifying, recording and classifying an Industrial User for inclusion in the GLWA's Regulatory program(s).

### 2.1 **Preparing for the Survey Process and Initial Notice**

The GLWA generally conducts the Survey Process by focusing on a specific area or community, and may also organize its approach by using Zip Codes where a community includes multiple Zip Codes. Industrial Users within the area are identified by consulting a variety of resources that includes but is not limited to the following:

- Business Directories;
- Information from telephone directories;
- Applications for sewer service;
- Business associations;
- Internet searches; and
- Field observations by regulatory personnel

Once Industrial Users are identified for a specific area, a list is developed from available information and cross referenced against the existing Inventory of Users (if available), including those with and without a Wastewater Discharge Permit. Industrial Users with an effective Wastewater Discharge Permit, or who have filed a survey or permit application within the last twelve months may be removed from the inventory list and the remaining Industrial Users constitute the preliminary Survey Process list.

Based upon the preliminary Survey Process list, Survey Forms are mailed. Following a 2-4 week period, responses are noted, returned undeliverable information is noted, and delinquent responses are noted. At the discretion of the GLWA, a second mailing may be made to delinquent respondents.

Where the information is complete, the User is classified as (i) a Minor User, (ii) a Significant Industrial User, (iii) Surcharge Program (High Strength Wastewater), (iv) Slug and or Spill Prevention Plan, and (v) additional information is needed to classify the Industrial User and a Permit Application is mailed.

Where the information is incomplete, or non-responsive, the original list is modified and plans are made to conduct field investigation and follow-up (see Survey Process 2.2), or Survey Process field investigation list.

## **2.2 Survey Process – Field Observations**

Industrial Users who fail to submit the Survey form are noted and the GLWA proceeds to conduct field investigation. A preliminary step of the Filed Observation activity involves performing an initial drive-through of the area to observe the location of businesses and Industrial User activities, and assess the completeness of the Survey Process field investigation list. Non-manufacturing facilities and facilities whose business activity is not expected to include the discharge of pollutant bearing process wastewater will be recorded and noted without further action.

The next step is to begin methodically visiting each manufacturing facility to assess their industry, and process operations and information about their wastewater discharge. The GLWA's representative will solicit information consistent with the Survey form to assess the facility. Where the GLWA believes that the Industrial User's Industry and discharge activities are likely to result in a Wastewater Discharge Permit or alternate Control Mechanism, a Permit Application form is left with instructions for completion. The GLWA follows up on any such applications to ensure submittal, and upon receipt evaluates the Permit Application.

Where the information provided by the Industrial User results in the belief that it is a Minor User, the User is classified as such and the information is used to process a Minor Discharge Letter (See below).

Upon completion of the field investigation, records are updated and the survey is deemed complete.

## **2.3 Classification of Industrial Users**

Information obtained from the Survey forms, or through field investigation and, if applicable, any Permit Applications collected using the Survey Process, are reviewed and evaluated. The GLWA will use sufficient care to conduct its survey activities as follows:

1. Process responses: Completed survey forms, field investigation reports and/or permit applications are reviewed and evaluated.
  - i. An Industrial User is classified as a Minor User where the GLWA determines *no potential* for classification as an SIU. Users receive written notice of the

determination and of applicable pretreatment Standards, and requirements under RCRA.

- ii. Where a survey form leads the GLWA to believe that the Industrial User is a *potential* SIU, a Permit Application is forwarded to the Industrial User. Upon return, the Industrial User is either classified as a Minor User consistent with step 1(i) or referred for a Baseline Inspection (step 1(iii) below).
- iii. Where information leads the GLWA to believe that the Industrial User may perform an operation regulated under a National Categorical Pretreatment Standard, or is otherwise deemed a *potential* Significant Industrial Users<sup>i</sup>, the User facility is scheduled for a Baseline Inspection, and available information is forwarded to the assigned inspector.

### **3.0 Notification Requirements**

The survey process is also used to notify Industrial Users of the following:

- National Categorical Pretreatment Standards promulgated as “final”, i.e., 40 CFR 405 – 471;
- General Pollutant Prohibitions (See 40 CFR 403.5(a));
- Specific Pollutant Prohibitions (See 40 CFR 403.5(b));
- Local Pollutant Discharge Limitations;
- RCRA Subpart C Requirements – that “...*any person who generates, transports, or recycles regulated wastes or who owns or operates a facility for the treatment, storage, or disposal of regulated wastes to notify the U.S. Environmental Protection Agency (EPA) of their activities, including the location and general description of the activities and the regulated wastes handled...*”

RCRA Subpart D Requirements – that there are nonhazardous solid waste reporting requirements.

### **4.0 Enforcement**

Users who fail to respond to any survey, permit application or BMR request from the GLWA or who are otherwise in noncompliance with existing federal, State or local limitations and requirements, will be addressed through the Enforcement Response Plan and Enforcement Procedures.

### **5.0 Forms and Documents**

Sample Forms and Documents are included in Appendix A, attached to these procedures. Additional forms and documents may be developed as needed, or to replace these forms as deemed necessary by the GLWA.

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<sup>i</sup> “**Significant Industrial User**” means any User who discharges to the POTW and which:

- (1) Has an average discharge flow of twenty-five thousand (25,000) gallons per day or more of process wastewater excluding sanitary, boiler blowdown, and noncontact cooling water; or
- (2) Has discharges subject to the national categorical pretreatment standards; or
- (3) Requires pretreatment to comply with the specific pollutant limitations of these Rules; or
- (4) Has in its discharge, toxic pollutants as defined pursuant to 33 U.S.C. 1317, or other applicable federal and state laws or regulations, that are in concentrations and volumes which are subject to regulation under these Rules as determined by the Control Authority; or
- (5) Is required to obtain a permit for the treatment, storage or disposal of hazardous waste pursuant to regulations adopted by this state or adopted under the Federal Solid Waste Disposal Act, as amended by the Federal Resource Conservation and Recovery Act, as amended, and may or does contribute or allow waste or wastewater into the POTW including, but not limited to, leachate or runoff; or
- (6) Is found by the GLWA to have a reasonable potential for adverse effect, either singly or in combination with other contributing industries, on the POTW operation, the quality of sludge, the POTW's effluent quality, or air emission generated by the POTW.

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## *Chapter 2: Permits & Control Mechanisms Procedures*

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The Great Lakes Water Authority Pretreatment Program may authorize the discharge of wastewater from Industrial Users through use of a Minor User Letter; a Wastewater Discharge Permit or equivalent Control Mechanism. At a minimum, Significant Industrial Users are required to obtain written authorization from the GLWA. The GLWA may withhold issuance of a Wastewater Discharge Permit or equivalent control Mechanism where a User is in noncompliance.

### **1.0 Duty to Apply**

All Users have a duty to apply for any non-domestic waste or wastewater discharge to the sewer system. The duty is satisfied by submission of a Baseline Monitoring Report (BMR) for Users subject to National Categorical Pretreatment Standards; or by filing a Survey form and/or Permit Application for all other Users. Survey forms are processed in accordance with the procedures (See Chapter I).

Users who fail to notify the GLWA and provide a timely application, will be subject to enforcement action (See Enforcement response Guide).

### **2.0 Wastewater Discharge Permit or Other Control Mechanism**

A Wastewater Discharge Permit is issued by the GLWA to control the contributions of pollutants to the POTW, and state the conditions necessary for enforceable conditions as required by 40 CFR 403.8(f)(1) (iii)(B)(1) – (6). On occasion, the GLWA may determine that an alternative Control Mechanism is preferred or otherwise warranted based on the Totality of the Circumstances. Such alternative is generally an Administrative Order or Court Order. In any event, the document is an enforceable basis to regulate the discharge of wastewater from the Significant Industrial User.

### **3.0 BMR or Permit Application Review and Evaluation**

As discussed in Chapter 1, following a referral of an Industrial User who potentially meets one or more of the criteria for a Significant Industrial User, a BMR or permit application is obtained and forwarded with a recommendation that a Baseline Monitoring Inspection occur. The Baseline Inspection (See chapter 3) is intended to confirm, complete or obtain additional information deemed necessary to (i) determine whether a permit is required, (ii) determine whether the User is subject to one or more of the National Pretreatment Categories, (iii) determine whether the User is an SIU, and/or (iv) determine whether the User is subject to the GLWA's High-Strength wastewater or other regulatory program. Following completion of the Baseline Inspection, a report is made. Where the report concludes that the User is not an SIU, they are classified as a Minor

User and receive notice consistent with that described by the Survey Process. Where the report concludes that the User is an SIU, a Wastewater Discharge Permit is drafted.

### **3.1 Preparing a Wastewater Discharge Permit**

Once a User is designated as an SIU, the GLWA begins to develop an initial Wastewater Discharge Permit. This entails a review of the BMR and/or permit application form(s) for completeness as well as the findings detailed in the Baseline Inspection. The initial steps are to determine whether the SIU is subject to a National Categorical Pretreatment Standard, and associated sub-categories, or to Local regulatory requirements only. Additionally, it is imperative that Sampling and Monitoring location(s) are identified and verified by field staff to measure applicable end-of-process and/or end-of-pipe discharges from the SIU facility. Finally, recommendations are made about the frequency of self-monitoring and reporting, the use of flow and/or time based composite sampling procedures, inclusion in the Surcharge program, slug or spill prevention plan requirements, and any other requirements deemed necessary to regulate the discharge of the facility.

Once these determinations have been made, a Draft Wastewater Discharge Permit is developed, supported by applicable calculations and/or narrative descriptions, application of Combined Wastestream Formula or Dilution factors. The Draft document is reviewed internally and then mailed to the SIU facility.

Should the GLWA determine that the SIU is required to construct or install additional pretreatment facilities, and the SIU is not in noncompliance, the GLWA may recommend an alternate Control Mechanism (e.g., Administrative Consent Order) in lieu of a Wastewater Discharge Permit.

### **3.2 Non-Significant Categorical Industrial Users**

In accordance with 40 CFR 403.5(v)(2), an Industrial User subject to categorical pretreatment standards may be classified as a *non-significant Categorical Industrial User* based upon a finding that the User never discharges more than 100 gallons per day of categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) and meets the conditions of 403.5(v)(2)(i)-(iii). When a User satisfies these conditions, the GLWA may determine that the User is not a Significant Industrial User, in accordance with applicable state and local law.

The User is notified of the GLWA's determination(s) in writing, and if applicable, a Draft Wastewater Discharge Permit is developed.

## **4.0 Wastewater Discharge Permit Process**

Once a User is classified as a Significant Industrial User, the GLWA will develop and prepare a Draft Wastewater Discharge Permit, and denote it as a "Draft". The basis of any permit issued by the GLWA will be based on the information provided in a permit application or re-application, or Baseline Monitoring Report; or information obtained by GLWA through an inspection. The Draft Wastewater Discharge Permit will include applicable local Pretreatment Standards and Requirements; applicable requirements from the Categorical Pretreatment Standards; and other



requirements from 40 CFR 403 or applicable state or local law; and include a brief description and classification of the User (a.k.a. Permit Definition).

The User shall have 30 days to comment on the Draft permit document. Comments for issues such as typographical errors or omissions will be corrected. All other comments will be addressed in writing by the GLWA either accepting or rejecting the comment(s) and providing a brief explanation of reasons thereof. After 30 days pass without receipt of comments, or upon resolution of any comments raised, a Final Wastewater Discharge Permit will be issued based upon the disposition of the GLWA.

After the GLWA issues a Final Wastewater Discharge Permit, Users will have twenty (20) days to file a request for reconsideration or appeal in accordance with applicable law. If no appeal is filed, the permit will be considered final as issued.

## **5.0 Permit Re-application**

An existing permittee shall apply for permit reissuance a minimum of 90 days before the expiration of the current permit. The existing permit for a Significant Industrial User, who timely submits an application for permit reissuance to the GLWA, shall be automatically extended until a final permit is issued. Where an application is untimely, authorization may be granted under an Administrative Order at the discretion of the GLWA.

## **6.0 Permit Modification**

Wastewater Discharge Permits are issued for a term of one to five years, and may be modified by the GLWA based on changes provided by the User or discovered by the GLWA. No permit will be modified or changed until the change(s) are confirmed. No permit will be considered effective until issued as final. The change process will generally follow the process described in 4.0 above by issuing a Draft *modified* Wastewater Discharge Permit and allowing for comments prior to a final permit, and an opportunity for appeal of the modified Wastewater Discharge Permit.

## **7.0 Inspection & Enforcement**

The GLWA will review a final Wastewater Discharge Permit at least annually as part of any inspection conducted at the facility (See Chapter 3) for relevance and accuracy.

The permit process, review of pertinent documentation, and other steps related to the permit process, may identify noncompliance with existing federal or local limitations. Where such noncompliance is identified, the GLWA Enforcement Response Guide shall be followed.

## **8.0 Permit Forms and Documents**

Sample Forms and Documents are included in Appendix A attached to these procedures. Additional forms and documents may be developed as needed, or to replace these forms as deemed necessary by the GLWA.

Control Authorities are required to carry out inspections, surveillance and monitoring activities necessary for independent determination of an Industrial User's compliance with applicable Pretreatment Standards and Requirements.

### ***Part A: Monitoring***

#### **Introduction**

GLWA operates a comprehensive monitoring program of Industrial User discharges. SIUs (as defined in 40 CFR Part 403) are monitored at a frequency to verify compliance with applicable pretreatment standards and requirements.

#### **1.0 The GLWA Monitoring Program**

The GLWA monitoring program involves the collection of representative samples of the wastewater discharged into the sewer system to assess the compliance of individual Users with daily limitations (Daily maximum); weekly limitations (4-day averages), or monthly (30-day averages); to obtain field measurements, i.e, temperature and pH; or for other purposes deemed necessary by the Control Authority. The monitoring program described herein, includes both (i) self-monitoring conducted by SIUs, and (ii) the GLWA's independent monitoring program. The GLWA's monitoring program incorporates the following monitoring methodologies:

- A. Scheduled Sampling include monitoring events planned in such a manner that dischargers have knowledge of and are aware of the scheduled event. The event may be performed upon mutual agreement of both parties. Examples of where this type of monitoring methodology is used is for sampling infrequent batch discharges, i.e., those occurring once every 6-months; and where User notification to the GLWA is a pre-condition of discharge.
- B. Unscheduled (unannounced) Sampling is conducted with no advance warning or notification to the Industrial User prior to the arrival of the sampling crew at the facility. The majority of sampling performed by the GLWA is unannounced.

Unannounced samples may be conducted for one or more of the following purposes, (i) to determine compliance with wastewater discharge permits; (ii) to determine an applicable Enforcement purpose; (iii) to assess the character and concentration of *Pollutants of Concern* contributed by a User; or for (iv) any other purpose including but not limited to determining the High-Strength Wastewater contributions.

Although these are identified as "unscheduled", the GLWA does create a sampling schedule to assign work to its staff of technicians. This work includes but is not limited to:

- a. Routine Sampling: These are monitoring activities performed to meet the minimum sampling frequencies necessary to determine compliance with established permit requirements.
- b. Verification Sampling: These are monitoring activities beyond the *routine*, and generally prompted by surveillance or enforcement activities, e.g., administrative orders, and compliance agreements. This sampling classification would also include those monitoring events which are initiated by GLWA personnel as a result of IU inspections and any additional samples necessary to evaluate the compliance status of an IU beyond the established routine sampling.
- c. Special Sampling: These less frequent monitoring activities are initiated in response to special requests, including but not limited to: (a) Hauled in Waste surveillance sampling, (b) High-strength wastewater sampling or (c) sampling of Minor Industrial Users.
- d. Demand sampling is performed in response to unplanned exigent events, i.e., spills, emergency or other circumstantial events encountered during field activities.

## 2.0 Sampling Frequencies

In accordance with 40 CFR 403, the GLWA should monitor discharges to independently assess compliance with applicable daily limitations (Daily maximum); weekly limitations (4-day averages), and monthly (30-day averages). Although there are no specific minimums include in applicable law, GLWA has developed the following goals to meet its duty to collect a sufficient number of samples from regulated Users as described in the table below:

| Limit                                                                                                 | Minimum Annual Sampling Frequencies <sup>a</sup> |                                       |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------|
|                                                                                                       | < 25,000 GPD Discharge                           | > 25,000 GPD Discharge                |
| Daily maximum                                                                                         | 2 Samples/yr                                     | 4 Samples/yr                          |
| 4-day average                                                                                         | 2 sets of Four consecutive samples/yr            | 4 sets of Four consecutive samples/yr |
| 30-day average or monthly                                                                             | 10 samples <sup>a</sup> per 30-day/yr            | 2 sets of 10 samples per 30-day/yr    |
| Batch (Episodic) Discharges                                                                           | 1 Sample/yr                                      | 2 Samples/yr.                         |
| Instantaneous                                                                                         | 1 Sample/yr                                      | 2 Sample/yr.                          |
| (a) Sampling frequencies will be based on BPJ if discharges are less than daily or episodic in nature |                                                  |                                       |

The selection of pollutant parameters which are to be identified in any monitoring event (with the exception of routine sampling) is based on any recommendations of the inspector and the exercise of Best Professional Judgment (BPJ) to evaluate the pollutant parameters which are reasonably expected to be present.

### **3.0 Self-Monitoring Sampling Frequencies**

The GLWA Pretreatment Program requires SIUs with Wastewater Discharge Permits to perform self-monitoring in compliance with 40 CFR 403.12(g)(3). These requirements will typically be included in the Wastewater Discharge Permit, but may also be specified in an enforcement document, i.e., Compliance Schedule or Administrative Consent Order. Unless otherwise noted, the parameters to be monitored will include all parameters regulated in an IU's permit.

GLWA has discretion in determining the frequency of self-monitoring samples, and considers factors such as the volume of wastewater discharged, the User's compliance history, and the variability characteristics of the waste stream. Other factors may also be considered. The selection of pollutant parameters which are to be identified in any self-monitoring event is based on the exercise of Best Professional Judgment (BPJ) to evaluate the pollutant parameters which are reasonably expected to be present.

The GLWA will, upon receipt of the self-monitoring results review the information and evaluate the results along with information collected through its own monitoring program to assess an Industrial User's compliance.

### **4.0 Monitoring Protocols**

Where possible, the following general guidelines are followed by the GLWA when collecting samples of Industrial User discharges:

- a. Sample wastewater at a point where the wastestream is flowing freely and well mixed;
- b. Collect the sample from the outlet of the sewer pipe or downstream of a flume, hydraulic jump or other type of flow disturbance;
- c. Use a representative sampling method (grab, or time/flow composite) as specified in the work order. Some sampling parameters that must be collected as a manual grab sample rather than by automatic sampler include the following: pH, FOG, Volatile Organics, Cyanide. GLWA may elect to collect multiple grab samples where appropriate to represent the wastewater being discharged.
- d. Avoid collecting non-homogeneous particles and objects;
- e. Collect the sample by facing the probe or container upstream to avoid contamination;
- f. Do not rinse sample container with sample when collecting oil and grease instead, fill it directly to within 2.5 to 5 centimeters from the top;
- g. Fill the container completely if the sample will be analyzed for volatile organics, ammonia, and pH;
- h. Collect sufficient volume to allow for testing. Bottles are designated in each sampling

cooler package which is sufficient for analysis. Additional volumes may be necessary for quality assurance testing;

- i. Do not skim the surface or scrape the sides or the bottom of the sewer or the sampling location. Where possible, use sufficient care to collect the sample from a mid-point in the stream;
- j. Field wash and rinse all elements of the sampling machine with distilled water after each use to ensure that they are clean.
- k. Follow all safety protocols in accordance with good sampling practices and procedures, or as may be advised by the facility. Contact the Team Leader if an area appears unsafe or dangerous.
- l. A sample collection Chain of Custody is created for each sample event to track the *hands* processing each sample from collection to analysis. Field information is recorded for each sample event to create a defensible evidentiary record addressing who, what, when, where and how the sample(s) were collected and presented for analysis.
- m. Sampling personnel should also consult training references which include the following:

Handbook for Monitoring Industrial Wastewater, U.S. EPA August 1973;  
Principles of Environmental Sampling, Lawrence H. Keith

## 5.0 **Findings**

The results of GLWA monitoring shall be documented in writing, and records shall be maintained in a centralized file system. The GLWA will provide copies of its results to the User.

## 6.0 **Enforcement**

The information gathered during or from a monitoring event may identify noncompliance at an Industrial User facility. Where noncompliance is identified, the GLWA ERP shall be followed. Specific procedures are discussed in the Enforcement Program, Chapter \_\_\_\_.

### *Part B: Surveillance and Inspection*

#### Introduction

The term "inspection", as used throughout this chapter, refers to a non-sampling industrial visits made by the GLWA. SIUs (as defined in 40 CFR Part 403.3 (t)) receive regular Inspection of their facilities to verify compliance with applicable Pretreatment Standards and Requirements. Surveillance and Inspection activities are referenced solely as Inspections.

The inspection is conducted by GLWA to obtain on-site information from a User and observe their activities. Inspections include but are not limited to the following: independently verify and confirm compliance with permit requirements, agreements, applicable Ordinance provisions, User charges, and Pretreatment Standards and Requirements.

## 1.0 Types of Inspections

The general approach for an inspection includes (i) gathering data, (ii) verifying information received from the company; (iii) maintaining records of the environmental compliance history for a facility, and (iv) recording and documenting all findings and conclusions in a written report. The following inspection types are currently used:

- A. Baseline Inspection – is performed upon receipt of a permit application of a potential SIU, or receipt of a Baseline Monitoring Report. It is conducted with sufficient care so that a decision of permit eligibility, classification and the identification of any additional Pretreatment Standards and Requirements can be made. A follow-up visit may be required to verify a proposed sampling location. A report is prepared and a recommendation made that a Wastewater Discharge Permit is or is not required.
- B. Comprehensive (Scheduled) Inspection (CI) – is performed at least once every two years to review and assess the SIUs compliance. The CI may be scheduled with the SIU, or unscheduled, and generally includes at least the following elements:
  - a. Verification of logistical information (operating data, sampling considerations and locations, and safety implications);
  - b. Inspection (walk-through) of the process, production, or manufacturing operation(s) and waste treatment operations;
  - c. Review of operation and maintenance records,
  - d. Evaluation of compliance with compliance schedules and construction schedules, if applicable,
  - e. Evaluation of the need for, or adequacy of, the slug control plan in accordance with 40 CFR Part 403.8(f)(2)(v);
  - f. Inspection of monitoring location(s).
  - g. Other items related to a facility's compliance.

Upon completion, a report is prepared.

- C. Unscheduled Inspection – Is performed at least once per year, and may include one or more of the elements for the Comprehensive Inspection above, or for some other purpose. The inspection is not scheduled in advance with the SIU. Upon completion, a report is prepared.
- D. Demand or IPER Inspection – Is performed in response to a complaint or to investigate an exigent matter, i.e., responding to a spill report. Upon completion, a report is prepared.
- E. Survey Inspection – is performed as part of a physical (window) survey or to verify information concerning a User. The field visit is documented and recorded in the file.

## 2.0 Forms and Documents

Sample formats of Inspection reports are included in the sample form book (Appendix A attached). Additional forms and documents may be developed as needed, or to replace these forms as deemed necessary by the GLWA.

## 3.0 Inspection Frequencies

The GLWA conducts annual inspections of User facilities (See below) to assess compliance with the Wastewater Discharge Permit and Rules as described below:

| Limit                    | Minimum Annual Inspection Frequencies |
|--------------------------|---------------------------------------|
| Baseline Inspection      | As needed                             |
| Demand Inspection        | As needed                             |
| Comprehensive Inspection | Once every 2-years                    |
| Unscheduled Inspection   | Once per year                         |

Notwithstanding the type of inspection, it normally includes a walk-through of the facility and inspection of the wastewater generating processes. Other activities conducted during the inspection will be based on the exercise of Best Professional Judgment (BPJ).

## 4.0 General Inspection Protocol and Procedures

The GLWA's inspection staff experience a variety of industry operations and processes. Over time, familiarity with the various types of Industrial Users develops. Nevertheless, unique or atypical Industrial Users are encountered that require an inspector to have awareness of the regulatory and compliance requirements applicable to a specific industry, and derive an opinion of the facility's conduct in achieving compliance. It is desirable from the GLWA's perspective that inspections maintain a consistent approach.

Characteristics for an inspector may include the following:

- Ability to observe the activities at a facility and record these in an objective and forthright manner;
- Ability to assess compliance with the SIU's wastewater discharge permit, letter of authorization or GLWA rules;
- Verify information, including but not limited to, information contained in self-monitoring reports, BMR reports, permits or permit applications or re-applications;
- Recognize and articulate observations on process operations generating wastewaters and

- any treatment processes employed to achieve compliance;
- Identify appropriate sampling points and develop strategies for monitoring compliance.

The following general procedures are followed for all types of inspections.

|         |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Step #1 | Preparing for an Inspection | Staff are to use sufficient care to prepare for the inspection activity to be undertaken, regardless of the type; and should review any available records and information concerning a facility.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Step #2 | Site Access                 | <p>The proper access procedure consists of the following steps:</p> <ol style="list-style-type: none"> <li>Make certain that all credentials have been properly presented to the facility's authorized representative or contact in charge.</li> <li>If entry is not granted, ask why. Tactfully probe the reason for denial to see if obstacles (i.e., misunderstandings) can be resolved. If entry is still denied, withdraw from the premises and contact the IWC Operations Manager.</li> <li>Document any observations pertaining to the denial of access.</li> <li>Exercise care and discretion to avoid threats of any kind, inflammatory discussions, or deepening of misunderstandings.</li> </ol>                                                                                         |
| Step #3 | Site Arrival                | Staff should contact the facility representative and identify themselves as a GLWA Inspector by showing their identification card. The Inspector will also advise the facility representative of the purpose of the visit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Step #4 | Perform Inspection          | Immediately proceed to deal with the business at hand, and through a series of questions to assess the compliance status of the facility. The inspection may employ a pre-prepared list of questions, however staff are not limited by these. Staff shall proceed to discuss the facility, the process operations, the treatment capability and recordkeeping for the facility. A tour of the production and treatment facilities is normally included at this stage. The Inspector is free to ask any question related to the production or treatment processes which comprise the discharge from the facility and incorporate comments or remarks into the final Inspection report. Responses, and observations should be fully understood and recorded in accordance with established practices. |



Should a practice, or activity be identified which is not in accordance with the wastewater discharge permit, then (i) the staff shall notify the facility contact and explain the problem and the remedial action required, (ii) document the findings in the report, and (iii) discuss with the IWC Operations Manager.

Step #5      Final report      Upon completion of the site inspection, staff shall finalize the Inspection report and findings, make any appropriate file notations and records, and identify whether any permit modification or enforcement recommendations are necessary.

Send a copy of the inspection report to the permittee inspected to assure it is complete and accurate. The permittee shall have 20 days from receipt of the report to make any comments and/or corrections and submit these in writing to the Inspector. The Inspector should review any comments received and revise the language in the report as appropriate. An inspection is complete when the final report is issued.

## **5.0 Findings**

The results of all inspection activities are documented in writing, i.e., by memorandum, report or similar document. This document is stored in an IU's file and a copy is submitted to the User.

## **6.0 Enforcement**

The information gathered during an inspection may identify noncompliance at a User facility. Where such noncompliance is identified, the GLWA's Enforcement Response Guide is to be used to identify an appropriate response to typical noncompliance. Noncompliance shall be documented in written reports when identified and forwarded to the enforcement Section as required.

Federal regulations require that Control Authorities evaluate whether an SIU needs a plan or other action to control Slug Discharges, that meet the requirements of 40 CFR 403.8(f)(2)(vi). Additionally, the GLWA requires that plans be developed and filed to address Accidental Discharges (i.e., Slugs and/or Spills). The Wastewater Discharge Permit is generally used to specify applicable requirements.

## **1.0 Introduction**

The GLWA will evaluate Users who are required to develop a Slug Control Plan (SCP), and/or Spill Prevention Plan (SPP). At a minimum, the GLWA will evaluate the need for a Slug Control Plan (SCP), and/or Spill Prevention Plan (SPP) during the initial Baseline Inspection, and re-evaluate the requirement during a comprehensive inspection.

## **2.0 Slug Control Plan**

Federal regulations require that the Control Authority evaluate a significant industrial user's needs for a plan or other actions to control Slug Discharges. A slug discharge includes non-routine, episodic discharges which include accidental spills or non-customary batch discharges having a reasonable potential to (i) cause POTW interference or pass-through; (ii) violate a POTW's regulations, local limitations or (iii) NPDES Permit conditions.

GLWA will perform the required evaluation during an SIU's Baseline Inspection, and on an on-going basis, through the Comprehensive Inspection. Where the GLWA concludes that a slug control plan is needed, requirements will be specified in the Wastewater Discharge Permit. A slug control plan submitted to the GLWA will be reviewed for completeness and compliance with the requirements of 40 CFR 403.8(f)(2)(vi), which include:

- Description of discharge practices, including non-routine batch Discharges;
- Description of stored chemicals;
- Procedures for immediately notifying the POTW of Slug Discharges, including any Discharge that would violate a prohibition under § 403.5(b) with procedures for follow-up written notification within five days;
- If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.

These plans shall be reviewed in accordance with the procedures for reports and plans described in Chapter 5 Data Management. The Slug Control Plan, and/or Spill Plan will be reviewed for completeness by the GLWA and the User will be notified in writing of its acceptability.

### **3.0 Demand Inspection & Complaints**

The GLWA receives notices from a variety of sources pertaining to slug and/or spill events; sewer odors, sewer blockages, dumping, bypasses and upsets. These events will be investigated and documented through a Demand Inspection.

The GLWA's response to these events will vary from a phone call to immediate on-site action, depending upon the priority and urgency of the situation. Priorities shall be determined considering the following criteria (i) nature of incident, (ii) suspected impact upon the community or POTW, (iii) occurrence of incident (past or ongoing), and (iv) the exercise of best professional engineering judgment. A five (5)-day report may also be required from the User.

Among other things, these Emergency Response activities may be triggered by any of the following:

- A. Citizen Complaints and Referrals - Complaints and referrals of sewer odors, blockages, dumping are received and investigated by the emergency response group.
- B. Spills - Notifications of chemical or waste spills are received and investigated, by the emergency response group.
- C. Bypasses and Upsets - User notifications to comply with the affirmative defense provisions established in the federal regulations, 40 CFR Part 403.16 and 40 CFR Part 403.17, are received by the emergency response group and investigated. (see Ordinance 34-96, Section 56-3-59.1(j) and 56-3-66.1 (b) & (c))
- D. Notifications - Telephone calls are received by the GLWA system control center (313-224-4775) on a 24-hour basis, and forwarded to the emergency response person(s) and the Wastewater Treatment Plant.

### **4.0 Enforcement**

Following completion of a Demand Inspection, the GLWA will (i) determine whether the User should review and update as necessary, the slug control or spill prevention plan(s); and (2) recommend additional actions or responses by the GLWA, including enforcement action.

A Pretreatment Program produces a large volume of data and information relative to the compliance of an SIU, and other Users. The GLWA will use sufficient care to maintain the integrity of these records and secure such records so that they may be used as evidence in an administrative or judicial hearing or related action. Records include but are not limited to reports of inspections and site visits, Permit applications and re-applications, permit documents, monitoring reports, and enforcement materials.

### Introduction

Data and Information Management consist of two distinct procedural activities, the first being actions to review and evaluate data, and the second being recording and retrieval through a file system. The following procedures will be observed by GLWA.

#### **1.0 Data Review and Evaluation**

The GLWA Control Authority will review and evaluate data received from Industrial Users, Significant Industrial Users as well as data obtained through its monitoring and inspection activities for completeness and compliance. Data includes but is not limited to the following:

- Analytical results (from GLWA and non-GLWA sources)
- Notifications
- Complaints
- Reports and Plans
- BMR and Permit (Re)Applications

General procedures for reviewing and evaluating data are:

1. For analytical data, the results of self-monitoring and GLWA sampling will be compared against applicable limits stated in a Wastewater Discharge Permit.
  - a. Compliance with Daily Maximum Limitations will be determined within 20 days of receipt of the analytical data and where noncompliant, written notice will be prepared to document the determination.
  - b. Compliance with a 4-day, 30-day or monthly average limitation will be determined by including all IU data including the User's 6-month (periodic) report and GLWA sampling. Where noncompliant, a written notice will be prepared to document the determination.
  - c. Analytical data compliance will also be made with the Significant Noncompliance Criteria (SNC) (Chronic and Technical review criteria), following receipt of all data results. The review of SNC will be made for each calendar quarter, i.e, 1st Quarter will include January-March, etc. Deficiencies or deviations will result in follow-up action.

2. Other data, i.e., volume of discharge, production rates, etc. that may apply to specific SIUs will be reviewed and evaluated as part of the 6-Month (periodic) report review as well as a comprehensive inspection. Deficiencies or deviations will result in follow-up action.
3. Reports and Plans include but not limited to 6-month (periodic) reports, 90-day reports, SCP and/or SPP plans, sampling plans, pH monitoring plans, etc., will be evaluated as follows:
  - a. Completeness of the submission. A preliminary review of the submittal will be made to determine whether essential components are included, such as identification, required analytical results, narratives to describe compliance, etc., which are expected for the particular submission. Where an essential element is missing or omitted, the submission will not be acknowledged as a valid submission until complete. The Control Authority will provide notice of such deficiency.
  - b. A submission appearing to be complete will be reviewed for compliance with applicable Pretreatment Standards and requirements, limitations, etc. Where required, support documentation relating to QA/QC, and or calculations, etc. will be reviewed for compliance. The Control Authority will document its review and provide notice of any deficiency, and violations identified to the Industrial User.
  - c. As a general goal, the GLWA Control Authority will seek to complete any review and evaluation within 30 days of receiving the report or plan. The timeframe may be extended where additional investigation is deemed necessary.
  - d. Copies of all notices, and records documenting reviews will be included in the file records of the Control Authority.
  - e. Deficiencies or deviations will result in follow-up action, in accordance with the GLWA's Enforcement response Guide.
4. Information and data, other than analytical data or a report or plan, will be reviewed and evaluated as appropriate. The GLWA Control Authority will use its BPJ and best efforts to conduct any additional investigation or verification of the information or data, necessary to assess compliance and provide Industrial Users with appropriate notification that (i) acknowledges receipt and acceptance of the information or data; (ii) identifies deficiencies with the report contents, or (iii) identifies noncompliance or violation of any limitation or requirement contained in a Wastewater Discharge Permit, or applicable law.

## **2.0 Recording and Retrieval of File Information**

Given the size of the GLWA service area, a large amount of information, data, records, correspondence, reports, etc. is generated and requires appropriate recording and retrieval.

The GLWA will use sufficient care to manage the data and information generated or received such that (i) it is retrievable; (ii) that it can be used as evidence in enforcement proceedings, and (iii) it is adequate for its intended purpose. As it deems necessary, the GLWA Control Authority will maintain records or information in paper form for the past three (3) years, and may use electronic or other methods to supplement or support these filing and recordkeeping practices. The GLWA will employ date stamps and if available, other technologies, to maintain the integrity and security

of information.

The File and recordkeeping practices are generally maintained by User Name, and may include applicable subdivisions for (i) correspondence, (ii) Industrial User reports, (iii) Wastewater Discharge Permits, Applications and BMRs, as well as (iv) Slug and/or SPP plans.

### **3.0 Other Data Management Activities**

The GLWA Control Authority will develop notifications, forms or formats, local IPP guidance for Industrial Users and maintain information or sources for information to assist both staff and Industrial Users in achieving the objectives of the Industrial Pretreatment Program. This includes but is not limited to the following examples:

1. Information on applicable Pretreatment Standards (federal, state, and local);
2. Information on applicable RCRA requirements in compliance with 40 CFR Part 403.8(f)(2)(iii);
3. Documentation protocols and exercise of reasonable care to document through reports, memoranda, notations, logs, photographs or other appropriate medium its findings and activities as they relate to specific IUs. Mechanisms, forms or formats shall be prepared as necessary to facilitate the documentation of information.
4. Information on nondomestic IUs, both active and inactive, will be retained in retrievable files for up to 3 years. Except in the case of an ongoing enforcement action, or one time submittals, files shall be reviewed periodically, and information more than three (3) years old shall be removed.
5. The GLWA shall implement confidentiality procedures in accordance with applicable law. Non-confidential information in the files shall be available to the public.
6. Information, other than information deemed “confidential” will be available for review by the Industrial User and the public at large through the FOIA policy of the GLWA.

### **4.0 Evaluation of Significant Noncompliance & Public Participation**

The GLWA will evaluate non-data events for Significant Noncompliance criteria of 40 CFR 403.8(f)(2)(vii), and document the review in the User’s file.

All events of Significant Noncompliance will satisfy the Public Participation requirements and include newspaper publication or other approved means of communication.

### **5.0 Substantial and Non-substantial Program Modifications**

The GLWA shall comply with substantial and non-substantial Program modifications, as required in 40 CFR Part 403.18, in response to promulgation of federal regulations and applicable State requirements. The GLWA also shall place this information in its annual report.

## **6.0 Enforcement**

As a result of the reviews, reports and/or other documentation generated or maintained in an IU's file, the GLWA will identify noncompliance. Where such noncompliance is identified, the GLWA's Enforcement Response Guide is to be used to identify an appropriate response to typical noncompliance. Noncompliance shall be documented in written reports when identified and forwarded to the enforcement Section as required.

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## *Chapter 6: Enforcement Procedures*

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The General Pretreatment Regulations (40 CFR Part 403<sup>1</sup>, as amended) require that the GLWA enforce compliance with applicable pretreatment standards and requirements. This chapter describes the GLWA Enforcement Program elements.

### **1.0 GLWA Responsibility**

The Board of the GLWA has assigned and authorized the Industrial Waste Control Operations Manager to be the person responsible for carrying out the administration, duties, and enforcement responsibilities as the GLWA, consistent with the intent of rules adopted on November 30, 2016. The Industrial Waste Control Operations Manager will direct staff, apply resources and use the legal authority granted by the GLWA's Board rules, or as may be delegated by the State of Michigan, to carry out the purpose and intent of the enforcement program described herein.

### **1.1 The GLWA Enforcement Program**

The GLWA, as Control Authority, has adopted rules to describe the local standards and requirements for Industrial Users to meet federal and state pretreatment standards and requirements. Industrial Users have an obligation to comply with these. Enforcement is the process by which an Industrial User's noncompliance and violations are surfaced, compliance is tracked, and remedies are imposed so as to attain compliance from the Industrial User.

The GLWA has developed an enforcement program to:

- Prevent potential damages to public facilities and/or natural resources;
- Provide fair and equitable treatment to all Users in the enforcement process by using a consistent and rational methodology;
- Deter noncompliance so that all Users comply with IPP requirements;
- Promote swift and consistent resolution of environmental problems;
- Remove the economic benefit an Industrial User may gain from not complying;
- Recover costs for damages to public facilities and/or natural resources

To achieve these objectives, the GLWA Enforcement Program will use (i) Administrative Enforcement Actions, (ii) Judicial Enforcement Actions and (iii) Supplemental Enforcement Actions to enforce the terms and conditions of GLWA's rules, and applicable state and federal regulations.

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<sup>1</sup> References to 40 CFR §§403, as amended, refer to the regulation as of the date of this writing. GLWA will seek to keep these regulatory references current.



## **1.2 Sample Forms**

The GLWA has developed a variety of forms and documents for use in the administration, implementation and enforcement of this Industrial Pretreatment Program. Samples of these forms are included in Appendix A. Additional forms and documents may be developed as needed, or to replace these forms as deemed necessary by the GLWA.

## **1.3 Enforcement Response Plan**

An Industrial User may be in non-conformity, noncompliance or violation of the federal, state or local rules and regulations, for a variety of circumstances. The regulations and Pretreatment Standards and Requirements, though self-implementing, require that the GLWA also develop methods of investigation, surveillance and evaluation, so that it may independently identify an Industrial User's noncompliance.

The Enforcement Response Plan of the GLWA consists of and includes the entire program document and the Enforcement Response Guide. The GLWA has developed an Enforcement Response Guide [See Appendix B] to describe the types of noncompliance that are likely to occur and to provide both notice (to the User) and guidance to GLWA's regulatory staff of the enforcement response(s)<sup>2</sup> available to appropriately address each non-compliance type. While the ERG seeks to be complete, it cannot include all acts and/or conditions which an Individual User may cause or commit, so that as a general rule: "Like infractions and conduct should require like responses".

A decision to institute enforcement action is normally triggered by a User's failure to achieve or maintain compliance with applicable pretreatment standards and requirements. This decision normally includes a review of the User's enforcement compliance history, which is the file(s) maintained by the GLWA. The level of an enforcement response will be based upon consideration of one or more of the following:

- Magnitude of noncompliance
- Duration of noncompliance
- Effect of Noncompliance on the WWTP performance
- Effect of noncompliance on receiving water quality
- Potential Effect of Noncompliance on the WWTP performance
- Potential Effect of noncompliance on receiving water quality
- History of past violations

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<sup>2</sup> It is imperative that the reader understand that the listing of Enforcement Responses should always consider the magnitude, frequency and seriousness of the violation, rather than a fixed step-wise process. The listing of Enforcement response should be considered as minimums. GLWA reserves its right to exercise its enforcement discretion and Best Professional Judgment in arriving at any Enforcement decision.

- Good faith efforts of User
- Effectiveness of responses in the past

The GLWA acting as the GLWA, reserves the discretion to select the enforcement response appropriate to the violation, and may consider any economic benefit which may have been obtained through noncompliance.

### **1.3.1 Administrative Enforcement Action**

The GLWA shall initiate the appropriate administrative enforcement action, except in the case of an emergency or flagrant violation, in order to compel a User to eliminate or remedy such violation as soon as possible. The record and documentation of the action selected will employ some form of written notice, description of the noncomplying action or conduct, and the expected response and/or corrective measures being sought. These include:

1.3.1.1 Notices of Violation (NOV) – includes any written notice provided to an Industrial User that conveys the finding(s) of the GLWA to any occurrence of non-compliance or violation. These written notices gives the Industrial User actual notice of the of the GLWA’s finding(s); and may require development and submission of a compliance schedule and other corrective actions to address the noncompliance; and a time or date allotted for the Industrial User’s response. GLWA uses several types of notices to implement its program. The following NOV notices are employed (See also Attachment A - Sample Form Book):

- a. **Notice of Exceedance (NOE)** – is a form report created to document the exceedance of one or more pollutant parameters measured from a User’s wastewater discharge, and includes, but not limited to the following:
  - i. Name of Pollutant(s)
  - ii. Result or Measurement (and units)
  - iii. Standard or limitation
  - iv. Date and location (sampling point) of measurement
  - v. Sample Type
  - vi. Sample Number or ID
  - vii. Comments (Optional)

The notice is automatically prepared whenever the GLWA’s sample result exceeds a pollutant limitation and may include more than one sample event, and is used only for such sampling events. The notice is reviewed and authorized by the Inspection Engineer. The NOE requires a response from the User.

- b. **Notice of Violation (NOV)** – is used for effluent (analytical) violations as well as for conduct or submissions.

- i. When used for effluent violations, it is a form/report created to document sample results where a discernable pattern, frequency or magnitude of the result(s) warrant an escalation of enforcement. An NOV may be issued even if an NOE has already been issued, and may recognize individual or multiple sampling events.
- ii. Variations of the form may also be used for non-sampling violations, e.g., failure to notify, tampering with samplers, etc.

The NOV form includes information similar to the NOE, and usually compels the User to attend a Conference where specific remedies and corrective measures are discussed. If no conference is required, the notice will clearly state this and specify the required response. The NOV always requires a response from the User.

- c. **Notice of Noncompliance (NON)** – is a generic notice used for a non-effluent noncompliance event; such as observations or determinations made from an inspection, or review and evaluation of periodic reports. In any event, the notice should include pertinent information, i.e., description of nonconformity, criteria or standard, and reference other inspections, notices, etc.; any corrective measures or specific remedies required; and the time frames for implementing or submitting a response. The NON requires a response from the User.

Additional violation notices may be developed as needed to effectively convey the GLWA's findings and notify an Industrial User.

1.3.1.2 Citations of Violation (**COV**) – The COV is a citation ticket issued by the GLWA for an Industrial User's reporting, notification and effluent violations meeting one or more of the criteria specified by the GLWA table of penalties (See GLWA rules). All COVs shall be authorized by the IWC Operations Manager.

1.3.1.3 Conferences & Compliance Schedules – The GLWA may order any person who violates the GLWA rules, 40 CFR Part 403, and/or a wastewater discharge permit to attend a conference. At a conference, the GLWA will endeavor to establish a program where the User agrees to eliminate or remedy their violation(s) pursuant to an enforceable compliance schedule. Although a Notice of Violation generally proceeds ordering an Industrial User to a conference, the GLWA, in an exercise of its enforcement discretion, may order an Industrial User to a conference for other reasons by written notice.

The conference is an informal meeting where the nature and scope of the violation(s) are addressed by the GLWA and the IU, and remedies for the violation or other issues are discussed, and generally seeks development of an enforceable compliance schedule. The compliance schedule will be made part of a Compliance Agreement, or may be attached to an Administrative Consent Order. Multiple conferences may be required to arrive at an acceptable compliance schedule.

Where the conference results in an acceptable compliance schedule, and the terms of a

compliance agreement or administrative consent order is reached, the GLWA or their designee and the Industrial User will countersign the documents to create an enforceable document. If the parties are unable to develop an acceptable compliance schedule, and/or the terms of a compliance agreement or administrative consent order cannot be reached, the GLWA will end the conference and consider escalation of the enforcement action.

As necessary, the GLWA will monitor the Industrial User's progress and compliance during the term of the compliance schedule and agreement. Where the IU complies with the schedule and agreement, the IU and the GLWA will perform compliance testing and/or other surveillance to verify completion prior to recommending removal from the enforcement rolls. Where the IU deviates from the agreement without cause, or additional violations occur, the enforcement action will be reviewed and the GLWA will consider escalation of the enforcement action.

- 1.3.1.4 Administrative Orders (AO) – whether issued unilaterally or by consent, the AO directs the Industrial User to take specific action(s) to remedy violations. The general construct of an Administrative Order includes (i) the finding of violation(s); (ii) specific actions, timeframes and schedules needed to remedy the violation(s); (iii) reporting requirements and (iv) (if appropriate) penalties.

The AO uses language that directs and orders an Industrial User to do something, and may be used as an alternative to a compliance agreement, or address instances involving exigent conditions, i.e., Permit Revocation, Cease & Desist Orders, Orders from a Show Cause Hearing, etc. It may also be used as an alternative control mechanism to a Wastewater Discharge Permit when circumstances warrant.

- 1.3.1.5 Show Cause Hearings (SCH) – may be used where a conference, compliance agreement or Administrative Order is either ineffective or not considered an appropriate to address an Industrial User's violation(s). The GLWA may employ the SCH by ordering an Industrial User's attendance at a hearing before the GLWA's Chief Compliance Officer or their designee, to "Show Cause why a proposed enforcement action should not be taken".

At the SCH, the GLWA presents its findings of violation, submits evidence in support of its findings, and provides a recommendation for an enforcement response to be embodied in an administrative order. The Industrial User has the opportunity to show cause why the action should (or should not) be taken and may submit its own evidence to support its position. Examples of where an SCH is appropriate is where a User has demonstrated intransigence, or balked at agreeing to a schedule.

- 1.3.1.6 Emergency Suspensions & Other Orders – Administrative actions will be taken to address emergencies or exigent events requiring an immediate response. Under these conditions, the User has a subsequent opportunity for a Hearing (i.e., SCH). Two typical examples are:

- a. Permit Revocation Order – is used where a User's discharge authorization is being withdrawn, for cause, or it is deemed necessary to formally terminate an

active Permit where an IU terminates their operations. The IU is provided an opportunity for a hearing in accordance with the GLWA rules.

- b. Cease & Desist Order – is issued to temporarily suspend an active discharge due to exigent conditions or similar events. Where issued verbally, a written order is issued within 24-hours, and the IU is provided an opportunity to a hearing before the GLWA in accordance with the GLWA rules.

**1.3.2 Judicial Enforcement Actions** – In addition to the administrative enforcement actions previously discussed, the GLWA can refer a case to the GLWA Office of General Counsel with a recommendation to file a civil or criminal action in a court of appropriate jurisdiction. Judicial enforcement actions may be filed in state or federal court in accordance with applicable state and/or federal civil/criminal procedures. Cases fall under one of the two categories:

- a. Civil Litigation is a filing in state or federal court for prosecution of violations or to seek to have a User enjoined from further discharge, to compel compliance, or to enforce the provisions of a wastewater discharge permit and to seek penalties and/or fines.
- b. Criminal Prosecution is a filing in state or federal court seeking prosecution of criminal charges against a User for criminal violations of the GLWA rules. This action is taken upon findings of criminal intent and evidence. The GLWA can seek fines as authorized by applicable laws and regulations.

**1.3.3 Supplemental Enforcement Actions** – The GLWA rules allow for the development and implementation of Pollution Prevention and Best Management Plans, as supplemental enforcement actions. These may be used for addressing discharges containing PCB (Poly chlorinated Bi-phenyls), Mercury (Hg), or other pollutants.

#### **1.4 Enforcement Procedures**

The Administrative, Judicial or Supplemental Enforcement Actions are performed in accordance with procedures developed by the GLWA. These procedures are developed as a reasonable interpretation of the federal, state or local rules except where these regulations specify a specific course of conduct.

As necessary, the GLWA will develop and promulgate Standard Operating Procedures (SOP) and develop guidance and policy statements to describe the system(s) necessary to meet these objectives and implement, administer and enforce the GLWA Pretreatment Program throughout the service area. The SOPs and policy statements are not considered as enforceable under the NPDES Permit MI0022802.

### 1.4.1 Discovering Noncompliance

The GLWA uses the tools of Inspection, Monitoring, and review of data and information to identify noncompliance. Industrial Users may also self-report noncompliance. Notwithstanding the specific method employed, the general discovery procedure generally includes:

- |                        |                                                                                                                                                                                                                           |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Step 1: Identification | Information on what constitutes the noncompliance, when it occurred, and its scope or magnitude.                                                                                                                          |
| Step 2: Criteria       | Recognition of the applicable criteria, e.g. limitation, standard, general or specific prohibition, compliance date or milestone, etc.                                                                                    |
| Step 3: Decision       | Determine whether the noncompliance has been established, e.g. data result exceeds permit limitation. If unsure consult with IWC Operations Manager. Include file notes if noncompliance is not established or warranted; |
| Step 4: Response       | Consult the Enforcement Response Guide for recommendations on appropriate enforcement response(s)                                                                                                                         |
| Step 5: Action:        | Place information into applicable format document (e.g., Exceedance Notice or Notice of Violation, etc.)                                                                                                                  |
| Step 6: Authorization  | - Direct document to authorized person(s) [or delegate] for execution and mailing/service.                                                                                                                                |

Each action of the IWC will be performed with sufficient care because it may be used (i) in future enforcement actions, or (ii) in ongoing enforcement actions.

### 1.4.2 Notification & Tracking of Compliance

Some form of written notice is necessary to document and notify the User of the findings. Notwithstanding the specific noncompliance that may be the subject of the notice, the general written notice procedure will be used to communicate any noncompliance discovered by the GLWA. These notices will be prepared by the Inspection Engineer and authorized in accordance with GLWA delegation protocols. These include:

- |                         |                                                                                                                                                                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Step1: Written Response | Place information into applicable format document (e.g., Exceedance Notice or Notice of Violation, etc.)                                                                                                                                         |
| Step 2: Content         | Written Notices should include all pertinent information necessary to communicate the discovery, nature and magnitude of an act of noncompliance, and include a date of occurrence or discovery and identify the person(s) making the discovery. |
| Step 3: Track Response  | As indicated by the notice, the date the User responds to the notice, the nature and scope of the response should be reviewed and evaluated. Information should be recorded in the User file.                                                    |

Step 4: Next Steps                      Where the Users response is timely and complete and addresses the subject of the notice, the matter is either (i) closed, or (ii) recommended for escalation of enforcement. *Note: Escalation involves discussion with the IWC Operations Manager.*

### **1.4.3 Time Frames - Enforcement**

The GLWA GLWA will use its best efforts and judgment to identify and address Noncompliance/violations in a timely manner. As a general rule, the GLWA will take enforcement action within twenty days of reaching a finding of noncompliance/violation. The following discussion provides additional insight into typical enforcement scenarios:

#### Time Frames: Discovering Effluent Violations

Step #1: The GLWA shall identify daily maximum violations (Exceedances) from its sampling and monitoring activities and reach a finding of noncompliance/violation, within ten (10) days of receiving the compliance information;

Step #2: The GLWA shall issue an enforcement response (NOE) within twenty (20) days of effluent violation identification.

Step #3: Violations which threaten health, or can be considered as an Emergency will receive an immediate response, i.e. referral for escalated enforcement action.

#### Time Frames: Discovering Effluent Violations – User Data

Step #1: The GLWA shall create a record of a User's self-monitoring violations and require resampling and a report within 30 days of receipt of notice from the User. The GLWA shall issue an enforcement response within twenty (20) days of receipt of the re-sampling report.

Step #2: The GLWA will review User's periodic (Six-month) Reports and identify effluent violations within thirty (30) days of receipt. The GLWA shall issue an enforcement response within twenty (20) days of identification of any self-monitoring effluent violation.

Step#3: Violations which threaten health, or can be considered as an Emergency will receive an immediate response, i.e. referral for escalated enforcement action.

#### Time Frames: Discovering Reporting Violations – User Data

Step #1: The GLWA will review User's periodic (Six-month) Reports and identify any self-monitoring violations, verify whether verbal or other notice was received from the User, and whether the User performed the required re-sampling within 30 days of receipt of notice from the User, or when the User should have known.

Step #2: If the User had complied with the notification and re-sampling requirements, no further action is taken. If however a User had failed to either notify and/or conduct the required re-sampling, the User is notified by GLWA within thirty (30) days of receipt of the periodic report.

### Time Frames: Discovering Other Violations

Step #1: Where a violation is identified from inspection or surveillance findings, the GLWA will initiate an appropriate Enforcement Response (NON) within thirty (30) of such finding, unless it involves a flagrant or pattern of noncompliance. In the latter case, the case must be referred for escalated enforcement (Level 2) within thirty (30) of such finding.

Step #2: Any violation, or group of violations which meets the definition of Significant Noncompliance shall be addressed with an enforcement action within thirty (30) days of the identification of the Significant Noncompliance.

#### **1.4.4 Level 2 Enforcement – Identifying Violations**

Whereas Level 1 Enforcement Actions are discoverable based on exceeding some limit, standard or other specification (e.g. time), Level II Enforcement Actions or Violations, generally require analysis and discernment of the conditions. Factors that include but are not limited to the magnitude of noncompliance; duration or frequency of noncompliance; effect on the POTW performance or receiving stream's water quality; or performance and discharge history of noncompliance; are considered to result in a Violation.

Additionally, the GLWA rules describe acts and conduct that are to be considered as violations, these are:

- 1) The failure of a User to provide a Permit Application, Baseline Monitoring Report or other application form for any discharge of wastewater to the sewer system prior to the commencement of discharge, whether from a new or existing source;
- 2) The failure of a User to completely and/or accurately report the wastewater constituents and/or characteristics of the User's discharge;
- 3) The failure to report significant changes in the User's operations or wastewater constituents and/or characteristics within the time frames provided in Section II-706 (b) of these rules;
- 4) The failure or refusal to grant reasonable access to the User's premises, waste discharge, or sample location for the purpose of inspection or monitoring;
- 5) Restricting, locking out or preventing, directly or indirectly, access to any monitoring facilities constructed on public or private property. The locking or securing of the monitoring facility shall not constitute a violation pursuant to this subsection, provided, that upon request, reasonable access to the facility is promptly provided to the GLWA representatives;
- 6) Restricting, interfering, tampering with, or rendering inaccurate any of the GLWA's monitoring devices including, but not limited to, samplers;



- 7) Failing to obtain a wastewater discharge permit prior to discharging wastewater to the POTW;
- 8) Failing to comply with any condition or requirement of the User's wastewater discharge permit, or other control mechanism;
- 9) Failing to provide notification of any self-monitoring violation, accidental release, or other notice required under these rules;
- 10) Failing to comply with any limitation, prohibition, or requirement of these rules, or order issued hereunder. Users acting in full compliance with wastewater discharge permits issued prior to the effective date of these rules shall be deemed to be in compliance with the requirements of these rules, and such permits shall remain in effect and be enforceable under these rules until a superseding permit is effective.
- 11) Users shall comply with applicable National Categorical Pretreatment Standards and requirements on the date specified in the Federal Regulations regardless of compliance schedules.

#### **1.4.4.1 Escalation to Violation**

Other than the specific violations enumerated in the GLWA rules, analytical exceedances or subjects of the noncompliance notice may require progression and escalation of the enforcement action. The following general procedures shall be taken:

|          |                             |                                                                                                                                                                                                                                                                                |
|----------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Step #1: | Identification              | If a User's act or conduct involve one or more of the eleven criteria specified in the GLWA rule, it is a violation and proceed to step #3. If not proceed to step #2.                                                                                                         |
| Step #2  | Effluent Violation          | Assess whether the User has a pattern of violation of any effluent limitation, i.e., daily, weekly, monthly, etc.; or the magnitude or frequency of occurrence; or performance history (18 months minimum), it is a violation and you should proceed to step #3. If not, stop. |
| Step #3  | Emergency Action            | Does the violation threaten health, or can be considered as an Emergency? If yes, go to Level 4 Enforcement Action. Otherwise, proceed to step #4.                                                                                                                             |
| Step #4  | Prepare Notice of Violation | Identify Findings and Source, include tables or other data as deemed necessary, Reach conclusion and specify required action(s). Initiate NOV within thirty (30) days of the finding the violation.                                                                            |
| Step #5  | Conference                  | Schedule Conference if applicable. Create (as needed) compliance schedule and agreement.                                                                                                                                                                                       |

#### **1.4.4.2 Compliance Tracking During Enforcement**

While some noncompliance/violations may be resolved immediately, others require some time to implement or evaluate. The following general compliance tracking procedures are used:

|         |                                              |                                                                                                                                                                                                                                                                             |
|---------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Step #1 | Enforcement Sampling                         | More frequent sampling, may be performed throughout the term of a Compliance Agreement. Sampling should be scheduled (using Best Professional Judgement) to monitor the User's compliance with the daily maximum and/or 4-day, weekly, or monthly averages (if applicable). |
| Step #2 | Enforcement Verification Inspections         | Conduct site inspections, as needed, to verify information in progress reports, and/or milestone dates established in the compliance schedule.                                                                                                                              |
| Step #3 | Final Compliance Sampling (or Determination) | Schedule GLWA sampling to verify compliance following Final Compliance Date, and up to 180 days afterwards. If violation is non-effluent, perform compliance inspection.                                                                                                    |

#### **1.4.5 Level 3 Enforcement Action – Enforcement Review and Escalation**

In addition to the general compliance tracking procedures described above, Industrial Users under an enforcement action, i.e., compliance agreement or administrative order, will be assessed semi-annually with the Operations Manager on whether they are making acceptable progress or whether additional or escalated enforcement action is required. Industrial Users who are not under enforcement but have had one or more NOV in the last 12 months will be assessed annually on whether any enforcement action is required.

#### **1.4.6 Level 4 Enforcement – Emergency Actions**

When in the opinion of the GLWA, an actual or risk to public health, or the environment or the POTW, is considered as an Emergency, the GLWA will proceed to issue orders to suspend or terminate a User's discharge and/or any wastewater discharge permit or equivalent control mechanism in place. In addition to the issuance of such order(s), the GLWA will refer the matter to legal counsel, when appropriate

#### **1.4.7 Level 5 Enforcement – Judicial Actions**

Level 5 enforcement actions refer to the legal, Civil and/or Criminal actions initiated by legal counsel in response to violations of local, State or federal law or regulations. Filings are made in a court of appropriate jurisdiction, i.e. State or federal. The case is referred to the attorney through a referral memorandum signed by the GLWA. IWC staff shall provide support to the management and counsel as necessary to prosecute the case.

#### **1.4.8 Other Actions**

The GLWA shall publish, at least on an annual basis, the names of those IUs who meet one or more of the criteria for Significant Noncompliance. The determination of SNC shall result from the monitoring, inspection, and data management activities (see related Chapters). The IU is notified of the GLWA's determination, and provided a copy of the proposed language. The User is afforded an opportunity to discuss the language and determination in an appeal hearing.

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## *Chapter 7: Organization of the GLWA Industrial Pretreatment Program*

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The Great Lakes Water Authority in seeking recognition as the “Control Authority” for purposes of implementation, administration and enforcement of its Industrial Pretreatment Program has allocated staffing to implement, administer and enforce the program. The Board of the GLWA has adopted Rules to specify the legal requirements for an Industrial Pretreatment Program in accordance with 40 CFR 403.8(f)(1).

### **1.0 Control Authority Responsibility**

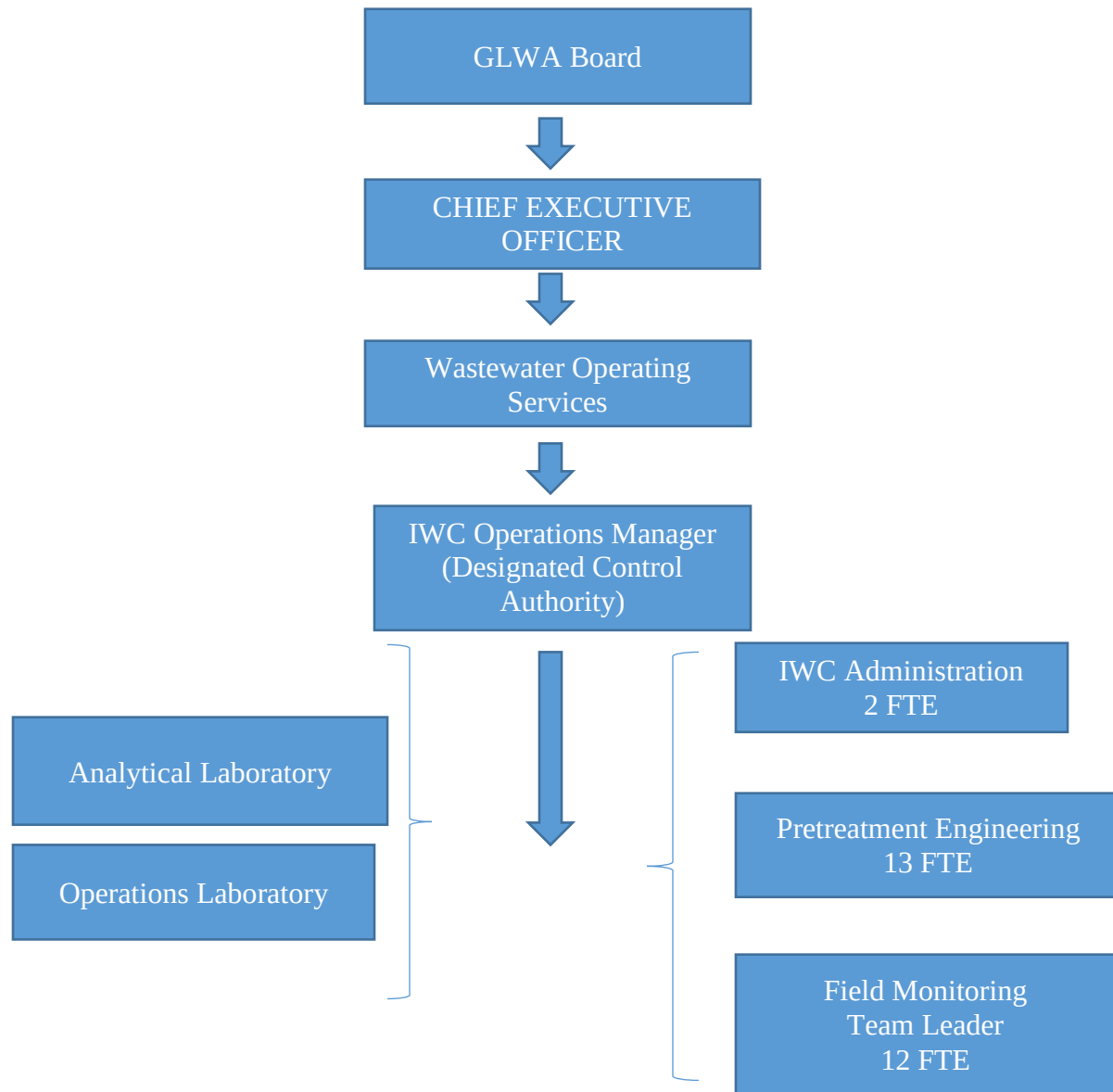
The Board of the GLWA has assigned and authorized the Industrial Waste Control Operations Manager to be the person responsible for carrying out the administration, duties, and enforcement responsibilities as the Control Authority, consistent with the intent of rules adopted on November 30, 2016. The Industrial Waste Control Operations Manager will direct staff, apply resources and use the legal authority granted by the GLWA’s Board rules, or as may be delegated by the State of Michigan, to carry out the purpose and intent of the enforcement program described herein.

### **2.0 Delegation of Authority – Industrial Waste Control Division Staff**

The organizational structure of the Industrial Waste Control Operations is comprised of the following titles and delegated responsibilities by the Industrial Waste Control Operations Manager. The Control Authority will exercise its best efforts to maintain staffing at 90% of these levels.

| <b>Position</b>                | <b>No. of FTE</b> | <b>Responsibilities &amp; Roles</b>                                                        | <b>Reporting To:</b>           |
|--------------------------------|-------------------|--------------------------------------------------------------------------------------------|--------------------------------|
| IWC Operations Manager         | 1                 | Designated Control Authority                                                               | Wastewater Operations Director |
| IWC Engineer                   | 10                | Inspections, Report Review, Enforcement, Survey, Permit Evaluation, Program Implementation | IWC Operations Manager         |
| Engineering Technicians        | 3                 | Support IWC Engineers in data collection, evaluation and processing                        | IWC Operations Manager         |
| Team Leader – Field Monitoring | 1                 | Supervise Collection of Field Samples and Records                                          | IWC Operations Manager         |
| Investigators                  | 11                | Collect Field Sample Collection, Record Field Observations and Follow COC                  | Team Leader – Field Monitoring |
| Office Support Specialists     | 2                 | Administrative assistance, Records Maintenance and Data Processing                         | IWC Operations Manager         |
| Totals =                       | 28                |                                                                                            |                                |

The organizational structure is presented below.





**APPENDIX A**  
**SAMPLE FORMS**







## APPENDIX A - SAMPLE FORMS

## **Sample Forms and Documents**

The sample forms and documents that are included in this appendix are presented as samples/examples of materials to be used to carry out the Industrial Pretreatment Program throughout the Service Area.

The GLWA reserves the right to modify, change, add or delete these forms compiled within Appendix A as deemed necessary to carry out the purpose, intent and obligations consistent with being a Control Authority under the Industrial Pretreatment Program.

GLWA will seek to maintain a current library of these documents and make them available to the Approval Authority upon request.

## Sample Application Forms



## 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) 297-5888 or [IWC@glwater.org](mailto:IWC@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

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  
SURVEY SECTION  
303 SOUTH LIVERNOIS  
DETROIT, MI 48209  
ATTN: INDUSTRIAL PRETREATMENT ENGINEER**



Great Lakes Water Authority  
Industrial Waste Control Division  
Livernois Center  
303 S. Livernois  
Detroit, MI 48209-3070

Phone: 313-297-5850

Fax: 313-297-5860

## 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 Wastewater Treatment Plant 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.

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                  |         |                 |                   |                  |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------|---------|-----------------|-------------------|------------------|
| Section A. General Information |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                  | BMR [ ] | Application [ ] | Reapplication [ ] | Permit Nbr _____ |
| 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?                                                             | YES |  | 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.                                                                           |     |  |    |  |
|                                         |                                                                                                                       |     |  |    |  |
|                                         |                                                                                                                       |     |  |    |  |
| 4                                       | North American Industrial Classification Code (NAICS Code)                                                            |     |  |    |  |
| 5                                       | Standard Industrial Classification Cod (SIC Code)                                                                     |     |  |    |  |
| 6                                       | Shift and Employee Information                                                                                        |     |  |    |  |
|                                         | Discharge on legal holidays (See Footnote)                                                                            |     |  |    |  |
|                                         | 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 operations begin at the current location?                          |     |  |    |  |
| 9                                       | What month and year did the facility begin discharging wastewater to the sewer?                                       |     |  |    |  |

\* Legal Holidays: New Years 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                      |  |
|-------------------------|--|-------------------------|--|
| 1st 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 _____ |
| <input type="checkbox"/> |                               | <input type="checkbox"/> |                      | <input type="checkbox"/> |         | <input type="checkbox"/> |             |

Water from other sources (groundwater, truck, other) Please describe source 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. |  |                                                                                                                   | YES |                                                            | NO |  |
|   |                                                                                                                                                                                                  |  |                                                                                                                   |     |                                                            |    |  |
|   |                                                                                                                                                                                                  |  |                                                                                                                   |     |                                                            |    |  |
|   |                                                                                                                                                                                                  |  |                                                                                                                   |     |                                                            |    |  |
| 2 | Please check all applicable methods of disposal used for wastewater and any solid/liquid waste materials from your facility.                                                                     |  |                                                                                                                   |     |                                                            |    |  |
|   | Method of Disposal                                                                                                                                                                               |  | Method of Disposal                                                                                                |     | Method of Disposal                                         |    |  |
|   | Discharged to sewer                                                                                                                                                                              |  | Hauled to Landfill                                                                                                |     | Treated On-site                                            |    |  |
|   | Discharged to Pond or Lagoon                                                                                                                                                                     |  | Hauled to off-site Treatment facility (see #5)                                                                    |     | Other (Describe)<br>_____                                  |    |  |
| 3 | For wastes hauled off-site, are waste manifests available?                                                                                                                                       |  |                                                                                                                   | YES |                                                            | NO |  |
|   | If yes, provide copies of all waste manifests for last 12 months                                                                                                                                 |  |                                                                                                                   |     |                                                            |    |  |
| 4 | Does you facility have secondary containment for spill control? (Dikes, trenches, storage controls)                                                                                              |  |                                                                                                                   | YES |                                                            | NO |  |
| 5 | Does your facility have any floor drains in the chemical storage area?                                                                                                                           |  |                                                                                                                   | YES |                                                            | NO |  |
| 6 | Does your company submit Tier I or II information under the SARA Title III Program?                                                                                                              |  |                                                                                                                   | YES |                                                            | NO |  |
| 7 | Please indicate if you are required to submit any of the following regulatory documents. Check all that apply.                                                                                   |  |                                                                                                                   |     |                                                            |    |  |
|   | Regulatory Documents (Specify type)                                                                                                                                                              |  | I discharge substances characterized as hazardous waste under 40 CFR 261 (attach copy of 40 CFR 403.12(p) report) |     |                                                            |    |  |
|   | Spill Prevention Countermeasure Control Plan (SPCC)                                                                                                                                              |  | Pollution Incident Prevention Plan (PIPP)                                                                         |     | Contingency Plan                                           |    |  |
|   | Materia Safety Data Sheet                                                                                                                                                                        |  | R Form (Toxic chemical release reporting form)                                                                    |     | Treatment, Storage and Disposal Facility Operating License |    |  |

| 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><br>(See Definitions Below) | Regulated <sup>4</sup> ,<br>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

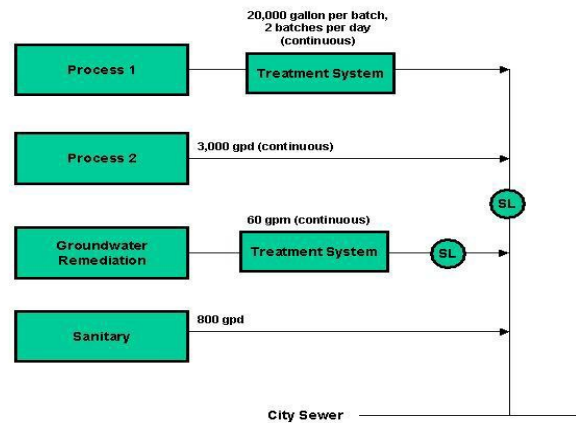
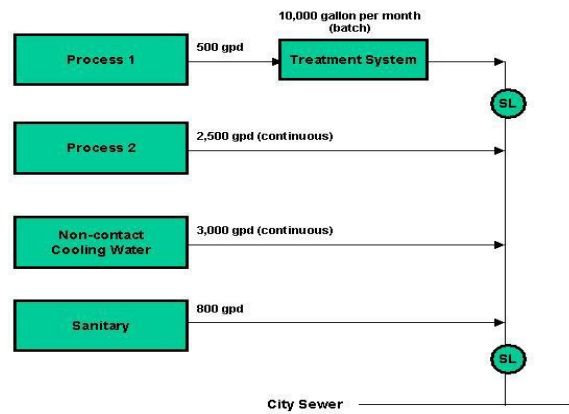
<sup>2</sup> Intermittent - wastewater discharge infrequently e.g., discharge occurs at intervals of 30 days or greater

<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.



SL = Sample Location

|                                                                                                  |
|--------------------------------------------------------------------------------------------------|
| 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

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 <b>MANDATORY FOR BMR SUBMISSIONS</b>         |                                                                                                                                                                                                                                |    |    |    |    |    |    |    |    |     |    |               |  |    |     |     |   |     |  |
|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|----|----|----|-----|----|---------------|--|----|-----|-----|---|-----|--|
| 1                                                                                                  | Do you have any analytical results of your wastewater discharge?                                                                                                                                                               |    |    |    |    |    |    |    |    |     |    | 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                                                                                                                                                                                                                    | As | Cd | Cr | Cu | CN | Fe | Pb | Hg | Ag  | Zn | Total Phenols |  | pH | BOD | FOG | P | TSS |  |
|                                                                                                    |                                                                                                                                                                                                                                |    |    |    |    |    |    |    |    |     |    |               |  |    |     |     |   |     |  |
|                                                                                                    |                                                                                                                                                                                                                                |    |    |    |    |    |    |    |    |     |    |               |  |    |     |     |   |     |  |
| Election for Individual Phenolic Coumpounds      YES _____      NO _____      Not Applicable _____ |                                                                                                                                                                                                                                |    |    |    |    |    |    |    |    |     |    |               |  |    |     |     |   |     |  |
| 2                                                                                                  | Based on the analytical data provided, are pretreatment standards being met on a consistent basis?                                                                                                                             |    |    |    |    |    |    |    |    | YES |    |               |  | NO |     |     |   | N/A |  |
|                                                                                                    | If No, what additional operational and maintenance plans are under consideration to attain compliance? Describe below.                                                                                                         |    |    |    |    |    |    |    |    |     |    |               |  |    |     |     |   |     |  |
|                                                                                                    |                                                                                                                                                                                                                                |    |    |    |    |    |    |    |    |     |    |               |  |    |     |     |   |     |  |
|                                                                                                    |                                                                                                                                                                                                                                |    |    |    |    |    |    |    |    |     |    |               |  |    |     |     |   |     |  |
| 3                                                                                                  | For facilities subject to Mass or Production Based Categorical Pretreatment Regulations, include the Mass, Volume, and all required information for last 12 months.                                                            |    |    |    |    |    |    |    |    |     |    |               |  |    |     |     |   |     |  |

### Section K: **Additional Requirements for Permit Reapplications**

1. Indicate if you intend to monitor for the individual phenolic compounds rather than Total phenols.    ☐ Yes ☐ No
2. For facilities subject to Electroplating (40 CFR 413), Metalfinishing (40 CFR 433), Electrical and Electronic Components (40 CFR469); include an updated Toxic Organic Management Plan (TOMP) or Total Toxic Organic Analyses (TTO).
3. For facilities subject to Aluminum forming (40 CFR 467), Metal Molding & Casting (40 CFR 464), or Copper Forming (40 CFR 468), Coil Coating - Subpart D Can-making Subcategory (40 CFR 465), include your election for Oil & Grease monitoring or Total Toxic Organic monitoring.
4. For facilities subject to Transportation Equipment Cleaning (40 CFR 442), provide an updated Pollutant Management Plan.

**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

|    | POINT SOURCE CATEGORIES                 | From 40 CFR Part   |
|----|-----------------------------------------|--------------------|
| 1  | Aluminum Forming                        | 467                |
| 2  | Animal Feeding Operations               | 412                |
| 3  | Anodizing                               | 413, 433           |
| 4  | Aquatic Animal Production               | 451                |
| 5  | Asbestos Manufacturing                  | 427                |
| 6  | Battery Manufacturing                   | 461                |
| 7  | Builder's Paper & Paperboard Mills      | 431                |
| 8  | Carbon Black Manufacturing              | 458                |
| 9  | Canned and Preserved Fruits/Vegetables  | 407                |
| 10 | Canned and Preserved Seafood Processing | 408                |
|    |                                         |                    |
| 11 | Casting Operations                      | 421, 464, 467, 471 |
| 12 | Cement Manufacturing                    | 411                |
| 13 | Centralized Waste Treatment             | 437                |
| 14 | Chemical Etching                        | 413, 433           |
| 15 | Coal Mining                             | 434                |
| 16 | Coating                                 | 413, 433           |
| 17 | Coil Coating                            | 465                |
| 18 | Cold Rolling                            | 420, 467, 468, 471 |
| 19 | Construction & Development              | 450                |
| 20 | Copper Forming                          | 468                |
|    |                                         |                    |
| 21 | Dairy Products Processing               | 405                |
| 22 | Drawing                                 | 420, 467, 468, 471 |
| 23 | Electrical & Electronic Components      | 469                |
| 24 | Electroless Plating                     | 413, 433           |
| 25 | Electroplating                          | 413, 433           |
| 26 | Explosives Manufacturing                | 457                |
| 27 | Extruding                               | 420, 467, 468, 471 |
| 28 | Ferroalloy Manufacturing                | 424                |
| 29 | Fertilizer Manufacturing                | 418                |
| 30 | Forging                                 | 420, 467, 468, 471 |
|    |                                         |                    |
| 31 | Foundries                               | 420, 421           |
| 32 | Fruits & Vegetable Processing           | 407                |
| 33 | Glass Manufacturing                     | 426                |
| 34 | Grain Mills Manufacturing               | 406                |
| 35 | Gum & Wood Chemicals Manufacturing      | 454                |
| 36 | Hospitals                               | 460                |
| 37 | Hot Rolling                             | 420, 467, 468, 471 |
|    |                                         |                    |
| 38 | Ink Formulating                         | 447                |
| 39 | Inorganic Chemicals Manufacturing       | 415                |
| 40 | Iron & Steel Manufacturing              | 420                |
|    |                                         |                    |

|    | <b>POINT SOURCE CATEGORIES</b>                  | <b>From 40 CFR Part</b> |
|----|-------------------------------------------------|-------------------------|
| 41 | Landfills                                       | 445                     |
| 42 | Leather Tanning & Finishing                     | 425                     |
| 43 | Meat & Poultry Products                         | 432                     |
| 44 | Metal Finishing                                 | 433                     |
| 45 | Metal Molding & Casting                         | 421, 464, 467, 471      |
| 46 | Metal Products & Machinery                      | 438                     |
| 47 | Milling                                         | 413, 433                |
| 48 | Mineral Mining & Processing                     | 436                     |
| 49 | Nonferrous Metals Forming & Metal Powders       | 471                     |
| 50 | Nonferrous Metals Manufacturing I and II        | 421                     |
|    |                                                 |                         |
| 51 | Oil & Gas Extraction                            | 435                     |
| 52 | Ore Mining & Dressing                           | 440                     |
| 53 | Organic Chemicals, Plastics, & Synthetic Fibers | 446                     |
| 54 | Paint Formulating                               | 446                     |
| 55 | Paving & Roofing (Tars & Asphalt)               | 443                     |
| 56 | Pesticide Chemicals Manufacturing               | 455                     |
| 57 | Petroleum Refining                              | 419                     |
| 58 | Pharmaceutical Manufacturing                    | 439                     |
| 59 | Phosphate Manufacturing                         | 422                     |
| 60 | Photographic Processing                         | 459                     |
|    |                                                 |                         |
| 61 | Plastic Molding & Forming                       | 463                     |
| 62 | Porcelain Enameling                             | 466                     |
| 63 | Printed Circuit Board Manufacturing             | 413                     |
| 64 | Pulp, Paper, & Paperboard Mills                 | 430                     |
| 65 | (Non-ferrous metal) Refining                    | 421                     |
| 66 | Rubber Processing                               | 428                     |
| 67 | Seafood Processing                              | 408                     |
| 68 | (Non-ferrous metal) Smelting                    | 421                     |
| 69 | Soap & Detergent Manufacturing                  | 417                     |
| 70 | Steam Electric Power Generation                 | 423                     |
|    |                                                 |                         |
| 71 | Sugar Processing                                | 409                     |
| 72 | Textile Mills Manufacturing                     | 410                     |
| 73 | Timber Products Manufacturing                   | 429                     |
| 74 | Transportation Equipment Cleaning               | 442                     |
| 75 | Waste Combustors                                | 444                     |



## APPENDIX B:

### EPA PRIORITY POLLUTANTS MICHIGAN CRITICAL MATERIALS LIST

#### ORGANICS

|    |                              |    |                                   |
|----|------------------------------|----|-----------------------------------|
| 1  | acids                        | 33 | 1-chloro-2,3-epoxypropane         |
| 2  | acenaphthene                 | 34 | chloroalkyl ethers                |
| 3  | acetone cyanohydrin          |    | 2-chloroethyl vinyl ether         |
| 4  | 2-acetylaminofluorene        | 35 | bis(2-chloroethyl) ether          |
| 5  | acrolein                     | 36 | chloroform                        |
| 6  | acrylic acid                 | 37 | bis(2-chloromethyl) ether         |
| 7  | acrylonitrile                | 38 | 3-chloromethyl) pyridine          |
| 8  | allyl chloride               |    | hydrochloride                     |
| 9  | 2-aminoanthraquinone         | 39 | 1-(4-chlorophenyl)-3,3-dimethyl   |
| 10 | aminoazobenzene              |    | triazene                          |
| 11 | o-aminoazotoluene            | 40 | 4-chloro-m-phenylenediamine       |
| 12 | 4-aminobiphenyl              | 41 | 4-chloro-o-phenylenediamine       |
| 13 | 3-amino-2-methylantraquinone | 42 | chloroprene                       |
| 14 | 1-amino-2-methylantraquinone |    |                                   |
| 15 | aminotriazole                | 43 | 5-chloro-o-toluidine              |
| 16 | aniline                      | 44 | p-cresidine                       |
| 17 | aniline hydrochloride        | 45 | 2,4-diaminoanisole sulfate        |
| 18 | o-anisidine                  | 46 | 4,4-diaminodiphenyl ether         |
| 19 | o-anisidine hydrochloride    | 47 | 2,4-diaminotoluene                |
| 20 | benzo(a)anthracene           | 48 | dibenzo(a,h)anthracene            |
| 21 | benzene                      | 49 | tris(2,3-dibromopropyl) phosphate |
| 22 | benzidine                    | 50 | di-n-butyl phthalate              |
| 23 | benzidine salts              | 51 | 3,3-dichlorobenzidine             |
| 24 | benzo(a)pyrene               | 52 | 3,3-dichlorobenzidine salts       |
| 25 | brucine                      | 53 | 1,2-dichloroethane                |
| 26 | carbon tetrachloride         | 54 | dichloroethylenes                 |
| 27 | chlorinated benzenes         |    | 1,1-dichloroethylene              |
|    | chlorobenzene                |    | 1,2-trans-dichloroethylene        |
|    | 1,2,4-trichlorobenzene       | 55 | dichloropropane & dichloropropene |
|    | 1,2-dichlorobenzene          |    | 1,3-dichloropropylene             |
|    | 1,3-dichlorobenzene          |    | (1,3-dichloropropene)             |
|    | 1,4-dichlorobenzene          |    | 1,2-dichloropropane               |
| 28 | chlorinated dibenzofurans    |    |                                   |
| 29 | chlorinated dioxins          | 56 | 1,2,3,4-diepoxybutane             |
| 30 | chlorinated ethanes          | 57 | diethyl sulfate                   |
|    | 1,1,1-trichloroethane        | 58 | 4-dimethylaminoazobenzene         |
|    | 1,1-dichloroethane           | 59 | dimethylhydrazines                |
|    | chloroethane                 | 60 | 2,4-dimethyl phenol               |
|    | 1,1,2,2-tetrachloroethane    | 61 | 4,6-dinitro-o-cresol              |
| 31 | chlorinated naphthalene      | 62 | 2,4-dinitrophenol                 |
|    | 2-chloronaphthalene          | 63 | 2,4-dinitrotoluene                |
| 32 | chlorinated phenols          | 64 | dinitrotoluene                    |
|    | 2-chlorophenol               |    | 2,6-dinitrotoluene                |
|    | p-chloro-m-cresol            |    |                                   |
|    | 2,4-dichlorophenol           |    |                                   |

# **APPENDIX B:** **EPA PRIORITY POLLUTANTS MICHIGAN CRITICAL MATERIALS LIST**

|    |                                                    |     |                                           |
|----|----------------------------------------------------|-----|-------------------------------------------|
| 65 | di-n-octyl phthalate                               | 94  | methylhydrazine                           |
| 66 | 1,4-dioxane                                        | 95  | 1-methylnaphthalene                       |
| 67 | 2,3-epoxy-1-propanol                               | 96  | 2-methyl-1-nitroanthraquinone             |
| 68 | ethylbenzene                                       | 97  | mustard gas                               |
| 69 | ethylene dibromide                                 | 98  | 1,5-naphthalenediamine                    |
| 70 | ethyleneimine                                      | 99  | 1-naphthylamine                           |
| 71 | ethylene oxide                                     | 100 | 2-naphthylamine                           |
| 72 | ethylene thiourea                                  | 101 | 5-nitroacenaphthene                       |
| 73 | bis(2-ethylhexyl) phthalate                        | 102 | 5-nitro-o-anisidine                       |
| 74 | ethylmethanesulfonate                              | 103 | nitrobenzene                              |
| 75 | fluoranthene                                       | 104 | 4-nitrobiphenyl                           |
| 76 | 2-(2-formylhydrazino)-4-(5-nitro-2-furyl)-thiazole | 105 | nitrogen mustard                          |
| 77 | Haloethers                                         | 106 | 2-nitrophenol                             |
|    | 4-chlorophenyl phenyl ether                        | 107 | 2-nitrophenol                             |
|    | 4-bromophenyl phenyl ether                         | 108 | nitrosamines                              |
|    | bis(2-chloroisopropyl) ether                       |     | N-nitrosodiphenylamine                    |
|    | bis(2-chloroethoxyl) methane                       | 109 | N-nitrosodi-n-propylamine                 |
| 78 | Halomethanes                                       |     | N-nitroso-n-butyl-N (4-hydroxybutyl)amine |
|    | methylene chloride                                 | 110 | N-nitrosodiethylamine                     |
|    | (dichloromethane)                                  | 111 | N-nitrosodimethylamine                    |
|    | methyl chloride                                    | 112 | p-nitrosodiphenylamine                    |
|    | (chloromethane)                                    | 113 | N-nitroso-N-ethylurea                     |
|    | methyl bromide (bromoethane)                       | 114 | N-nitroso-N-methylurea                    |
|    | bromoform (tribromomethane)                        | 115 | N-nitroso-N-methylurethane                |
|    | dichlorobromomethane                               | 116 | N-nitrosomethylvinylamine                 |
|    | trichlorofluoromethane                             | 117 | N-nitrosomorpholine                       |
|    | dichlorodibromomethane                             | 118 | N-nitroso-N-phenylhydroxylamine           |
|    | chlorodibromomethane                               |     | ammonium salts                            |
| 79 | hexachlorobenzene (HCB)                            | 119 | N-nitrososarcosine                        |
| 80 | hexachlorobutadiene                                | 120 | pentachloronitrobenzene                   |
| 81 | hexachlorocyclohexane                              | 121 | pentachlorophenol                         |
| 82 | hexachlorocyclopentadiene                          | 122 | peroxyacetic acid                         |
| 83 | hexachloroethane                                   | 123 | phenol                                    |
| 84 | hydrazobenzene                                     | 124 | phthalate esters                          |
| 85 | hydroquinone                                       |     | butyl benzyl phthalate                    |
| 86 | N-(2-hydroxyethyl) ethyleneimine                   |     | diethyl phthalate                         |
| 87 | isophorone                                         |     | dimethyl phthalate                        |
| 88 | lactonitrile                                       | 125 | piperonyl sulfoxide                       |
| 89 | malachite green                                    | 126 | polybrominated biphenyls (PPB)            |
| 90 | methylenebis(2-chloroaniline)                      | 127 | polychlorinated biphenyls (PCB)           |
| 91 | 4,4-methylenebis(2-methylaniline)                  | 128 | polynuclear aromatic hydrocarbon          |
| 92 | 4,4-methylenebis (N,N-dimethyl aniline)            |     | 3,4-benzofluoranthene                     |
|    |                                                    |     | benzo(k)fluoranthene                      |
| 93 | 1,2(methylenedioxy)-4-propenyl benzene             |     | 11,12-benzofluoranthene                   |

## APPENDIX B:

### EPA PRIORITY POLLUTANTS MICHIGAN CRITICAL MATERIALS LIST

|     |                                                |     |                                                       |
|-----|------------------------------------------------|-----|-------------------------------------------------------|
|     | chrysene                                       |     | <u>Inorganic</u>                                      |
|     | acenaphthalene                                 |     |                                                       |
|     | anthracene                                     | 165 | acids                                                 |
|     | benzo(ghi)perylene                             | 166 | chloramines                                           |
|     | fluorene                                       | 167 | chlorine                                              |
|     | phenanthrene                                   | 168 | cyanides                                              |
|     | indeno(1,2,3-cd)pyrene (2,3-o-phenylenepyrene) | 169 | hydrazine                                             |
|     | pyrene                                         | 170 | hydrogen sulfide                                      |
|     | naphthalene                                    | 171 | hypochlorite                                          |
|     |                                                | 172 | asbestos (fibrous)                                    |
| 129 | 1,3-propane sultone                            |     |                                                       |
| 130 | beta-propiolactone                             |     | <u>Pesticides</u>                                     |
| 131 | 5-propyl-1,3-benzodioxole                      |     |                                                       |
| 132 | propyleneimine                                 | 173 | aldicarb                                              |
| 133 | semicarbazide                                  | 174 | aldrin                                                |
| 134 | styrene                                        | 175 | 4-aminopyridine                                       |
| 135 | tetrachloroethylene (perchloroethylene)        | 176 | anilazine                                             |
|     |                                                | 177 | antimycin A                                           |
| 136 | thioacetamide                                  | 178 | azinphos-ethyl                                        |
| 137 | 4,4-thiodianiline                              | 179 | azinphos-methyl                                       |
| 138 | thiourea                                       | 180 | barban                                                |
| 139 | toluene                                        | 181 | bendiocarb                                            |
| 140 | o-toluidine                                    |     |                                                       |
| 141 | o-toluidine hydrochloride                      | 182 | benomyl                                               |
| 142 | triaryl phosphate esters                       | 183 | bromoxynil                                            |
| 143 | 1,1,2-trichloroethane                          | 184 | 2(p-tert-butylphenoxy isopropyl 2-chloroethyl sulfite |
| 144 | trichloroethylene                              |     |                                                       |
| 145 | trichlorophenol                                | 185 | captafol                                              |
| 146 | 2,4,5-trimethylaniline                         | 186 | captan                                                |
| 147 | trimethylphosphate                             | 187 | carbaryl                                              |
| 148 | vinyl chloride                                 | 188 | carbofuran                                            |
| 149 | xylene                                         | 189 | carbophenothion                                       |
|     | <u>Metals</u>                                  |     |                                                       |
|     |                                                | 190 | chlordane                                             |
| 150 | antimony                                       | 191 | chlordecone                                           |
| 151 | arsenic                                        | 192 | chlorfenvinphos                                       |
| 152 | beryllium                                      | 193 | chlorobenzilate                                       |
| 153 | cadmium                                        | 194 | chlorpyrifos                                          |
| 154 | chromium                                       | 195 | clonitralid                                           |
| 155 | cobalt                                         | 196 | coumaphos                                             |
| 156 | copper                                         | 197 | crotoxyphos                                           |
| 157 | lead                                           | 198 | cycloheximide                                         |
| 158 | lithium                                        | 199 | DDT                                                   |
| 159 | mercury                                        | 200 | demeton                                               |
| 160 | nickel                                         | 201 | diallate                                              |
| 161 | selenium                                       | 202 | diazinon                                              |
| 162 | silver                                         | 203 | dibromochloropropane (DBCP)                           |
| 163 | thallium                                       | 204 | dichlone                                              |
| 164 | zinc                                           | 205 | dichlorvos                                            |

# **APPENDIX B:** **EPA PRIORITY POLLUTANTS MICHIGAN CRITICAL MATERIALS LIST**

|     |                                            |     |                             |
|-----|--------------------------------------------|-----|-----------------------------|
| 206 | dichrotophos                               |     |                             |
| 207 | dieldrin                                   | 248 | sodium fluoroacetate        |
| 208 | dimethoate                                 | 249 | strychnine                  |
| 209 | dinocap                                    | 250 | sulfallate                  |
| 210 | dinoseb                                    | 251 | sulfoxide                   |
| 211 | dioxathion                                 | 252 | TDE                         |
| 212 | disulfoton                                 | 253 | TEPP                        |
| 213 | endosulfan                                 | 254 | terbufos                    |
| 214 | endrin                                     | 255 | tetrachlorvinphos           |
| 215 | EPN                                        | 256 | thiram                      |
| 216 | ethion                                     | 257 | toxaphene                   |
| 217 | fensulfothion                              | 258 | trichlorofon                |
| 218 | fenthion                                   | 259 | trichlorophenoxyacetic acid |
|     |                                            | 260 | trifluralin                 |
|     |                                            | 261 | ziram                       |
| 219 | fluchloralin                               |     |                             |
| 220 | heptachlor                                 |     |                             |
| 221 | heptachlor epoxide                         |     |                             |
| 222 | hexachlorocyclohexane isomers              |     |                             |
| 223 | leptophos                                  |     |                             |
| 224 | malathion                                  |     |                             |
|     | 4,4' -DDE (p,p' -DDE)                      |     |                             |
|     | 4, 4' -DDD (p,p' -TDE)                     |     |                             |
| 225 | endosulfan sulfate                         |     |                             |
| 226 | metabolites of endrin                      |     |                             |
|     | endrin aldehyde                            |     |                             |
| 227 | metabolites of heptachlor                  |     |                             |
|     | heptachlor epoxide                         |     |                             |
| 228 | methomyl                                   |     |                             |
| 229 | methoxychlor                               |     |                             |
| 230 | methyl mercaptan                           |     |                             |
| 231 | methyl parathion                           |     |                             |
| 232 | mevinphos                                  |     |                             |
| 233 | mexacarbate                                |     |                             |
| 234 | mirex                                      |     |                             |
| 235 | monocrotophos                              |     |                             |
| 236 | naled                                      |     |                             |
| 237 | nicotine                                   |     |                             |
| 238 | nitrofen                                   |     |                             |
| 239 | oxydemeton-methyl                          |     |                             |
| 240 | paraquat                                   |     |                             |
| 241 | parathon                                   |     |                             |
| 242 | phorate                                    |     |                             |
| 243 | phosazetim                                 |     |                             |
| 244 | phosmet                                    |     |                             |
| 245 | phosphamidon                               |     |                             |
| 246 | rotenone                                   |     |                             |
| 247 | silvex, propylene glycol butyl ether ester |     |                             |



## GENERAL DISCHARGE PERMIT APPLICATION/REAPPLICATION (UTILITY COMPANIES ONLY)

This application/questionnaire is designed to enable the Great Lakes Water Authority (GLWA) to authorize the discharge of groundwater resulting from maintenance and related activities of gas, steam or electrical utilities into the GLWA Sewerage System. The information provided in this application will be used to decide whether a permit can be granted.

### SECTION A. GENERAL INFORMATION

1. BUSINESS NAME OF APPLICANT: \_\_\_\_\_
2. MAILING ADDRESS: \_\_\_\_\_  
\_\_\_\_\_
3. NAME of AUTHORIZED REPRESENTATIVE: \_\_\_\_\_  
TITLE: \_\_\_\_\_
4. TELEPHONE NO.: \_\_\_\_\_ FAX NO.: \_\_\_\_\_
5. NAME of CONTACT PERSON: \_\_\_\_\_ TELEPHONE NO. \_\_\_\_\_  
TITLE: \_\_\_\_\_

### SECTION B. GENERAL SERVICE AREA AND SITES LOCATION

Service Area and Site Location:

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#### Source of Collected Wastewater:

Type of Discharge from:

Vault: \_\_\_\_\_ Trench: \_\_\_\_\_ Manholes: \_\_\_\_\_

Discharge

\_\_\_\_\_ From: Vault/Trench/manhole (Designate each one)

Any other Accumulation (Describe):

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---

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**SECTION C:****WASTEWATER INFORMATION**

1. Indicate the constituents that are or could be present in the wastewater :

|                                               |                                                 |
|-----------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> Ammonia              | <input type="checkbox"/> Radioactive Substances |
| <input type="checkbox"/> Caustics             | <input type="checkbox"/> Mud, Sand, Silt        |
| <input type="checkbox"/> Detergents           | <input type="checkbox"/> Acids                  |
| <input type="checkbox"/> Heavy Metals         | <input type="checkbox"/> PCBs                   |
| <input type="checkbox"/> Brine                | <input type="checkbox"/> Solvents               |
| <input type="checkbox"/> Oil and Grease       | <input type="checkbox"/> Sulfides               |
| <input type="checkbox"/> Pesticides           | <input type="checkbox"/> Other                  |
| <input type="checkbox"/> Flammable Substances |                                                 |

2. Describe the method of discharging the wastewater from the site to the sewer system (above ground, in ground).

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**SECTION D:****CERTIFICATION STATEMENT**

I certify under penalty of law that I am familiar with the information 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 / or imprisonment.

\_\_\_\_\_/\_\_\_\_\_  
Authorized Representative's Signature Date

\_\_\_\_\_  
Authorized Representative's Name (please print)

\_\_\_\_\_/\_\_\_\_\_  
Title Telephone No.

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address

## **INSTRUCTIONS FOR COMPLETING THE GENERAL DISCHARGE PERMIT**

Section A - General Information

Section B - General Service Area - Site Locations

Section C - Wastewater Information

Section D - Certification Statement

### **A. General Information**

- 1-5 Give complete business name and mailing address of the applicant. Specify the name, title and phone number of the designated authorized representative and of the contact person.

### **B. General Service Area Site Locations**

1. Specify general service area, specific site or locations and where wastewater is collected and to which sewer line discharge will be made. Submit essential drawings showing the details.
2. Provide source of collected wastewater.

Note: It is prohibited to discharge into storm sewers that connect to storm drains and open waters without MDNR (DEQ) approval. Care must be taken to determine proper sewer lines which will connect to GLWA collection system. If necessary consult with appropriate local authorities and/or GLWA.

### **C. Wastewater Information**

1. Mark the pollutants suspected to be present in the wastewater.
2. . Verify the manner of discharging the wastewater assuring the GLWA that discharge will be made to proper sanitary sewer. The discharge end should be located inside the man-holes facing vertically downward.

### **D. Certification**

This section must be signed by the company's authorized representative. The authorized representative shall refer to a corporate officer or a general partner.

**GREAT LAKES WATER AUTHORITY  
INDUSTRIAL WASTE CONTROL DIVISION  
POLICY FOR GENERAL GROUNDWATER DISCHARGE PERMIT**

The Detroit Water and Sewerage Department (GLWA) allows the utility companies to discharge groundwater, storm water, and other wastewater sources without prior notice into the sewer system in accordance with the following conditions.

- 1) The applicant for the general ground wastewater discharge shall not discharge any ground wastewater into the sewer system without the General Discharge Permit:
- 2) The applicant shall apply for a General Discharge Permit on the Permit Application/Reapplication form. and satisfy the following requirements:
  - a) The background history of the site of locations 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 certification of the company's authorized representative responsible for the overall project operation.
- 3) The Department shall issue the General Discharge Permit after the applicant complies with all the requirements.
- 4) The General Discharge Permit shall contain the discharge limitations, reporting requirements, and other general conditions needed for compliance.
- 5) The applicant shall comply with all the established conditions and requirements as issued on the General Discharge Permit. Failure to comply shall result in immediate permit revocation and appropriate enforcement action.



Septage Hauler Unloading Permit  
Application / Re-Application Form

**GREAT LAKES WATER AUTHORITY**  
**Industrial Waste Control Division**

303 S. Livernois  
Detroit, Michigan 48209  
Phone: (313) 297-5850      Fax: (313) 297-5860

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**Septage Hauler Unloading Permit**  
**Application / Re-Application Form**

This application / re-application form is designed to enable the Great Lakes Water Authority (GLWA) to make a determination for issuance of a Septage Hauler Unloading Permit. A permit is required to discharge all domestic septage waste into the GLWA sewerage system and its tributaries

**SECTION A: GENERAL INFORMATION**

|    |                                          |  |
|----|------------------------------------------|--|
| 1. | Company Name                             |  |
| 2. | Company Address                          |  |
| 3. | Mailing Address<br>(if different from 2) |  |
| 4. | Authorized Representative                |  |
| 5. | Title                                    |  |
| 6. | Telephone No.                            |  |
| 7. | Fax No.                                  |  |

**SECTION B: BUSINESS OPERATIONS**

|    |                                                                         |                                                                |
|----|-------------------------------------------------------------------------|----------------------------------------------------------------|
| 1. | Source and type of pollutants hauled by company (mark applicable boxes) |                                                                |
|    | <input type="checkbox"/> Septic tanks                                   | <input type="checkbox"/> Recreational vehicle toilets          |
|    | <input type="checkbox"/> Cesspools                                      | <input type="checkbox"/> Municipal sludge                      |
|    | <input type="checkbox"/> Seepage pits                                   | <input type="checkbox"/> Grease trap cleaning                  |
|    | <input type="checkbox"/> Sewerage lift stations                         | <input type="checkbox"/> Oils/greases from food establishments |
|    | <input type="checkbox"/> Portable toilets                               | <input type="checkbox"/> Industrial waste                      |
|    | <input type="checkbox"/> Others (please specify <small>SEP</small> )    | <small>SEP</small>                                             |
| 2. | Number of Employees                                                     |                                                                |
| 3. | Schedule of Operation                                                   | hours/day                                                      |
|    |                                                                         | days/week                                                      |
| 4. | Number of Trucks used in hauling Business                               |                                                                |

|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|---------------|-------------------|
| 5.                                                                                                                            | Truck Storage Address                                                                                           |                         |                   |               |                   |
| 6.                                                                                                                            | <b>Hauling Vehicle Information (list all vehicles to be included under the Septage Hauler Unloading Permit)</b> |                         |                   |               |                   |
|                                                                                                                               | Vehicle Description                                                                                             | Tank Capacity (gallons) | License Numbers   | DEQ Decal No. | Expiration Date ❶ |
|                                                                                                                               | Year & Make                                                                                                     |                         | DEQ Vehicle       |               | Business License  |
|                                                                                                                               | Vehicle Identification No. (VIN)                                                                                |                         | DMV License Plate |               | Vehicle Decal     |
| a.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| b.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| c.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| d.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| e.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| f.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| g.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| h.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| i.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| j.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| k.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| l.                                                                                                                            |                                                                                                                 |                         |                   |               |                   |
|                                                                                                                               |                                                                                                                 |                         |                   |               |                   |
| ❶ - Attach copies pf business license and DEQ vehicle license (i.e. showing valid expiration dates) to this application form. |                                                                                                                 |                         |                   |               |                   |

|    |                                                                                   |                               |               |
|----|-----------------------------------------------------------------------------------|-------------------------------|---------------|
| 7. | General Services Area (list service area by county and cities/townships/villages) |                               |               |
|    | County                                                                            | Cities / Townships / Villages |               |
|    |                                                                                   |                               |               |
|    |                                                                                   |                               |               |
|    |                                                                                   |                               |               |
|    |                                                                                   |                               |               |
|    |                                                                                   |                               |               |
|    |                                                                                   |                               |               |
|    |                                                                                   |                               |               |
| 8. | Average Wastewater Discharge                                                      |                               | gallons / day |

### SECTION C: 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's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Authorized Representative's Name (Please print)



## GENERAL DISCHARGE PERMIT APPLICATION/REAPPLICATION (UTILITY COMPANIES ONLY)

This application/questionnaire is designed to enable the Great Lakes Water Authority (GLWA) to authorize the discharge of groundwater resulting from maintenance and related activities of gas, steam or electrical utilities into the GLWA Sewerage System. The information provided in this application will be used to decide whether a permit can be granted.

### SECTION A. GENERAL INFORMATION

1. BUSINESS NAME OF APPLICANT: \_\_\_\_\_
2. MAILING ADDRESS: \_\_\_\_\_  
\_\_\_\_\_
3. NAME of AUTHORIZED REPRESENTATIVE: \_\_\_\_\_  
TITLE: \_\_\_\_\_
4. TELEPHONE NO.: \_\_\_\_\_ FAX NO.: \_\_\_\_\_
5. NAME of CONTACT PERSON: \_\_\_\_\_ TELEPHONE NO. \_\_\_\_\_  
TITLE: \_\_\_\_\_

### SECTION B. GENERAL SERVICE AREA AND SITES LOCATION

Service Area and Site Location:

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#### Source of Collected Wastewater:

Type of Discharge from:

Vault: \_\_\_\_\_ Trench: \_\_\_\_\_ Manholes: \_\_\_\_\_

Discharge

\_\_\_\_\_ From: Vault/Trench/manhole (Designate each one)

Any other Accumulation (Describe):

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**SECTION C:****WASTEWATER INFORMATION**

1. Indicate the constituents that are or could be present in the wastewater :

|                                               |                                                 |
|-----------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> Ammonia              | <input type="checkbox"/> Radioactive Substances |
| <input type="checkbox"/> Caustics             | <input type="checkbox"/> Mud, Sand, Silt        |
| <input type="checkbox"/> Detergents           | <input type="checkbox"/> Acids                  |
| <input type="checkbox"/> Heavy Metals         | <input type="checkbox"/> PCBs                   |
| <input type="checkbox"/> Brine                | <input type="checkbox"/> Solvents               |
| <input type="checkbox"/> Oil and Grease       | <input type="checkbox"/> Sulfides               |
| <input type="checkbox"/> Pesticides           | <input type="checkbox"/> Other                  |
| <input type="checkbox"/> Flammable Substances |                                                 |

2. Describe the method of discharging the wastewater from the site to the sewer system (above ground, in ground).

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**SECTION D:****CERTIFICATION STATEMENT**

I certify under penalty of law that I am familiar with the information 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 / or imprisonment.

\_\_\_\_\_/\_\_\_\_\_  
Authorized Representative's Signature Date

\_\_\_\_\_  
Authorized Representative's Name (please print)

\_\_\_\_\_/\_\_\_\_\_  
Title Telephone No.

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address

## **INSTRUCTIONS FOR COMPLETING THE GENERAL DISCHARGE PERMIT**

Section A - General Information

Section B - General Service Area - Site Locations

Section C - Wastewater Information

Section D - Certification Statement

### **A. General Information**

- 1-5 Give complete business name and mailing address of the applicant. Specify the name, title and phone number of the designated authorized representative and of the contact person.

### **B. General Service Area Site Locations**

1. Specify general service area, specific site or locations and where wastewater is collected and to which sewer line discharge will be made. Submit essential drawings showing the details.
2. Provide source of collected wastewater.

Note: It is prohibited to discharge into storm sewers that connect to storm drains and open waters without MDNR (DEQ) approval. Care must be taken to determine proper sewer lines which will connect to GLWA collection system. If necessary consult with appropriate local authorities and/or GLWA.

### **C. Wastewater Information**

1. Mark the pollutants suspected to be present in the wastewater.
2. . Verify the manner of discharging the wastewater assuring the GLWA that discharge will be made to proper sanitary sewer. The discharge end should be located inside the man-holes facing vertically downward.

### **D. Certification**

This section must be signed by the company's authorized representative. The authorized representative shall refer to a corporate officer or a general partner.

**GREAT LAKES WATER AUTHORITY  
INDUSTRIAL WASTE CONTROL DIVISION  
POLICY FOR GENERAL GROUNDWATER DISCHARGE PERMIT**

The Detroit Water and Sewerage Department (GLWA) allows the utility companies to discharge groundwater, storm water, and other wastewater sources without prior notice into the sewer system in accordance with the following conditions.

- 1) The applicant for the general ground wastewater discharge shall not discharge any ground wastewater into the sewer system without the General Discharge Permit:
- 2) The applicant shall apply for a General Discharge Permit on the Permit Application/Reapplication form. and satisfy the following requirements:
  - a) The background history of the site of locations 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 certification of the company's authorized representative responsible for the overall project operation.
- 3) The Department shall issue the General Discharge Permit after the applicant complies with all the requirements.
- 4) The General Discharge Permit shall contain the discharge limitations, reporting requirements, and other general conditions needed for compliance.
- 5) The applicant shall comply with all the established conditions and requirements as issued on the General Discharge Permit. Failure to comply shall result in immediate permit revocation and appropriate enforcement action.



## Sample Permit Forms

GREAT LAKES WATER AUTHORITY  
Industrial Waste Control Division  
Livernois Center  
303 South Livernois  
Detroit, Michigan 48209

**WASTEWATER DISCHARGE PERMIT**  
**PERMIT NO.: PNUMBER-IU**

**SECTION A: GENERAL INFORMATION**

Facility I.D. No.: Number

Company Name: Name

Facility Address: Address #1  
Address #2

Mailing Address: Address #1.  
Address #2

The Great Lakes Water Authority ("Authority") hereby authorizes the Significant Industrial User specified above to discharge wastewater to the Authority's sewer system, in accordance with the terms of this Wastewater Discharge Permit. The requirements and conditions established in this permit do not relieve the company of its obligation to comply with any applicable pretreatment regulations, standards, requirements, or laws that may become effective during the term of this permit.

This permit is granted in accordance with the application filed with the Authority, and in conformity with plans, specifications, and other substantive data submitted to the Authority in support of the above application. This discharge authorization is granted in accordance with the Wastewater Discharge Ordinance of the City of Detroit or equivalent local ordinance, and any applicable provisions of federal or state laws or regulations.

It is the responsibility of the Permittee to submit a permit reapplication form at least ninety (90) days before the expiration date of this permit with all supporting documentation and re-certifications. Upon a timely filing, this permit will continue in effect until it is superseded by a successive final Wastewater Discharge Permit.

Effective Date: Permit Eff\_Date

Expiration Date: Permit\_End Date

Authorized by:

\_\_\_\_\_  
Stephen J. Kuplicki, P.E., J.D.  
Operations Manager  
Industrial Waste Control Division

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**SECTION B: DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS**

Page #

March 28, 2013

Permit No. #####

Significant Industrial User

Representative Sampling Location: **Manhole inside landfill area; 20' E of wire fence, 50' N of Galloway Creek**

**Batch Discharge Information:** Frequency - 3-4 batches/ week  
Duration - 20 -30 minutes/batch  
Maximum Volume - 1,400 gallons per batch

Wastewater Discharge Information: Continuous Discharge  
31,224 gpd average

Authorized Composite Sampling Method (See Section I): Flow-proportional / Time Composite

| Applicable Discharge Limitations<br>(reported in mg/l unless otherwise indicated) |        |                  |                         |
|-----------------------------------------------------------------------------------|--------|------------------|-------------------------|
| PARAMETER                                                                         |        | Daily Max.       | Min. Sampling Frequency |
| 1,1-Dichloroethylene                                                              | 1DCE   | Report           | 1 / 3 Months            |
| 1,2-Dichloroethane                                                                | 2DCA   | Report           | 1 / 3 Months            |
| 1,4-Dichlorobenzene                                                               | 4DCB   | Report           | 1 / 3 Months            |
| 2,4,5-TP (Silvex)                                                                 | SILVEX | Report           | 1 / 3 Months            |
| 2,4,5-Trichlorophenol                                                             | 245TCP | Report           | 1 / 3 Months            |
| 2,4,6-Trichlorophenol                                                             | TCPH   | Report           | 1 / 3 Months            |
| 2,4-D                                                                             | 2,4-D  | Report           | 1 / 3 Months            |
| 2,4-Dinitrotoluene                                                                | 4DNT   | Report           | 1 / 3 Months            |
| Acidity/Alkalinity (pH)                                                           | pH     | 5.0 - 11.5 Units | 1 / 3 Months            |
| Arsenic                                                                           | As     | 1.0              | 1 / 3 Months            |
| Benzene                                                                           | BENZ   | Report           | 1 / 3 Months            |
| Biochemical Oxygen Demand                                                         | BOD    | 7500.0           | 1 / 3 Months            |
| Cadmium                                                                           | Cd     | 1.0              | 1 / 3 Months            |
| Carbon Tetrachloride (tetrachloromethane)                                         | CTCL   | Report           | 1 / 3 Months            |
| Chlordane                                                                         | CHLO   | Report           | 1 / 3 Months            |
| Chlorobenzene                                                                     | CBNZ   | Report           | 1 / 3 Months            |
| Chloroform                                                                        | CFRM   | Report           | 1 / 3 Months            |
| Chromium                                                                          | Cr     | 25.0             | 1 / 3 Months            |
| Copper                                                                            | Cu     | 2.5              | 1 / 3 Months            |
| Cresol                                                                            | Cresol | Report           | 1 / 3 Months            |

|                           |          |            |              |
|---------------------------|----------|------------|--------------|
| Cyanide (Available)       | AVCN     | 1.0        | 1 / 3 Months |
| Endrin                    | ENDI     | Report     | 1 / 3 Months |
| Fats, Oil or Grease       | FOG      | 1500.0     | 1 / 3 Months |
| Heptachlor                | HEPT     | Report     | 1 / 3 Months |
| Hexachlorobenzene         | HCBZ     | Report     | 1 / 3 Months |
| Hexachlorobutadiene       | HCBD     | Report     | 1 / 3 Months |
| Hexachloroethane          | HECA     | Report     | 1 / 3 Months |
| Iron                      | Fe       | 1000.0     | 1 / 3 Months |
| Lead                      | Pb       | 1.0        | 1 / 3 Months |
| Lindane                   | LIND     | Report     | 1 / 3 Months |
| Mercury                   | Hg       | Non-detect | 1 / 3 Months |
| Methoxychlor              | TO1420   | Report     | 1 / 3 Months |
| Methyl Ethyl Ketone       | TO1170   | Report     | 1 / 3 Months |
| Nickel                    | Ni       | 5.0        | 1 / 3 Months |
| Nitrobenzene              | NIBZ     | Report     | 1 / 3 Months |
| Pentachlorophenol         | PCPH     | Report     | 1 / 3 Months |
| Phosphorus                | P        | 250.0      | 1 / 3 Months |
| Pyridine                  | PYRD     | Report     | 1 / 3 Months |
| Silver                    | Ag       | 1.0        | 1 / 3 Months |
| Tetrachloroethylene       | 4TCE     | Report     | 1 / 3 Months |
| Total PCB                 | PCB      | Non-detect | 1 / Year     |
| Total Phenolic Compounds  | PHENOL   | 1.0        | 1 / Year     |
| Total Suspended Solids    | TSS      | 7500.0     | 1 / 3 Months |
| Toxaphene                 | TOXP     | Report     | 1 / 3 Months |
| Trichloroethylene         | 3TCE     | Report     | 1 / 3 Months |
| Vinyl Chloride            | VICL     | Report     | 1 / 3 Months |
| Zinc                      | Zn       | 7.3        | 1 / 3 Months |
| m-Cresol                  | m-Cresol | Report     | 1 / 3 Months |
| o-Cresol (2 Methylphenol) | OCRE     | Report     | 1 / 3 Months |
| p-Cresol                  | PCRE     | Report     | 1 / 3 Months |

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

**SECTION C: PROHIBITION FOR DILUTION OR DILUTION IN LIEU OF TREATMENT**

Except where expressly authorized to do so by an applicable pretreatment standard or requirement, no user shall increase the use of process water, or in any way dilute or attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the national categorical pretreatment standards, or in any other pollutant specific limitation or requirement imposed by the City of Detroit, the State of Michigan, or the Authority.

**SECTION D: APPLICABLE LIMITS ON RATE AND TIME OF DISCHARGE & FLOW REGULATION**

- 1) The permittee is authorized to discharge wastewater regulated under this permit which has been given treatment or equivalent treatment in accordance with the representations made by the permittee. Based upon information filed with the Authority, the following rate and time of discharge conditions and restrictions apply.
  - a) Days of Operation:                      days/week
  - b) Hours of Operation:                      hours a day
  - c) Daily Rate Limits:                      The total volume discharged shall not exceed gallons per day of process wastewater
  - d) Type of Discharge:                      ☐ Batch                      ☐ Continuous  
  
                                         ☐ Intermittent :                      Where the discharge is classified as Intermittent, no discharge may occur except in accordance with Section F (4).
- 2) The permittee shall maintain the following records and information in support of all types of discharge in hard-copy or electronic form, and permit this information to be available to the Authority's representative upon request. At a minimum, the permittee shall maintain a record of (i) the date of discharge, and the (ii) volume of wastewater discharged.
- 3) For facilities operating less than seven (7) days per week or twenty-four (24) hours per day, the permittee is prohibited from discharging any wastewater regulated under this permit outside of the stated hours or days of operation described in paragraph D.1.
- 4) Discharge authorization may be granted for discharges outside of the stated hours of days of operation described in Section D.1 where the permittee provides at least 72 hours notification to the Department and receives prior written authorization from the Authority for the proposed discharge.

**SECTION E: SELF-MONITORING CONDITIONS AND REQUIREMENTS**

- 1) The sampling location(s) used for purposes of compliance sampling and reporting is identified in Section B. No alternate locations will be accepted unless approved in writing by the Authority. Except in emergencies, all requests for an alternate sample location or change in the sampling location shall be submitted in writing at least thirty (30) days prior to the proposed date of change.
- 2) In accordance with 40 CFR 403.12(g)(3), the Authority, as the authorized agent of the Control Authority, shall require the frequency of monitoring necessary to assess and assure compliance by the permittee. The minimum sampling frequency for each pollutant parameter described in Section B has been established based on (a) an evaluation of compliance history; (b) volume of process wastewater discharged to the sewer; (c) reported discharge frequency (if other than daily); and other information submitted in your permit application (or re-application), or from prior reports or inspections.
- 3) The Authority may authorize a waiver of sampling for pollutants regulated under a Categorical Pretreatment Standard in accordance with 40 CFR 403.12 (e)(2), but shall not be effective until and unless the Authority modifies the Wastewater Discharge Permit and includes the waiver as a condition of the permit.
- 4) The specific pollutant parameters, which are to be monitored for purposes of compliance sampling and reporting, are identified in Section B.
  - (a) A **time/flow**-proportional composite sample shall be collected and analyzed for all parameters as specified Section B, except for Fats, Oil or Grease (FOG), Cyanide (total, available, or amenable), pH, Total Phenols, and the volatile organic compounds included in the TTO list, which shall be collected by one or more grab samples, or as specified in 40 CFR 136. All samples shall be representative of the facility's discharge based on **flow-proportional or time-proportional** method.
  - (b) All samples shall be individually analyzed, reported and compared against the applicable limitations listed in Section B.
  - (c) If Section B includes limitations for 4-day, 30-day or monthly average, the appropriate average shall be calculated; compared with the appropriate Section B limitation, and reported with the self-monitoring report.
- 5) All sampling and analyses conducted for purposes of compliance with the requirements of this Permit, as identified in Section B, must be performed in accordance with the methods and techniques specified in 40 CFR Part 136 and any amendments thereto.

**SECTION F: REPORTING, RECORDKEEPING AND NOTIFICATION REQUIREMENTS**

- 1) If sampling performed by the permittee indicates a violation of the stated permit limitations, then the permittee shall provide notice and make a demonstration of compliance, which is acceptable to the Authority and consist of the following minimum requirements:

- a) Written notification via email to [iwc@glwater.org](mailto:iwc@glwater.org), or notification by telephone to the Authority's at telephone number (313) 297-5826, or by fax at 313-297-5860 within twenty-four (24) hours of becoming aware of the violation.

NOTE: For purposes of this section, when interpreting, "*within twenty-four (24) hours of becoming aware*" the Authority shall consider the reasonable time frame which the authorized representative, or their designated authorized representative, actually or should have become aware of the exceedance or violation through due diligence.

- b) A report identifying the suspected or known causes of the violation and any corrective measures taken or planned to prevent future noncompliance.
- c) A demonstration of compliance by collecting and analyzing at least two (2) more individual daily samples.
- d) Submission of the report and two (2) additional analyses to the Authority within thirty (30) days of becoming aware of the noncompliance.
- 2) Where wastewater(s) are hauled off-site in addition to or in lieu of discharge to the POTW, the permittee shall maintain and provide the following information with their six-month report:
- a) Copies of waste manifest documents,
- b) Copies of analytical reports for materials sent off-site;
- c) Flow-meter records and/or water bill records for the six-month period
- 3) The permittee shall maintain the following records and information in support of all types of discharge in hard-copy or electronic form, and permit this information to be available to the Authority's representative upon request. At a minimum, the permittee shall maintain a record of (i) the date of discharge, and the (ii) volume of wastewater discharged.

4) Discharges that are intermittent (Section D. 1. D), shall comply with the following discharge requirements:

- a) The permittee shall contact the Authority (through their Pretreatment Inspector or at 313-297-5826), at least forty-eight (48) hours prior to the planned discharge and provide the results of sampling and analysis demonstrating compliance with the applicable limitations of Section B;
- b) Provide the proposed period of discharge in terms of date and time/duration [Note: discharges may only be authorized between 9:00 am to 4:00 pm, Monday-Friday] No wastewater may be discharged on Saturdays, Sundays or Holidays;
- c) Request an authorization number from the Authority;
- d) Forward supporting information to [iwc@glwater.org](mailto:iwc@glwater.org) or fax to 313-297-5860.
- e) Where the analytical data submitted in support of the discharge demonstrates compliance with all applicable limitations, the Authority shall provide an authorization number for the discharge and release of the material.
- f) Where the analytical data submitted in support of the discharge demonstrates non-compliance with some or all applicable limitations, the Authority shall reject the request and require additional treatment from the permittee.
- g) The Authority may elect to perform independent sampling of the discharge.

**SECTION G: SPECIAL USER CHARGES AND FEES**

- 1) Regulatory Oversight Fee – The Authority will assess an Industrial Waste Control Meter Charge to all commercial and industrial users to recover the costs of regulatory sampling, inspections, enforcement and pretreatment administration through your local community.
- 2) Surcharges – In compliance with federal regulations, a User Charge Program (“Surcharge Program”) has been developed and adopted to assess any additional treatment costs for the discharge of compatible pollutants in excess of domestic strength levels. Currently, the compatible pollutants that have an applicable User Charge are: Biochemical Oxygen Demand 5-day (BOD<sub>5</sub>), Total Suspended Solids (TSS), Fats Oil or Grease (FOG), and Phosphorous (P). (See DWSD’s Surcharge Rules and Regulations).

☐ Your facility is subject to the Surcharge Program based on ☐ Assigned Averages from Table 3-1, or ☐ Waste Strength Determination Sampling dated \_\_\_\_.

☐ Your facility is not currently subject to the Surcharge Program.

These charges are exclusive of any fines or penalties assessed for noncompliance with the Ordinance or this wastewater discharge permit issued under the Ordinance.



## SECTION H: OTHER REQUIREMENTS

- 1) Unless modified by an Administrative Order or Judicial Order, the permittee is required to comply with all conditions, standards, and requirements of this permit. Failure to comply will result in enforcement action.
- 2) Notice of Hazardous Waste - As part of its Wastewater Discharge Permit re-application, the permittee shall submit certified notice of any discharge which would be a hazardous waste under 40 CFR §261, in accordance with 40 CFR 403.12(p). The permittee shall update this information as necessary, but no less frequent than every **<five (5) years or specific date>**.
- 3) Slug Control/Spill Prevention Plan – The permittee is required to submit a Slug Control/Spill Prevention Plan (SC/SPP) against accidental discharges to the POTW, in accordance with the City of Detroit Ordinance 08-05.
  - a) The permittee shall review its SC/SPP every two (2) years, or following any substantial change in operation impacting the potential for a slug discharge/spill to the sewer system, or following an implementation event of its SC/SPP, and modify or update the SC/SPP as necessary, submitting all changes to the Authority.
  - b) The permittee shall comply with the notification and reporting requirements (See General Terms and Conditions).
- 4) Periodic Compliance Report or Six Month Report - The Six Month Report (*aka* Periodic Compliance Report) must be submitted to the Authority semi-annually on or before June 30<sup>th</sup> and December 31<sup>st</sup> of each year. The report must be submitted in the form prescribed by the Authority or on an alternative form approved by the Authority. It must contain the following requirements:
  - i) Analytical part (Self-Monitoring Requirements/Wastewater Analyses);
  - ii) Descriptive part (i.e. facility information, water usage/discharge information, certified statement, certification, etc.)

This report shall be signed and dated by the authorized representative of the Permittee.

**SECTION I: REPRESENTATIVE SAMPLING REQUIREMENT**

All wastewater sampling performed by the permittee shall be collected in a manner and form intended to represent the wastewater discharged by the permittee.

**CHOOSE ONE OF THE THREE GROUPS**

☐ The permittee shall perform flow-proportional sampling in accordance with the Information submitted on\_\_\_\_\_.

☐ The permittee shall perform time-proportional sampling in accordance with the Information submitted on\_\_\_\_\_.

☐ Within 60 days of permit issuance, the permittee shall provide an approvable sampling plan, to the Authority. The sampling plan shall describes 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 Section B. 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 equivalent methods, 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.

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 to exceed 180 days

\_\_\_\_\_.

## **SECTION K: CENTRALIZED WASTE TREATMENT POINT SOURCE CATEGORY**

### **1) Facility Subpart Designation**

- a) The permittee qualifies as a Centralized Waste Treatment Facility ("CWT facility"), and is authorized to accept the wastes and wastewater consistent with the applicable Subpart (see below) in accordance with the National Categorical Pretreatment Standards (40 CFR 437), and the local ordinance.
  - i) ( ) Subpart A - Metals Treatment and Recovery
  - ii) ( ) Subpart B - Oils Treatment and Recovery
  - iii) ( ) Subpart C - Organics Treatment and Recovery
  - iv) (x) Subpart D - Multiple Wastestreams as follows:
    - (i) (x) Combined Waste Receipts from subparts A, B and C
    - (ii) ( ) Combined Waste Receipts from subparts A, and B
    - (iii) ( ) Combined Waste Receipts from subparts A, and C
    - (iv) ( ) Combined Waste Receipts from subparts B and C

### **2) Waste and Wastewater Prohibitions**

The permittee shall not dispose or discharge to the POTW:

- a) Any waste or wastewater not identified in the permit application;
- b) Any waste or wastewater from any Centralized Waste Treatment facility subparts not authorized above;
- c) Any mixed or mixtures of waste or wastewater from any Centralized Waste Treatment facility subparts not authorized above;
- d) Any waste or wastewater containing PCBs (Polychlorinated Biphenyls).

## **SECTION L: WASTEWATER ACCEPTANCE REQUIREMENTS**

- 1) The CWT facility shall maintain onsite wastewater acceptance procedures (paperwork and analyses) that are adequate and:
  - a) Describes the general nature, source and processes generating the waste or wastewater;
  - b) Identifies the quantity and character of toxic pollutants known or suspected to be present in the waste or wastewater;
  - c) Describes that the waste or wastewater is acceptable for the treatment, or equivalent treatment provided by the CWT facility, in accordance with the subpart designation in Section K.

- 2) The CWT facility has provided written documentation that it has developed, adopted and is implementing its wastewater acceptance procedures and that they are available on-site for review. The CWT facility shall submit a new written statement with its next wastewater discharge permit application or re-application. The statement shall be signed and dated by the authorized representative.
- 3) These wastewater acceptance procedures may include or incorporate the US EPA evaluation guidance criteria and numerical standards included as attachment A.
- 4) Unless the wastewater acceptance procedures are deemed inadequate by the Authority in writing, the CWT facility's wastewater acceptance procedures shall be implemented as written.
- 5) The permittee shall provide the Authority with access to waste manifests, and/or other bills of lading for all incoming materials, and any analytical information available and/or used in support of the accepted waste, upon the request of Authority.

If immediate access is not feasible, then the permittee shall provide written notice within seven (7) days of the Authority's request, (i) providing access to the documents or (ii) supply copies in either hard copy or electronic format. The information shall be made available to Authority within thirty (30) days of the permittee's written notice.

**[ ] Section J: SEWERAGE FLOW SYSTEM (CWT ONLY)**

- a) A Sewage Flow System includes a Sewage Flow Meter(s) and non-resettleable Totalizer(s) for each Sample Location(s).
- b) The facility shall perform an annual maintenance evaluation of the sewerage flow system. The facility shall provide the Authority with its certification attesting the workability/accuracy of the Sewage Flow System and last calibration date during Comprehensive Inspection (CI) or with its December 31<sup>st</sup> Six Month Report (SMR).
- c) No discharge shall bypass the Sewage Flow System.
- d) If the facility's sewerage flow meters malfunction, the facility must notify the Authority at (313) 297-\_\_\_\_\_ or [iwc@glwater.org](mailto:iwc@glwater.org) within forty-eight (48) hours.
- e) If the facility plans to replace or install a new sewerage flow meter, the Authority must also be notified prior to replacement or installation of the sewerage flow meter, and given a schedule for completion of the work.
- f) The facility shall have or record daily flow-rates or volumes which shall be provided to the Authority and submitted with each Six Month Report or on request of the Authority.

**SECTION M: INITIAL AND PERIODIC CERTIFICATION STATEMENTS (SUBPART D - ONLY)**

As part of its wastewater discharge permit re-application, the permittee shall provide written certification that it has submitted the information required by 40 CFR 437.41 as its Initial Certification Statement, or as modified and described by subsequently submitted Periodic Certifications.

The permittee shall submit a Periodic Certification Statement annually, due on or before December 31<sup>st</sup> of each year, which:

1. Shall certify that the CWT facility is operating its treatment system(s) to provide equivalent treatment as set forth in its Initial Certification, or as modified and described by subsequently submitted Periodic Certifications. The Periodic Certification Statement must include the information specified in 40 CFR 437.41(a)(1-3);
2. Shall submit a description of any modifications made to the CWT facility and include or make available, supporting information needed to establish equivalent treatment.
3. Shall be signed and dated by the Permittee's Authorized Representative.

**SECTION N: ON-SITE COMPLIANCE PAPERWORK (SUBPART D - ONLY)**

In addition to the record-keeping requirements enumerated in 40 CFR 403.12(o), and in accordance with 40 CFR 437.41(c), the permittee shall retain and make available to the Control Authority "On-site Compliance Paperwork" as specified in 40 CFR 437.41(c) (1-5), which supports the initial and periodic certification statements. This paperwork must:

- 1) List and describe the subcategory wastes being accepted for treatment at the facility;
- 2) List and describe the treatment system(s) in-place at the CWT facility, any modifications to the treatment systems and the conditions under which the systems are operated for the subcategories of wastes accepted for treatment at the CWT facility;
- 3) Provide information and supporting data establishing that these treatment systems will achieve equivalent treatment;
- 4) Describe the procedures it follows to ensure that its treatment systems are well operated and maintained; and
- 5) Explain why the procedures it has adopted will ensure its treatment systems are well-operated and maintained.
- 6) All users granted a permit from the department shall maintain records which, at a minimum, identify the source, volume, character, and constituents of the wastewater

accepted for treatment and disposal. These records may be reviewed at any time by the department.

- 7) Upon written request from the Authority – Industrial Waste Control Division, the CWT shall provide information requested by the department including, but not limited to the information enumerated by section 56-3-59.1(f)(1-6), of the City of Detroit Ordinance 08-05.

This information shall be maintained by the permittee in either a hard-copy or electronic format and shall be available and accessible to the Authority upon request. Select appropriate conditions to specific SIU.

*The Authority may request copies or print-outs of this information.*

**PART II: GENERAL TERMS AND CONDITIONS**

**SECTION A: GENERAL PROHIBITIONS**

No user shall discharge or cause to be discharged into the POTW, directly or indirectly, any pollutant or wastewater which will cause interference or pass through. It shall be unlawful for a user to discharge into the POTW:

- 1) Any liquid, solid or gas, which by reason of its nature or quantity, is sufficient either alone or by interaction with other substances to create a fire or explosion hazard or to be injurious in any other way to persons, to the POTW, or to the operations of the POTW. Pollutants, which create a fire or explosion hazard in a POTW, include, but are not limited to, wastestreams with a closed cup flash point of less than 140°F or 60°C using the test methods specified in 40 C.F.R. § 261.21; or
- 2) Any solid or viscous substance in concentrations or quantities, which are sufficient to cause obstruction to the flow in a sewer or other encumbrances to the operation of the POTW, including, but not limited to, grease, animal guts or tissues, bones, hair, hides or fleshing, entrails, whole blood, feathers, ashes, cinders, sand, cement, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, strings, fibers, spent grains, spent hops, wastepaper, wood, plastics, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud or glass grinding or polishing wastes, or tumbling and deburring stones; or
- 3) Any wastewater containing petroleum oil, non-biodegradable cutting oil, products of mineral oil origin, or toxic pollutants in sufficient concentration or quantity either singly or by interaction with other pollutants to cause interference, or pass through, or constitute a hazard to humans or animals; or
- 4) Any liquid, gas, solid or form of energy, which either singly or by interaction with other waste is sufficient to create toxic gas, vapor, or fume within the POTW in quantities that may cause acute worker health and safety problems, or may cause a public nuisance or hazard to life, or are sufficient to prevent entry into the sewers for their maintenance and repair; or
- 5) Any substance which is sufficient to cause the POTW's effluent or any other product of the POTW, such as residue, sludge, or scum to be unsuitable for reclamation processing where the POTW is pursuing a reuse and reclamation program. In no case shall a substance discharged into the POTW cause the POTW to be in noncompliance with sludge use or disposal criteria guidelines or regulations developed under 33 U.S.C. § 1345, with any criteria, guidelines, or developed and promulgated regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Federal Clean Air Act, the Federal Toxic Substances Control Act, or with state criteria applicable to the sludge management method being used; or

- 6) Any substance which will cause the POTW to violate either the Consent Judgment in U.S. EPA v City of Detroit et al, Federal District Court for the Eastern District of Michigan Case No. 77-1100, or the City's National Pollutant Discharge Elimination System permit; or
- 7) Any discharge having a color uncharacteristic of the wastewater being discharged; or
- 8) Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into a public sewer which exceeds 150°F or which will cause the influent at the wastewater treatment plant to rise above 104°F (40°C); or
- 9) Any pollutant discharge which constitutes a slug; or
- 10) Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established in compliance with applicable federal or state regulations; or
- 11) Any floating fats, oil or grease which are sufficient to cause interference with or pass through the POTW; or
- 12) Any solid materials having a specific gravity greater than 1.2 or a cross section dimension of one-half (½) inch or greater which are sufficient to cause interference with the POTW.

#### **Section B: GENERAL TERMS AND CONDITIONS**

The Permittee is authorized to discharge industrial wastewater to the Authority's sewer system in compliance with the City of Detroit Wastewater Discharge Ordinance or equivalent local ordinance and any applicable provisions of federal or state law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

- 1) **Records for monitoring activities** shall be maintained in accordance with ordinance requirements and shall include the following information for all samples:
  - a) The date, time, exact place and method of sampling
  - b) The names of persons taking the sample
  - c) The technique or method of analysis, the date and results of analysis
  - d) The names of person performing the analysis



- 2) **Notification and Reporting Requirements** – The following telephone contact numbers are available for providing notice to the Authority:

**To report Spills, Upsets, Bypasses or Environmental emergencies:**

**24-hour Numbers:**

Systems Control Center  
(313) 267-6000

Wastewater Treatment Plant  
(313) 297-0322 or 297-0326

**Non-emergency Number:**

Industrial Waste Control Division Office  
(313) 297-5850  
[iwc@glwater.org](mailto:iwc@glwater.org)

- a) **Sampling Violations (Self Monitoring)** - Within twenty-four (24) hours of becoming aware of a violation, the IU shall notify Authority by telephone at (313) 297-5826 or by email at Notice. [iwc@glwater.org](mailto:iwc@glwater.org).
- b) **Slug Loading / Accidental Discharge** - Within one (1) hour of becoming aware of a discharge entering into the sewer system which exceeds or does not conform with federal, state or City of Detroit laws, regulations or the permit requirements, the Permittee shall telephone the Authority at the Systems Control Center and inform the Authority about the details of the discharge.
- c) **Upset at the IU's Pretreatment Facility** - Within twenty-four (24) hours of becoming aware of an upset, the IU shall telephone Authority at the System Control Center and inform the Authority about the details of the upset and discharge.
- d) **Bypass Events** – are prohibited, unless the permittee demonstrates that:
- i) The bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
  - ii) There was no feasible alternative to the bypass;
  - iii) The permittee notifies the Authority of the bypass event:
- (1) **Unanticipated Bypass** - Within twenty-four (24) hours of becoming aware of the bypass, IU shall telephone the Authority at the System Control Center and inform the Authority about the details of the discharge.
  - (2) **Anticipated Bypass** - If an IU anticipates the need for a bypass, prior notice shall be submitted to the Authority at least ten (10) days before the date of bypass. The report shall be accompanied by analytical data, if available, which shows the characteristics of the material to be bypassed. Upon evaluation, the Authority will provide the IU with its determination on the bypass.

- e) **Submission of Report** - For the incidents b, c, or d, a written report shall be submitted to the Authority within five (5) calendar days of becoming aware of the incident. This report shall contain the following information:
- i) A description of the discharge and the cause of the incident;
  - ii) The duration of the incident including exact dates and times or, if not corrected, the anticipated time the incident is expected to continue;
  - iii) Steps being taken and/or planned to reduce, eliminate and prevent future occurrences of a similar incident.

The IU may also have certain notification requirements under applicable federal regulations, including but not limited to 40 CFR Part 403.

- 3) **Limitations on Permit Transfer** - The wastewater discharge permit shall not be reassigned or transferred without the written approval of the Authority and provision of a copy to the new owner or operator. The permittee shall notify the Authority of any such changes at least thirty (30) days prior to the change.
- 4) **Duty to Provide Notice of Material or Substantive Change** - The permittee shall notify the Authority of any material or substantial change to the facility, its operations, or changes in the characteristics of the Permittee's effluent, including but not limited to the method, frequency or volume of discharge, within thirty (30) days of the change.
- 5) **Confidential Information** - Except for data accepted as confidential under the ordinance, all information and data regarding the permittee obtained from written reports, questionnaires, permit applications, permits, monitoring programs and inspections shall be available to the public or other government agencies without restriction. If a permittee submits information claimed to be Confidential Information it must be clearly marked "Confidential". The Authority shall make a determination in accordance with 56-3-64.1.
- 6) **Legal Actions**
- a) Any user who violates any local provision, including the failure to pay any fees, charges, or surcharges imposed hereby, or any condition or limitation of a permit issued pursuant thereto or who knowingly makes any false statements, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to this ordinance or wastewater discharge permit or who tampers with, or knowingly renders inaccurate any monitoring device required under this ordinance is guilty of a misdemeanor and shall, upon conviction, be punished by a fine not to exceed \$500 for each violation per day or by imprisonment for not more than ninety (90) days or by both. The Authority is hereby authorized to seek, through its counsel, prosecution of criminal charges against any person violating any provision of this ordinance.

- b) If any person discharges sewage, industrial wastes, or other wastes into the POTW contrary to the provisions of the ordinance, permit or order issued thereunder, the Director or Board may commence a civil action to enjoin such discharge or to enforce compliance with this ordinance, permit or order issued thereunder, in the Circuit Court for the County of Wayne or other appropriate court. Upon a proper showing of a violation of this ordinance, permit or order issued thereunder, a permanent or temporary injunction may be granted without bond. The Authority or Board may also seek additional legal and/or equitable relief.

Instituting suit in the Circuit Court does not constitute as exclusive election of remedies and does not prohibit the Authority, Director, Board, or City of Detroit from commencing action in Federal Court for discharges believed to be in violation of this ordinance, State and Federal requirements pursuant to the Clean Water Act, the NPDES permit, or other applicable laws or requirements.

The Authority may also recover reasonable attorney fees, court costs, court reporters fees, and other unusual expenses related to enforcement activities or litigation against the person found to have violated this ordinance or the orders, rules, regulations, and permits issued hereunder.

- c) All fines, costs and penalties which are imposed by any court of competent jurisdiction shall be payable to the clerk of such court, who shall deposit the same with the City Treasurer, all of which fines, costs, and penalties shall be credited to the appropriate fund of the Authority.

**6) All reports shall be addressed to:**

Great Lakes Water Authority  
Industrial Waste Control Division  
303 S. Livernois  
Detroit, Michigan 48209

- 7) **Requirement to Reapply** - This permit shall expire on the expiration date identified. Existing permittees shall apply for permit reissuance a minimum of ninety (90) days prior to the expiration of existing permits on a form prescribed by the Authority. Upon timely application for reissuance of a permit, the expired permit shall be automatically extended until modified or reissued by the Authority. Failure to submit a timely reapplication for reissuance may result in a delayed issuance of a permit and a cessation of unpermitted discharges to the sewer system.
- 9) **Records Retention** - The permittee shall maintain records of all information from monitoring activities, permit requirements, or 40 CFR 403.12 for no less than three (1) ) years.

- 10) **Operation and Maintenance of Pretreatment Facilities** - The permittee shall operate and maintain any and all pretreatment facilities in a prudent and professional manner. Records of operation and maintenance shall be provided to the Authority for review, upon request.
- 11) **Right of Entry** - The Authority's employees or authorized representative shall have ready access to the Permittee's premises to engage in inspection, sampling, compliance monitoring and/or metering activities. Each such activity shall be commenced and completed at reasonable times, and in a reasonable manner. It is the permittees' responsibility to make prompt and necessary arrangements so that upon presentation of appropriate credentials, personnel from the Authority will be permitted to enter immediately for the purposes of performing their specific responsibilities.

Denial of access to any authorized Authority representative shall result in enforcement action.

- 12) **Permit Modification** - The terms and conditions of this permit are subject to modification during the term of the permit in accordance with the City of Detroit Ordinance 08-05 Sec. 56-3-61.1 (g)(1-12).
- 13) **Permit Revocation** - The Authority may revoke this permit at any time in accordance with applicable law. Actions for which a permit may be revoked include, but are not limited to, failure of a Permittee to comply with the permit, failure to comply with an administrative order, or court order, discharging wastewater which has the potential to or does threaten the POTW or the community, discharges which would cause the POTW to violate its NPDES permit.

Where such action is taken by the Authority, the former permittee shall have an opportunity for a hearing for permit reinstatement in accordance with applicable law.

- 14) **Mercury and Total PCB compliance** - shall be based upon compliance with section 56-3-59.1(b)(2) of the Detroit City Code:
- a) The limitation for Total PCB is Non-detect. Total PCB shall not be discharged at detectable levels, based upon U.S. EPA Method 608, and the quantification level shall not exceed 0.2 µg/l, unless a higher level is appropriate because of demonstrated sample matrix interference.
- b) The Limitation for Mercury (Hg) is Non-detect. Mercury (Hg) shall not be discharged at detectable levels, based upon U.S. EPA Method 245.1, and the quantification level shall not exceed 0.2 µg/l, unless a higher level is appropriate because of demonstrated sample matrix interference.

## **SECTION C: DEFINITIONS AND REQUIREMENTS**

**4-DAY Average Limitation** is the highest allowable mass or concentration standard of discharges over four (4) consecutive, independent daily sampling events. Compliance with this limitation is calculated as the summation of individual daily discharge measurements for a parameter taken during four (4) consecutive daily sampling events divided by four (4). The four (4) consecutive sampling events need not occur on consecutive calendar days.

**30-DAY Average Limitation** is the summation of individual daily measurements for a parameter during a thirty (30) consecutive calendar day period, divided by the number of individual measurements for that parameter taken during that thirty (30) day period. The recommended minimum number of samples (1 set) required to demonstrate compliance are ten (10) independent daily samples.

**Authorized Representative** – means the person defined in section 56-3-58.1(a) of the Detroit City Code, or the person designated as a duly authorized representative made in conformance with section 56-3-59.1(n) of the Detroit City Code.

**Authority** – means the Great Lakes Water Authority, and authorized employees of the Authority. See also Control Authority.

**Available Cyanide** – means the quantity of cyanide that consists of cyanide ion (AVCN); hydrogen cyanide in water (HAVCNaq); and the cyano-complexes of zinc, copper, cadmium, mercury, nickel, and silver, determined by EPA method OIA-1677, or other method designated as a Standard Method or approved under 40 CFR Part 136.

**Batch Discharge** A non-continuous release of treated wastewater, resulting from a collection of one or more compatible wastestreams whose volume, duration or frequency of generation warrant periodic releases as the most efficient and effective means of discharge.

**Best Management Practices (BMP)** – means programs, practices, procedures or other directed efforts, initiated and implemented by a User, which can or does lead to the reduction, conservation or minimization of pollutants being introduced into the ecosystem, including but not limited to the Detroit sewer system. BMPs include, but are not limited to, equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control, and may include technical and economic considerations.

**Continuous Discharge** - means a “discharge” which occurs without interruption throughout the operating hours of the Permittee, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

**Control Authority** - means the Detroit Water and Sewerage Department, or its agent Great Lakes Water Authority, which have been officially designated as such by the Michigan Department of Environmental Quality under the provisions of 40 CFR 403.11, 40 CFR 403.9, and 40 CFR 403.12.

**Daily Maximum Limitation** is the maximum allowable discharge of pollutant on a single calendar day.

**Intermittent Batch Discharge** - A non-continuous release of treated wastewater, resulting from a collection of one or more compatible wastestreams whose volume, duration or frequency of generation warrant periodic releases as the most efficient and effective means of discharge. Batch discharges are classified as intermittent when there is a period of more than thirty (30) days between batch discharges.

**Monthly Average Limitation** is the summation of individual daily measurements for a parameter during a calendar month, divided by the number of individual measurements for that parameter taken during that month. The recommended minimum number of samples (1 set) required to demonstrate compliance are ten (10) independent daily samples.

**Permittee** means the Company Name in Section A of this Wastewater Discharge Permit. As used within this Wastewater Discharge Permit, it also means the Industrial User, or User.

**Publicly Owned Treatment Works (POTW)** means a treatment works as defined by 33 U.S.C. § 1292(2)(A) which is owned **or operated**, by a state or municipality, as defined in 33 U.S.C. § 1362, including:

- (1) Any devices and systems used in the storage, treatment, recycling, or reclamation of municipal sewage or industrial wastes of a liquid nature; or
- (2) Sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant; or
- (3) The municipality, as defined in 33 U.S.C. § 1362, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

**Quantification Level** – means the measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calculated at a specified concentration above the detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant.

**Total PCB** – means the sum of the individual analytical results for each of the PCB aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260 during any single sampling event with any aroclor result less than the quantification level being treated as zero.

**Total Phenolic Compounds** – means the sum of the individual analytical results for each of the phenolic compounds of 2-chlorophenol, 4-chlorophenol, 4-chloro-3-methylphenol, 2,4-dichlorophenol, 2,4-dinitrophenol, 4-methylphenol, 4-nitrophenol, and phenol during any single sampling event expressed in mg/l.

**TOTAL TOXIC ORGANICS (TTO)** is the summation of all quantifiable values greater than 1.1 g/l for the listed toxic organics. TTO requirement shall be as follows:

- (a) All parameters shall be analyzed in accordance to 40 CFR Part 136 methods. Usage of approved analytical procedures is essential to the detection of parameters being analyzed. All MDLs should be reported with the sample results, and any cleanup procedures and sample interference shall be reported.
- (b) In lieu of monitoring for TTO, facilities subject to either 40 CFR Part 413 or Part 433 may be allowed to make the TTO certification as a comment to the Six Month Report, provided:
  - i) At least one (1) complete set of analytical results has been submitted for all the TTO pollutants of concern, and
  - ii) The Permittee has submitted a Toxic Organic Management Plan (TOMP) in compliance with either 40 CFR Part 413 or 433 requirements, and
  - iii) The TOMP has been approved by the Authority.

**TOTAL METAL** is the sum of the concentration of Copper (Cu), Nickel (Ni), Chromium (CrT) and Zinc (Zn).

**PART III: PERMIT DEFINITION**

**1. FACILITY DESCRIPTION**

Great Lakes Golf Center is a recreational golfing facility situated in a closed non-hazardous solid waste landfill. The center maintains the closed landfill and operates with eighteen (18) employees.

**2. PROCESS DESCRIPTION**

The leachate generated from this closed landfill is discharged directly into the public sanitary sewer without pretreatment. The discharge occurs 24 hours a day and seven (7) days a week.

**3. APPLICABLE CLASSIFICATION**

The facility is classified as a Significant Industrial User (SIU), discharging more than 25,000 gpd of process wastewater that contains toxic pollutants which are subjected to the City of Detroit Ordinance 08-05.

**4. WASTEWATER DISCHARGE FLOW INFORMATION**

|                   |            |             |
|-------------------|------------|-------------|
| Landfill Leachate | 31,244     | gpd average |
| Sanitary          | <u>360</u> | gpd average |
| Total Flow        | 31,604     | gpd average |

**5. SOURCES OF INFORMATION**

- i) Wastewater Discharge Permit Re-application dated February 26, 2013
- ii) Revision on Wastewater Discharge Permit Re-application dated February 27, 2013
- iii) Wastewater Discharge Permit No. 707-92833-IU dated April 29, 2010
- iv) City of Auburn Hills' Leachate (wastewater discharge) information dated March 4, 2013.

Prepared by: \_\_\_\_\_

Reviewed by: \_

Date: \_\_\_\_\_

Date: \_



| Flow Meter Information |  |
|------------------------|--|
|                        |  |
| Model:                 |  |
| Serial Number:         |  |
| Units:                 |  |
| Totalizer:             |  |
| Gallons/Pulse          |  |
|                        |  |

| Account Information        |  |
|----------------------------|--|
|                            |  |
| Community:                 |  |
| Wholesale Provider:        |  |
| Water Meter ID             |  |
| Units                      |  |
| Size:                      |  |
| Comment:                   |  |
| Surcharge Basis &<br>Date: |  |

| Account Information        |  |
|----------------------------|--|
|                            |  |
| Community:                 |  |
| Wholesale Provider:        |  |
| Water Meter ID             |  |
| Units                      |  |
| Size                       |  |
| Comment:                   |  |
| Surcharge Basis &<br>Date: |  |

**CERTIFIED MAIL**

«date»

«contact»  
«Company\_»  
«mailaddress»  
«city»

Re: Draft - General Discharge Permit No. GLWA-«permitno»

Dear «contact2»:

Enclosed is a draft copy of the General Discharge Permit prepared for your company. The terms and conditions of this permit are based upon data and other related information your company has submitted to the Industrial Waste Control Division. Please review each section of the permit for accuracy.

If you wish to file a response to the draft permit, you must file a written response to the division within thirty (30) days upon receipt of the draft permit. If you concur with this permit, please let us know within the said days so that we can expedite issuing the final permit. A final permit will be issued at the disposition of the Department.

Should you have any questions, please contact «eng» at (313) 297-«phone» or myself at (313) 297-5802.

Sincerely,

Stephen J. Kuplicki, P.E., J.D.  
Operations Manager  
Industrial Waste Control Division

SJK/«enginit»/  
Enclosure

**CERTIFIED MAIL**

«date»

«contact»  
«Company\_»  
«mailaddress»  
«city»

**Re: General Discharge Permit No. GLWA- «permitno»**

Dear «contact2»:

Enclosed please find your General Discharge Permit as issued by Great Lakes Water Authority (GLWA). The terms and conditions of this permit are based on applicable law, data and other related information your company has submitted to the Industrial Waste Control Division.

The permit contains specific discharge limitations, effective dates, self-monitoring and reporting requirements for your facility to comply.

In accordance with the City of Detroit Ordinance No. 08-05, or equivalent local ordinance, any appeal regarding this permit must be submitted in writing within twenty (20) days upon receipt of the permit.

Should you have any questions, please contact «eng» at (313) 297-«phone» or myself at (313) 297-5802.

Sincerely,

Stephen J. Kuplicki, P.E., J.D.  
Operations Manager  
Industrial Waste Control Division

SJK/«enginit»/

**GENERAL DISCHARGE PERMIT  
PERMIT NO. DWSD-GD-02**

**SECTION A: GENERAL INFORMATION**

|                  |                        |                |
|------------------|------------------------|----------------|
| Company Name     | «Company_»             |                |
|                  | Headquarter/Mailing    | Facility/Local |
| Company Address  | «mailaddress».         | «faciladdress» |
|                  | «mailaddress»          | «facilcity»    |
| Contact Person   | «contact»              |                |
| Title            | Environmental Engineer |                |
| Telephone Number |                        |                |
| Fax Number       |                        |                |

The Great Lakes Water Authority (GLWA) hereby authorizes the company to discharge groundwater/storm water run-off accumulation from its to the GLWA sewer system. This authorization is granted in accordance with the City of Detroit Ordinance (08-05) Sec. 56-3-59.1 (g) and/or any applicable provisions of federal or state laws or regulations.

The requirements and conditions established in this permit do not relieve the company of its obligation to comply with any applicable pretreatment regulations, standards, requirements, or laws that may become effective during the term of this permit.

To continue discharging groundwater/storm water run-off accumulation after the expiration date, it is the company's responsibility to submit an application for permit reissuance at least 90 days before the expiration of the existing permit. The permit reapplication form may be requested from this GLWA.

Effective Date:       «Effectie\_date»

Expiration Date:     «expdate»

Authorized by:

---

Stephen J. Kuplicki, P.E., J.D.  
Operations Manager  
Industrial Waste Control Division  
And Environmental Affairs



## SECTION B: DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

### Applicable Discharge Limitations

| PARAMETER                                                    |     | Daily Max. (mg/l) | Min. Sampling Frequency |
|--------------------------------------------------------------|-----|-------------------|-------------------------|
| Arsenic                                                      | As  | 1.0               | 6 samples / 6 months    |
| Cadmium                                                      | Cd  | 1.0               | 6 samples / 6 months    |
| Chromium                                                     | Cr  | 25.0              | 6 samples / 6 months    |
| Copper                                                       | Cu  | 2.54.5            | 6 samples / 6 months    |
| Cyanide                                                      | CN  | 1.0               | 6 samples / 6 months    |
| Iron                                                         | Fe  | 1000.0            | 6 samples / 6 months    |
| Lead                                                         | Pb  | 1.0               | 6 samples / 6 months    |
| Mercury                                                      | Hg  | Non detect*       | 6 samples / 6 months    |
| Nickel                                                       | Ni  | 5.0               | 6 samples / 6 months    |
| Silver                                                       | Ag  | 1.0               | 6 samples / 6 months    |
| Zinc                                                         | Zn  | 7.3               | 6 samples / 6 months    |
| Total PCB                                                    |     | Non detect**      | 6 samples / 6 months    |
| Total Phenolic Compounds which cannot be removed by the POTW |     | 1.0               | 6 samples / 6 months    |
| Fats, Oil, or Grease                                         | FOG | 1,500.0           | 6 samples / 6 months    |
| Total Suspended Solids                                       | TSS | 7,500.0           | 6 samples / 6 months    |
| Biochemical Oxygen Demand                                    | BOD | 7,500.0           | 6 samples / 6 months    |
| Phosphorus                                                   | P   | 250.0             | 6 samples / 6 months    |
| Acidity/Alkalinity                                           | pH  | 5.0 - 11.5 units  | 6 samples / 6 months    |

\*Quantitation level shall not exceed 0.2 µgm/l based on EPA method 245.1.

\*\*Quantitation level shall not exceed 0.2 µgm/l based on EPA method 608.

The above specified frequency of sampling pollutants is the recommended minimum number of samples required for wastewater analysis and submission to the GLWA for demonstration of compliance.

## **SECTION C: OTHER CONDITIONS AND REQUIREMENTS**

- 1) The discharge of groundwater/storm water run-off accumulation shall be in compliance with the Discharge Prohibitions of the City of Detroit Ordinance 08-05, Sec. 56-3-59.1.

The company is not authorized to discharge groundwater if its conditions are observed as follows:

- a) Presence of floating oil – unless filter bag is utilized to completely remove the floating oil
  - b) Prior knowledge of contamination
- 2) The permittee shall maintain a discharge log for all groundwater/storm water run-off accumulation discharges into the Detroit sewer system. The log shall contain the following minimum requirements:
  - a) Date and time of discharge
  - b) Volume and duration of discharge
  - c) Location of discharge
  - d) Observation
- 3) All sampling and analysis for all parameters listed in Section B of the permit must be performed in accordance with the methods and techniques specified in 40 CFR Part 136 and any amendments thereto. Samples analyzed by SW-846 method are specifically prohibited.
- 4) The permittee is prohibited from disposing of or discharging any wastes or wastewater not identified in this permit.
- 5) The permittee is required to comply with all conditions, standards, and requirements of this permit. Failure to comply will result in enforcement action.
- 6) **The Six Month Report**  
The Six Month Report must be submitted to the GLWA semiannually on or before July 15<sup>th</sup> (i.e. January to June reporting period) and January 15<sup>th</sup> (i.e. for July to December reporting period) of each year. The report must contain the following minimum requirements:
  - a) analytical data of representative samples (refer to item 4 above) as specified in Section B of the permit,
  - b) Copy of discharge log for the respective reporting period and
  - c) The company must attempt to sample different manholes and discharge volume must be at least 1,000 gallons during sampling.
  - d) The report shall be certified and dated by the company's authorized representative.

«Company\_»  
«mailaddress».  
«city»

Permit No. «permitno»  
Renewal Date: «Effectie\_date»  
Expiration Date: «expdate»

4

## CERTIFICATION STATEMENT

I certify under the penalty of law that this document and all attachments were prepared under my direction, or supervision, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of the fine and imprisonment for knowing violations.

- 7) All reports shall be addressed to: Great Lakes Water Authority  
Industrial Waste Control Division  
303 S. Livernois Avenue  
Detroit, Michigan 48209  
Attn.: General Discharge Permit
- 8) **Modifications or Revisions of the Permit**  
The permittee should notify the GLWA of any operational changes, which may affect the permit.

The terms and conditions of the permit may be subject to modification by the Great Lakes Water Authority during the terms of the permit, in accordance with applicable law, including but not limited to the City's ordinance.

- 9) **Confidential Information**  
Except for data accepted by the GLWA as confidential under the ordinance, all information and data on the permittee obtained from written reports, questionnaires, permit applications, permits, monitoring programs and inspections shall be available to the public or other government agencies without restriction.

- 10) **Legal Actions**  
a) Any user who violates any local provision, including the failure to pay any fees, charges, or surcharges imposed hereby, or any condition or limitation of a permit issued pursuant thereto or who knowingly makes any false statements, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to this ordinance or general discharge permit or who tampers with, or knowingly renders inaccurate any monitoring device required under this ordinance is guilty of a misdemeanor and shall, upon conviction, be punished by a fine not to exceed \$500 for each violation per day or by imprisonment for not more than 90 days or by both.

The GLWA is hereby authorized to seek, through its counsel, prosecution of criminal charges against any person violating any provision of this ordinance.



- b) If any person discharges sewage, industrial wastes, or other wastes into the POTW contrary to the provisions of the ordinance, permit or order issued thereunder, the Director or Board may commence a civil action to enjoin such discharge or to enforce compliance with this ordinance, permit or order issued thereunder, in the Circuit Court for the County of Wayne or other appropriate court. Upon a proper showing of a violation of this ordinance, permit or order issued thereunder, a permanent or temporary injunction may be granted without bond. The GLWA or Board may also seek additional legal and/or equitable relief.

Instituting suit in the Circuit Court does not constitute as exclusive election of remedies and does not prohibit the GLWA, Director, Board, or City of Detroit from commencing action in Federal Court for discharges believed to be in violation of this ordinance, State and Federal requirements pursuant to the Clean Water Act, the City's NPDES permit, or other applicable laws or requirements.

The City of Detroit may also recover reasonable attorney fees, court costs, court reporters fees, and other unusual expenses related to enforcement activities or litigation against the person found to have violated this ordinance or the orders, rules, regulations, and permits issued hereunder.

- c) All fines, costs and penalties which are imposed by any court of competent jurisdiction shall be payable to the clerk of such court, who shall deposit the same with the City Treasurer, all of which fines, costs, and penalties shall be credited to the appropriate fund of the GLWA.
- 13) **Requirement to Reapply**  
This permit shall expire on the expiration date identified. Existing permittees shall apply for permit reissuance a minimum of 90 days prior to the expiration of existing permits on a form prescribed by the GLWA. Upon timely application for reissuance of a permit, the expired permit shall be automatically extended until modified or reissued by the GLWA. Failure to submit a timely reapplication for reissuance may result in a delayed issuance of a permit and a cessation of unpermitted discharges to the sewer system.
- 14) **Records Retention**  
The permittee shall maintain records of all information from monitoring activities, permit requirements, or 40 CFR 403.6 for no less than three (3) years.

«Company\_»  
«mailaddress».  
«city»

Permit No. «permitno»  
Renewal Date: «Effectie\_date»  
Expiration Date: «expdate»

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6

**15) Permit Revocation**

The GLWA may revoke this permit at any time in accordance with applicable law. Actions for which a permit may be revoked include but are not limited to failure of a facility to comply with the permit, failure to comply with an administrative order, or Court order, discharging wastewater which has the potential to or does threaten the POTW or the community, discharges which would cause the POTW to violate its NPDES permit.

Where such action is taken by the GLWA, the former permittee shall have an opportunity for a hearing for Permit reinstatement in accordance with applicable law.

**SECTION C: PERMIT DEFINITION**

**1) Wastewater Discharge Flow Information**

**2. Sources of Information**

- i) General Discharge Permit No: DWSD-GD-02, Previous issued on October 20, 2000
- ii) Permit reissuance letter from the company dated August 27, 2000
- iii) Letter dated September 1, 2000 to the company for the issues agreed
- iv) Letter dated August 29, 2003 to confirm the name of the company for issuing the permit.

Prepared by:

\_\_\_\_\_  
Akshay Chauhan  
Special Project Technician

Date:

\_\_\_\_\_

Permit Reviewed by:

\_\_\_\_\_  
Thomas Eapen, P.E.  
Engineer

## Sample Inspection Forms

# BASELINE INSPECTION REPORT

## I. Industrial User Background Information

|    |                  |  |
|----|------------------|--|
| 1. | Facility Name    |  |
| 2. | Facility Address |  |
| 3. | Mailing Address  |  |
| 4. | Contact Person   |  |
|    | Title            |  |
|    | Phone Number     |  |

## II. Inspection Information

|    |                  |  |
|----|------------------|--|
| 1. | Inspector's Name |  |
| 2. | Inspection Date  |  |
| 3. | Inspection Time  |  |

## III. Recommendation

|    |                                                                                                                |  |     |  |    |
|----|----------------------------------------------------------------------------------------------------------------|--|-----|--|----|
| 1. | Facility is a Minor Discharger<br>(If <b>No</b> , start processing the facility's Wastewater Discharge Permit) |  | Yes |  | No |
| 2. | Facility need a Slug Control/Spill Prevention Plan<br>(If <b>Yes</b> , refer to SC/SPP Group)                  |  | Yes |  | No |
| 3. | Facility Should be covered under Surcharge<br>(If <b>Yes</b> , refer to Surcharge Group)                       |  | Yes |  | No |

## IV. Significance Test

|    |                                                                                                                            |  |     |  |    |
|----|----------------------------------------------------------------------------------------------------------------------------|--|-----|--|----|
| 1. | Has process wastewater discharge >25,000 gpd                                                                               |  | Yes |  | No |
| 2. | Has discharges subject to the National Categorical Pretreatment Standards                                                  |  | Yes |  | No |
| 3. | Requires pretreatment to comply with the specific pollutant limitations                                                    |  | Yes |  | No |
| 4. | Has in its discharge toxic pollutants in concentrations and volumes subject to regulation                                  |  | Yes |  | No |
| 5. | Is a treatment, storage, or disposal of hazardous waste                                                                    |  | Yes |  | No |
| 6. | Have a reasonable potential for adverse effect, either singly or in combination with other contributing industries or POTW |  | Yes |  | No |

## V. General Industrial User Information

|     |                                                                                         |                           |                                                                   |                          |                          |                          |
|-----|-----------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| 1.  | Nature of Business                                                                      |                           |                                                                   |                          |                          |                          |
| 2.  | SIC Number                                                                              |                           | 3.                                                                | Number of Employees      |                          |                          |
| 4.  | Schedule of Operation                                                                   |                           | <div>hours/day</div> <div>days/week</div> <div>shift(s)/day</div> |                          |                          |                          |
| 5.  | Date operation started                                                                  |                           |                                                                   |                          |                          |                          |
| 6.  | Process Description(s)                                                                  |                           |                                                                   |                          |                          |                          |
|     |                                                                                         |                           |                                                                   |                          |                          |                          |
|     |                                                                                         |                           |                                                                   |                          |                          |                          |
|     |                                                                                         |                           |                                                                   |                          |                          |                          |
| 7.  | Are there floor drains within the production area                                       |                           |                                                                   |                          | <input type="checkbox"/> | Yes                      |
|     | If Yes, where do the floor drains discharge to? (storm, sanitary, etc.)                 |                           |                                                                   |                          | <input type="checkbox"/> | No                       |
| 8.  | Water Supply                                                                            | <input type="checkbox"/>  | municipal                                                         | <input type="checkbox"/> | well                     | <input type="checkbox"/> |
|     |                                                                                         |                           |                                                                   |                          | <input type="checkbox"/> | other                    |
| 9.  | Water usage data (last 12 months) ❶                                                     |                           |                                                                   |                          | [ ] gpd                  |                          |
|     | from                                                                                    |                           | 19                                                                | to                       | 2000                     |                          |
| 10. | Wastewater Flow Rates                                                                   |                           |                                                                   |                          |                          |                          |
|     | Type                                                                                    |                           | Usage (gpd) ❶                                                     |                          | Discharge (gpd) ❶        |                          |
|     | a)                                                                                      | Process                   | [ ] gpd                                                           |                          | [ ] gpd                  |                          |
|     | b)                                                                                      | Contact Cooling Water ❷   | [ ] gpd                                                           |                          | [ ] gpd                  |                          |
|     | c)                                                                                      | Non-contact Cooling Water | [ ] gpd                                                           |                          | [ ] gpd                  |                          |
|     | d)                                                                                      | Sanitary                  | [ ] gpd                                                           |                          | [ ] gpd                  |                          |
|     | e)                                                                                      | Boiler feed/blowdown      | [ ] gpd                                                           |                          | [ ] gpd                  |                          |
|     | f)                                                                                      | Product                   | [ ] gpd                                                           |                          | [ ] gpd                  |                          |
|     | g)                                                                                      | Air Pollution Control ❷   | [ ] gpd                                                           |                          | [ ] gpd                  |                          |
|     | h)                                                                                      | Other                     | [ ] gpd                                                           |                          | [ ] gpd                  |                          |
|     | TOTAL Process Wastewater Discharge ❷                                                    |                           |                                                                   |                          | [ ] gpd                  |                          |
|     | TOTAL Plant Wastewater Discharge                                                        |                           |                                                                   |                          | [ ] gpd                  |                          |
| 11. | Type of discharge for process wastewater (continuous, batch ❸, or intermittent batch ❹) |                           |                                                                   |                          |                          |                          |

|                                                                |
|----------------------------------------------------------------|
| For batch or intermittent batch wastewater discharge, indicate |
|----------------------------------------------------------------|

|     |    |                             |         |
|-----|----|-----------------------------|---------|
| 12. | a) | Frequency of discharge      |         |
|     | b) | Average Length of discharge | hour(s) |
|     | c) | Max. volume of discharge    | gal     |

- ❶ - specify whether measured (M) or estimated (E)  
❷ - considered also as process water  
❸ - A non-continuous release of treated/untreated wastewater whose volume, duration or frequency of generation warrant periodic release as the most efficient and effective means of discharge.  
❹ - Same as batch discharge; however, the period involved between batch discharges is more than 30 days.

## VI. Storage Areas

|    |                                                                                                       |            |             |                 |     |  |    |
|----|-------------------------------------------------------------------------------------------------------|------------|-------------|-----------------|-----|--|----|
| 1. | Are there chemicals stored on site?                                                                   |            |             |                 | Yes |  | No |
| 2. | List of chemicals on site                                                                             |            |             |                 |     |  |    |
|    | Quantity Stored                                                                                       | Brand Name | Common Name | MSDS Available? |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
| 3. | Description of the chemical storage area on site                                                      |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
|    |                                                                                                       |            |             |                 |     |  |    |
| 4. | Are there floor drains within the chemical storage area?                                              |            |             |                 | Yes |  | No |
|    | If Yes, where do the floor drains discharge to? (storm, sanitary, etc.)                               |            |             |                 |     |  |    |
| 5. | Are there wastes stored on site?                                                                      |            |             |                 | Yes |  | No |
| 6. | Are there floor drains within the waste storage area?                                                 |            |             |                 | Yes |  | No |
|    | If Yes, where do the floor drains discharge to? (storm, sanitary, etc.)                               |            |             |                 |     |  |    |
| 7. | Does the industrial user need a Slug Control/Spill Prevention Plan pursuant to 40 CFR 403.8(f)(2)(v)? |            |             |                 | Yes |  | No |

## VII. Wastewater Treatment Facility

|     |                                                                                                                              |            |     |  |    |
|-----|------------------------------------------------------------------------------------------------------------------------------|------------|-----|--|----|
| 1.  | Is there pretreatment at the facility?                                                                                       |            | Yes |  | No |
| 2.  | Describe the pretreatment operation(s) performed at the facility.                                                            |            |     |  |    |
|     |                                                                                                                              |            |     |  |    |
| 3.  | Describe the other generated and/or untreated process wastewater (e.g. spent waste solution) and method of disposal, if any. |            |     |  |    |
|     |                                                                                                                              |            |     |  |    |
| 4.  | Type of wastewater treatment (continuous, batch)                                                                             |            |     |  |    |
| 5.  | Max. design flow of the pretreatment system.                                                                                 | gpm<br>gpd |     |  |    |
| 6.  | Are replacement parts available on site for critical components (e.g. pumps, pH probe, etc.)?                                |            | Yes |  | No |
| 7.  | Are chemicals for use in the wastewater pretreatment readily available (e.g. caustic soda, lime, etc.)?                      |            | Yes |  | No |
| 8.  | Does facility have pretreatment O & M manual?                                                                                |            | Yes |  | No |
| 9.  | Does facility's waste treatment operation(s) generate sludge?                                                                |            | Yes |  | No |
|     | If Yes, describe the waste characterization of the generated sludge and method of disposal.                                  |            |     |  |    |
|     |                                                                                                                              |            |     |  |    |
| 10. | Describe facility's potential to bypass its pretreatment system.                                                             |            |     |  |    |
|     |                                                                                                                              |            |     |  |    |
| 11. | Is there full time qualified personnel in charge of maintaining and operating the wastewater pretreatment system?            |            | Yes |  | No |

## VIII. Wastestream Characteristics

|    |                                                                                                                                                                                                                                |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Observe and describe the characteristic of the wastestream being discharged by the IU to the sanitary sewer (I.e. color, turbid, oil & grease, etc.).                                                                          |
|    |                                                                                                                                                                                                                                |
| 2. | Provide a list of pollutants that do come in direct contact with the water that is discharged to the POTW.                                                                                                                     |
|    |                                                                                                                                                                                                                                |
| 3. | Provide a list of pollutants that do not come in direct contact with the water that is discharged to the POTW, but has the potential to enter the wastestream due to spills, machinery malfunctions or other similar problems. |
|    |                                                                                                                                                                                                                                |

### IX. Sampling Location(s)

|    |                                   |
|----|-----------------------------------|
| 1. | Describe the sampling location(s) |
|    |                                   |

### X. Schematic Drawing

On an attached page provide a schematic drawing of the IU's facility. This drawing has to be done once; however, it should be continually updated if any changes, additions, deletions to any of the above items required in the schematic drawing. The drawing must include but not limited to the following:

- locations of process equipment, wastewater treatment, chemical and waste storage areas
- water flow throughout the facility (include arrow to show flow direction)
- location of sampling location (e.g. manholes)
- location of floor drains
- location of discharge points
- connections receiving each national categorical process wastestream
- connections receiving storm water, sanitary water, and/or non-contact cooling water

### XI. General Comments

|    |                                  |  |      |  |      |  |      |
|----|----------------------------------|--|------|--|------|--|------|
| 1. | Is the facility well maintained? |  | good |  | fair |  | Poor |
|----|----------------------------------|--|------|--|------|--|------|



|    |                                                                                                                                                                                |  |     |  |    |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----|--|----|
| 2. | Is any of the information in this form confidential information pursuant to 40 CFR 403.14?                                                                                     |  | Yes |  | No |
| 3. | Has the IU notified the POTW of substances discharged to the POTW that otherwise disposed of would be a hazardous waste under 40 CFR part 261 as required in 40 CFR 403.12(p)? |  | Yes |  | No |
| 4. | Additional comments about the inspection                                                                                                                                       |  |     |  |    |
|    |                                                                                                                                                                                |  |     |  |    |

[Click here to enter text.](#)

## INDUSTRIAL USER FILE REVIEW

Year

|            |                                           |               |                                                 |
|------------|-------------------------------------------|---------------|-------------------------------------------------|
| Company    | <a href="#">Click here to enter text.</a> |               |                                                 |
| Address    | <a href="#">Click here to enter text.</a> | Reviewed by   | <a href="#">Click here to enter text.</a>       |
|            | <a href="#">Click here to enter text.</a> | Date Reviewed | <a href="#">Click here to enter a date.</a>     |
| Permit No. | <a href="#">Click here to enter text.</a> | Copy to       | File, <a href="#">Click here to enter text.</a> |

|                                                                                                                            |      |                                             |    |                                             |
|----------------------------------------------------------------------------------------------------------------------------|------|---------------------------------------------|----|---------------------------------------------|
| File Review Period                                                                                                         | from | <a href="#">Click here to enter a date.</a> | to | <a href="#">Click here to enter a date.</a> |
| File Review Period starts from the date of the last file review and ends at present review date (see Date Reviewed above). |      |                                             |    |                                             |

| SUPERVISOR'S EVALUATION |                          |                             |                              |                             |
|-------------------------|--------------------------|-----------------------------|------------------------------|-----------------------------|
| Comments/Action Needed  | Concerns                 |                             |                              |                             |
|                         | I                        | Previous Year's File Review | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|                         | II                       | Permit                      | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|                         | III                      | PIMS                        | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|                         | IV                       | Sampling Location           | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|                         | V                        | GLWA Monitoring             | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|                         | VI                       | Compliance                  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|                         | VII                      | Surcharge                   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|                         | VIII                     | SC/SPP                      | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|                         | Reviewed by (Supervisor) |                             |                              |                             |

|                                           |                                                                                                                                                            |                              |                             |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|
| I.                                        | PREVIOUS YEAR'S FILE REVIEW                                                                                                                                |                              |                             |
| 1.                                        | Are there still any issues or concerns raised in the previous year's file review that require resolution during this review period? If Yes, explain below. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <a href="#">Click here to enter text.</a> |                                                                                                                                                            |                              |                             |

|     |                                                                                                                               |                                             |                                                          |
|-----|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------|
| II. | PERMIT                                                                                                                        |                                             |                                                          |
| 1.  | Permit Expiration Date                                                                                                        | <a href="#">Click here to enter a date.</a> |                                                          |
|     | Is there a copy of the facility's final permit in the main file (i.e. blue folder)? If No, explain below.                     |                                             | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|     | <a href="#">Click here to enter text.</a>                                                                                     |                                             |                                                          |
| 2.  | Specific Discharge Limitation (identify all limits that apply)                                                                |                                             |                                                          |
|     | <input type="checkbox"/> Local Limits <input type="checkbox"/> Categorical Limits <input type="checkbox"/> Groundwater Limits |                                             |                                                          |
|     | Is the above limitation(s) applied properly to the company's classification? If No, explain below.                            |                                             | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|     | <a href="#">Click here to enter text.</a>                                                                                     |                                             |                                                          |

|    |                                                                                                                                                                                     |                                                          |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| 3. | Are there any permit issues or concerns raised in the file or resulting from any GLWA activities that require permit modification during this review period? If Yes, explain below. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|    | <a href="#">Click here to enter text.</a>                                                                                                                                           |                                                          |

|                                                 |                                                                                                                                                                                                                  |                                             |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| <b>III. PIMS</b>                                |                                                                                                                                                                                                                  |                                             |
| 1.                                              | Provide the status of the following PIMS entries:                                                                                                                                                                |                                             |
|                                                 | a) Inspector (under General Info)                                                                                                                                                                                | Choose an item.                             |
|                                                 | b) Authorized Representative (under GI)                                                                                                                                                                          | Choose an item.                             |
|                                                 | c) Facility Contact Person (under GI)                                                                                                                                                                            | Choose an item.                             |
|                                                 | d) Mailing Address (under GI)                                                                                                                                                                                    | Choose an item.                             |
|                                                 | e) Facility Address (under GI)                                                                                                                                                                                   | Choose an item.                             |
|                                                 | f) GLWA Sampling Frequency (under Monitoring) for the following grouped parameters:                                                                                                                              | Frequency                                   |
|                                                 | Acidity/Alkalinity (pH)                                                                                                                                                                                          | Choose an item.                             |
|                                                 | Compatible Pollutants                                                                                                                                                                                            | Choose an item.                             |
|                                                 | Metals                                                                                                                                                                                                           | Choose an item.                             |
|                                                 | Total Phenolic Compounds                                                                                                                                                                                         | Choose an item. <input type="checkbox"/> NA |
|                                                 | 8 Individual Phenolic Compounds                                                                                                                                                                                  | Choose an item. <input type="checkbox"/> NA |
|                                                 | Total PCB                                                                                                                                                                                                        | Choose an item.                             |
|                                                 | Organics (i.e. for landfill, groundwater remediation)                                                                                                                                                            | Choose an item. <input type="checkbox"/> NA |
|                                                 | Other Applicable Categorical Parameters                                                                                                                                                                          | Choose an item. <input type="checkbox"/> NA |
| g) Attached Previous Year's CIR (under Results) | <input type="checkbox"/> Yes <input type="checkbox"/> No ★ <small>★ -During this review period, the inspector must ensure to attach last year's CIR in PIMS and notify his/her supervisor to approve it.</small> |                                             |

|                              |                                                                                                                                                                                       |                                                          |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| <b>IV. SAMPLING LOCATION</b> |                                                                                                                                                                                       |                                                          |
| 1.                           | Is the sampling location representative of the facility's wastewater discharge? If No, explain below.                                                                                 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|                              | <a href="#">Click here to enter text.</a>                                                                                                                                             |                                                          |
| 2.                           | Are drawings/schematic diagrams for each sampling location available in the main file? If No, explain below.                                                                          | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|                              | <a href="#">Click here to enter text.</a>                                                                                                                                             |                                                          |
| 3.                           | Are there any sampling location issues or concerns raised in the file or resulting from any GLWA activities that require resolution during this review period? If Yes, explain below. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|                              | <a href="#">Click here to enter text.</a>                                                                                                                                             |                                                          |

|                           |                                                                                                       |                 |
|---------------------------|-------------------------------------------------------------------------------------------------------|-----------------|
| <b>V. GLWA MONITORING</b> |                                                                                                       |                 |
| 1.                        | How many representative sampling location(s) does the company have (i.e. as specified on its permit)? | Choose an item. |

| 2.             | Based on the number of sampling location(s) noted above, determine whether the <u>Authority</u> has sampled and analyzed the required (R) parameters (i.e. as specified on company's permit and respective sampling location) during the last six (6) months of this review period. Indicate the sample date and location where you found the analytical data either in: i) the black book (B) – <i>first priority to look at</i> or ii) PIMS (P) – <i>last priority to look at</i> . For additional sampling locations (i.e. SL#3 and SL#4), see Section IX, 1). |                                             |                                             |                          |                          |                          |                                             |                                             |                          |                          |                 |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------|--------------------------|--------------------------|--------------------------|---------------------------------------------|---------------------------------------------|--------------------------|--------------------------|-----------------|
|                | SL#1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                             |                                             |                          |                          | SL#2                     |                                             |                                             |                          |                          |                 |
|                | Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | R                                           | Sample Date                                 | B                        | P                        | Comment                  | R                                           | Sample Date                                 | B                        | P                        | Comment         |
|                | Acidity/Alkalinity (pH)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Arsenic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Biochemical Oxygen Demand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Cadmium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Chromium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Copper                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Cyanide (Available)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Fats, Oil or Grease                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Iron                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Lead                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Mercury                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Nickel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Phosphorus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Silver                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Total PCB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Total Phenolic Cpds.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Total Suspended Solids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | Zinc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | 2-Chlorophenol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | 4-Chlorophenol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | 4-Chloro-3-Methylphenol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | 2,4-Dichlorophenol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | 2,4-Dinitrophenol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
|                | 4-Methylphenol (p-cresol)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/>                    | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/> | <input type="checkbox"/> | Choose an item. |
| 4-Nitrophenol  | <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/>                    | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/> | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/>                    | <input type="checkbox"/> | Choose an item.          |                 |
| Phenol Alcohol | <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/>                    | <input type="checkbox"/> | Choose an item.          | <input type="checkbox"/> | <a href="#">Click here to enter a date.</a> | <input type="checkbox"/>                    | <input type="checkbox"/> | Choose an item.          |                 |
| R              | required parameter to be sampled and analyzed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                             |                                             |                          |                          |                          |                                             |                                             |                          |                          |                 |
| B              | black book                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                             |                                             |                          |                          |                          |                                             |                                             |                          |                          |                 |
| P              | PIMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                             |                                             |                          |                          |                          |                                             |                                             |                          |                          |                 |
| S and A        | has already been sampled and analyzed within the last 6 months of the file review period                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                             |                                             |                          |                          |                          |                                             |                                             |                          |                          |                 |

|              |                                                                                                                                                                          |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Not (S & A)1 | has not been sampled and analyzed (requires investigation and corrective action)                                                                                         |
| Not (S & A)2 | has not been sampled and analyzed (i.e. this may be due to incorrect or missed entry in PIMS - requires proper PIMS entry and sampling coordination with PIMS personnel) |
| S but NAD    | has been sampled / has been scheduled for sampling (as per PIMS) but no available data found in PIMS (requires investigation of the analyses)                            |

| 3. | Is the company subjected to local limits only? If No, indicate below the other applicable category and respective action requirement. If Yes, however the SIU has more than two (2) SLs, utilize and complete Section IX, 1 or Attachment 1. |  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------|-----------------------------|
|    | Category                                                                                                                                                                                                                                     |  | Action Required: Complete Section IX, # |                             |
|    | <input type="checkbox"/> Aluminum Forming                                                                                                                                                                                                    |  | 2                                       |                             |
|    | <input type="checkbox"/> Battery Manufacturing                                                                                                                                                                                               |  | 2                                       |                             |
|    | <input type="checkbox"/> Centralized Waste Treatment                                                                                                                                                                                         |  | 5                                       |                             |
|    | <input type="checkbox"/> Electroplating                                                                                                                                                                                                      |  | 2 & 3                                   |                             |
|    | <input type="checkbox"/> Groundwater Remediation                                                                                                                                                                                             |  | 3                                       |                             |
|    | <input type="checkbox"/> Iron & Steel Manufacturing                                                                                                                                                                                          |  | 2                                       |                             |
|    | <input type="checkbox"/> Landfill                                                                                                                                                                                                            |  | 6                                       |                             |
|    | <input type="checkbox"/> Leather Tanning                                                                                                                                                                                                     |  | 2                                       |                             |
|    | <input type="checkbox"/> Metal Finishing                                                                                                                                                                                                     |  | 2 & 3                                   |                             |
|    | <input type="checkbox"/> Nonferrous Metals Manufacturing                                                                                                                                                                                     |  | 2                                       |                             |
|    | <input type="checkbox"/> Organic Chemicals, Plastics and Synthetic Fibers                                                                                                                                                                    |  | 7                                       |                             |
|    | <input type="checkbox"/> Petroleum Refining                                                                                                                                                                                                  |  | 2                                       |                             |
|    | <input type="checkbox"/> Pharmaceutical                                                                                                                                                                                                      |  | 4                                       |                             |
|    | <input type="checkbox"/> Transportation Equipment Cleaning                                                                                                                                                                                   |  | 2                                       |                             |
| 4. | Are there any sampling and monitoring issues or concerns raised in the company's file and/or resulting from any GLWA activities that require resolution during this review period? If Yes, explain below.                                    |  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No |
|    | <a href="#">Click here to enter text.</a>                                                                                                                                                                                                    |  |                                         |                             |

| VI. COMPLIANCE                                                                                                                                     |                                                                                                                                                                                      |                                             |                                 |                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------|----------------------------------------------------------|
| 1.                                                                                                                                                 | Was the company under enforcement action during the previous file review period or is the company currently under enforcement action (i.e. resulting from monitoring exceedance(s))? |                                             |                                 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|                                                                                                                                                    | 2. Was the company issued a Notice of Exceedance between the previous file review period to the present time?                                                                        |                                             |                                 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|                                                                                                                                                    | 3. Was the company issued a SMR Review letter or a Notice of Violation during the last two (2) reporting periods (i.e. resulting from monitoring exceedance(s))?                     |                                             |                                 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Complete item 4 below if you responded "Yes" to any questions 1-3 above. If you responded "No" to all three (3) questions, proceed to Section VII. |                                                                                                                                                                                      |                                             |                                 |                                                          |
| 4.                                                                                                                                                 | Was the company evaluated for TRC/CV during these two (2) file review periods? If Yes, complete the tabulation below.                                                                |                                             |                                 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|                                                                                                                                                    | TRC/CV period                                                                                                                                                                        | Date TRC/CV conducted                       | Outcome                         | SNC Referral Date                                        |
|                                                                                                                                                    | April                                                                                                                                                                                | <a href="#">Click here to enter a date.</a> | <a href="#">Choose an item.</a> | <a href="#">Click here to enter a date.</a>              |
|                                                                                                                                                    | October                                                                                                                                                                              | <a href="#">Click here to enter a date.</a> | <a href="#">Choose an item.</a> | <a href="#">Click here to enter a date.</a>              |

**Outcome**

- A – Based on the TRC/CV evaluation, the company did not meet the SNC criteria. No further action is required.  
 B – Based on the TRC/CV evaluation, the company meets the SNC criteria and is/will be referred for further action.

|                                           |                                                                                                                                            |                                                                             |                                                                             |                                                                           |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------|
| <b>VII</b>                                | <b>SURCHARGE</b>                                                                                                                           |                                                                             |                                                                             |                                                                           |
| 1.                                        | Is the company under surcharge program? If Yes, proceed below. If No, proceed to Section VIII.                                             |                                                                             |                                                                             | <input type="checkbox"/> Yes <input type="checkbox"/> No                  |
| 2.                                        | Provide the date of the latest waste strength determination conducted on-site. Any comments, explain below.                                |                                                                             |                                                                             | <a href="#">Click here to enter text.</a>                                 |
| <a href="#">Click here to enter text.</a> |                                                                                                                                            |                                                                             |                                                                             |                                                                           |
| 3.                                        | Denote all applicable parameter and actual concentration that the company is surcharged for.                                               |                                                                             |                                                                             |                                                                           |
|                                           | <input type="checkbox"/> TSS <a href="#">Click here to enter text.</a> mg/L                                                                | <input type="checkbox"/> BOD <a href="#">Click here to enter text.</a> mg/L | <input type="checkbox"/> FOG <a href="#">Click here to enter text.</a> mg/L | <input type="checkbox"/> P <a href="#">Click here to enter text.</a> mg/L |
| 4.                                        | Does the company have any concerns or issues raised on surcharge that require resolution during this review period? If Yes, explain below. |                                                                             |                                                                             | <input type="checkbox"/> Yes <input type="checkbox"/> No                  |
| <a href="#">Click here to enter text.</a> |                                                                                                                                            |                                                                             |                                                                             |                                                                           |

|                                           |                                                                                                                                                                                                                         |                                |                                 |                                                          |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------|----------------------------------------------------------|
| <b>VIII.</b>                              | <b>INCIDENCE and SLUG CONTROL/SPILL PREVENTION PLAN</b>                                                                                                                                                                 |                                |                                 |                                                          |
| 1.                                        | Does the file indicate any incidents: spill, upset, bypass and/or slug discharge experienced by the company during this file review period? If Yes, denote the incident(s) below and proceed to 2. If No, proceed to 3. |                                |                                 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|                                           | <input type="checkbox"/> Spill                                                                                                                                                                                          | <input type="checkbox"/> Upset | <input type="checkbox"/> Bypass | <input type="checkbox"/> Slug Discharge                  |
| 2.                                        | Explain what action(s) was taken by the company to ensure that this incident(s) will not occur again.                                                                                                                   |                                |                                 |                                                          |
| <a href="#">Click here to enter text.</a> |                                                                                                                                                                                                                         |                                |                                 |                                                          |
| 3.                                        | Does the company need to have a Slug Control/Spill Prevention Plan (SC/SPP)?                                                                                                                                            |                                |                                 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
|                                           | If Yes, denote the date of the company's latest submitted SC/SPP to the Authority.                                                                                                                                      |                                |                                 | <a href="#">Click here to enter a date.</a>              |
| 4.                                        | Is there a need to update the company's SC/SPP? If Yes, explain below.                                                                                                                                                  |                                |                                 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <a href="#">Click here to enter text.</a> |                                                                                                                                                                                                                         |                                |                                 |                                                          |

|                                                                                               |                   |                                                                                                |               |                   |      |                  |
|-----------------------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------------------------------|---------------|-------------------|------|------------------|
| e                                                                                             | Enter date        | Enter parameter                                                                                | Choose period | %                 | Mark | Mark             |
|                                                                                               | Mark              | See <b>Attachment BB-October</b> for additional TRC/CV evaluation                              |               |                   |      |                  |
|                                                                                               | Comment           | Enter text                                                                                     |               |                   |      |                  |
| <b>Monthly, 30-Days or 4-Days Average Violation</b> (Denote the applicable type of violation) |                   |                                                                                                |               |                   |      |                  |
|                                                                                               | Mark              | Monthly Violation                                                                              | Mark          | 30-Days Violation | Mark | 4-Days Violation |
|                                                                                               | SNC Referral Date | Parameter in Violation                                                                         | Month         | Period            | %    | TRC CV           |
| a                                                                                             | Enter date        | Enter parameter                                                                                | Choose month  | Choose period     | %    | Mark Mark        |
| b                                                                                             | Enter date        | Enter parameter                                                                                | Choose month  | Choose period     | %    | Mark Mark        |
| c                                                                                             | Enter date        | Enter parameter                                                                                | Choose month  | Choose period     | %    | Mark Mark        |
|                                                                                               | Mark              | See <b>Attachment BB-October</b> for additional Monthly, 30- or 4-Days Aver. TRC/CV evaluation |               |                   |      |                  |
|                                                                                               | Comment           | Enter text                                                                                     |               |                   |      |                  |

**Technical Review Criteria (TRC)** violation occurs when 33% or more of all the measurements taken during a six month period equal or exceed the product of the daily maximum limit or the average limit multiplied by 1.4 for BOD, TSS, FOG, and 1.2 for all other pollutants except pH.

**Chronic Violation (CV)** occurs when 66% or more of all the measurements taken during a six month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter.

## XI. HOUSEKEEPING

|    |                                                                                                                                  |            |     |      |    |      |    |
|----|----------------------------------------------------------------------------------------------------------------------------------|------------|-----|------|----|------|----|
| 1. | Is the facility well organized?                                                                                                  | Mark       | Yes | Mark | No | Mark | NA |
|    | Are all packaged and bagged chemicals properly stored in appropriate storage areas?                                              | Mark       | Yes | Mark | No | Mark | NA |
|    | Are containers for chemicals, waste materials, products clearly labeled, stored in orderly fashioned and visible for inspection? | Mark       | Yes | Mark | No | Mark | NA |
|    | Has alleviation of space constraints been considered to implement good housekeeping?                                             | Mark       | Yes | Mark | No | Mark | NA |
|    | Are walkways and passageways easily accessible, safe and free of protruding objects and equipment?                               | Mark       | Yes | Mark | No | Mark | NA |
|    | Comment                                                                                                                          | Enter text |     |      |    |      |    |
| 2. | Is the facility maintained in clean fashion?                                                                                     | Mark       | Yes | Mark | No | Mark | NA |
|    | Is the process debris removed regularly?                                                                                         | Mark       | Yes | Mark | No | Mark | NA |
|    | Is there any evidence of drippings or leaks from equipment or machinery?                                                         | Mark       | Yes | Mark | No | Mark | NA |
|    | Is there evidence of fumes and/or dust in the air or floor resulting from industrial operations?                                 | Mark       | Yes | Mark | No | Mark | NA |
|    | Comment                                                                                                                          | Enter text |     |      |    |      |    |
| 3. | Have procedures been developed to maintain good housekeeping measures?                                                           | Mark       | Yes | Mark | No | Mark | NA |
|    | Are all employees aware of the importance of good housekeeping through training?                                                 | Mark       | Yes | Mark | No | Mark | NA |
|    | Are publicity posters, bulletin boards and employee publications used for good housekeeping programs?                            | Mark       | Yes | Mark | No | Mark | NA |
|    | Are there regular housekeeping inspections to check for good housekeeping problems?                                              | Mark       | Yes | Mark | No | Mark | NA |

|    |                                                                                                          |            |     |      |    |      |    |
|----|----------------------------------------------------------------------------------------------------------|------------|-----|------|----|------|----|
|    | Are good housekeeping measures employed in appropriate locations?                                        | Mark       | Yes | Mark | No | Mark | NA |
|    | Comment                                                                                                  | Enter text |     |      |    |      |    |
| 4. | Are outside areas kept neat and clean?                                                                   | Mark       | Yes | Mark | No | Mark | NA |
|    | Is the site free from oil and/or chemical staining, spills or debris?                                    | Mark       | Yes | Mark | No | Mark | NA |
|    | Are loading and unloading areas free of spills and/or debris?                                            | Mark       | Yes | Mark | No | Mark | NA |
|    | Are unpaved outdoor areas protected from wind and water erosion?                                         | Mark       | Yes | Mark | No | Mark | NA |
|    | Are paved outdoor areas properly maintained and kept free of pollutants that can be transported offsite? | Mark       | Yes | Mark | No | Mark | NA |
|    | Comment                                                                                                  | Enter text |     |      |    |      |    |

## XII. SLUG CONTROL/SPILL PREVENTION PLAN

|    |                                                                                                                                                                |                                                                   |            |      |    |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------------|------|----|
| 1. | Does the facility store chemicals on site?                                                                                                                     | Mark                                                              | Yes        | Mark | No |
| 2. | Are there floor drains within/near the chemical storage area?                                                                                                  | Mark                                                              | Yes        | Mark | No |
| 3. | Is there waste in liquid form stored on site?                                                                                                                  | Mark                                                              | Yes        | Mark | No |
| 4. | Is additional chemical containment needed? If Yes, explain below.                                                                                              | Mark                                                              | Yes        | Mark | No |
|    | Enter text                                                                                                                                                     |                                                                   |            |      |    |
| 5. | At the facility's chemical storage area and/or waste storage area, an accidental spill can lead to a discharge to                                              |                                                                   |            |      |    |
|    | Mark                                                                                                                                                           | an on-site treatment system                                       |            |      |    |
|    | Mark                                                                                                                                                           | public sanitary sewer system (e.g. floor drains)                  |            |      |    |
|    | Mark                                                                                                                                                           | storm drain                                                       |            |      |    |
|    | Mark                                                                                                                                                           | other, specify                                                    | Enter text |      |    |
|    | Mark                                                                                                                                                           | not applicable; no possible discharge to any of the above routes. |            |      |    |
| 6. | Did the facility have past slug discharge(s) during the last twelve (12) months? If Yes, explain below.                                                        | Mark                                                              | Yes        | Mark | No |
|    | Enter text                                                                                                                                                     |                                                                   |            |      |    |
| 7. | Does the facility need a Slug Control/Spill Prevention Plan (SC/SPP)? If No, explain below.                                                                    | Mark                                                              | Yes        | Mark | No |
|    | Enter text                                                                                                                                                     |                                                                   |            |      |    |
| 8. | a) Date of latest SC/SPP submitted to the Authority                                                                                                            | Enter date                                                        |            |      |    |
|    | b) Is the SC/SPP more than two (2) years old from the date the facility submitted its latest SC/SPP? If Yes, explain below.                                    | Mark                                                              | Yes        | Mark | No |
|    | Enter text                                                                                                                                                     |                                                                   |            |      |    |
|    | c) Are there any substantial changes in the facility's operation(s) that will require it to update its SC/SPP? If Yes, describe the change in operation below. | Mark                                                              | Yes        | Mark | No |
|    | Enter text                                                                                                                                                     |                                                                   |            |      |    |

**Slug** means any discharge of a non-routine episodic nature including, but not limited to, an accidental spill or a non-customary batch discharge.



### XIII. SURCHARGE

|     |                                                                                                                                                                 |              |                    |                     |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------|---------------------|
| 1.  | Is the facility under surcharge program? If Yes, proceed to 2; otherwise, proceed to Section XIV.                                                               |              |                    | Mark Yes Mark No    |
| 2.  | Provide the date of the latest waste strength determination conducted on site. For any comments, explain below.                                                 |              |                    | Enter date          |
|     | Enter text                                                                                                                                                      |              |                    |                     |
| 3.  | Does the facility have a flow meter to determine the volume of its discharge? If Yes, describe below the type of the installed flow meter.                      |              |                    | Mark Yes Mark No    |
|     | Enter text                                                                                                                                                      |              |                    |                     |
| 4.  | Does the facility need to install a flow meter to determine the volume of its discharge? If Yes, explain below the reason for the need to install a flow meter. |              |                    | Mark Yes Mark No    |
|     | Enter text                                                                                                                                                      |              |                    |                     |
| 5.  | Surcharged Pollutants                                                                                                                                           | Limit (mg/L) | Assigned Pollutant | Actual Conc. (mg/L) |
|     | BOD                                                                                                                                                             | 275          | Mark Yes Mark No   | Enter text          |
|     | TSS                                                                                                                                                             | 350          | Mark Yes Mark No   | Enter text          |
|     | P                                                                                                                                                               | 12           | Mark Yes Mark No   | Enter text          |
|     | FOG                                                                                                                                                             | 100          | Mark Yes Mark No   | Enter text          |
| 6.  | Time of Peak Water Usage                                                                                                                                        |              | Enter text         |                     |
| 7.  | Time of Peak Wastewater Discharge                                                                                                                               |              | Enter text         |                     |
| 8.  | Is the facility's sampling location appropriate for collecting representative surcharge samples? If No, explain below.                                          |              |                    | Mark Yes Mark No    |
|     | Enter text                                                                                                                                                      |              |                    |                     |
| 9.  | Does the facility's sampling location represent the facility's overall wastewater discharge? If No, explain below.                                              |              |                    | Mark Yes Mark No    |
|     | Enter text                                                                                                                                                      |              |                    |                     |
| 10. | Does the facility have any concerns raised on the representativeness of its sampling location? If Yes, explain below.                                           |              |                    | Mark Yes Mark No    |
|     | Enter text                                                                                                                                                      |              |                    |                     |
| 11. | Is there a need to conduct another waste strength determination on site? If Yes, explain below.                                                                 |              |                    | Mark Yes Mark No    |
|     | Enter text                                                                                                                                                      |              |                    |                     |

### XIV. DRAWINGS

|    |                                                                                                                  |                  |
|----|------------------------------------------------------------------------------------------------------------------|------------------|
| 1. | Are drawings showing the facility layout, sewer connections, sampling location(s), and flow schematic available? | Mark Yes Mark No |
| 2. | Are the above drawings updated?                                                                                  | Mark Yes Mark No |
| 3. | If No for 1 or 2, explain below.                                                                                 |                  |
|    | Enter text                                                                                                       |                  |

**NOTE:** These updated drawings must be incorporated with this report to assess the compliance status of the company.

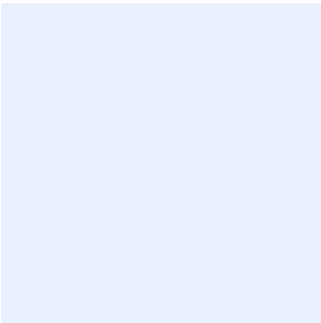
### XV. COMPLIANCE STATUS / OTHER COMMENTS

|    |                                                                 |
|----|-----------------------------------------------------------------|
| 1. | Compliance / Enforcement Status for the last twelve (12) months |
|----|-----------------------------------------------------------------|

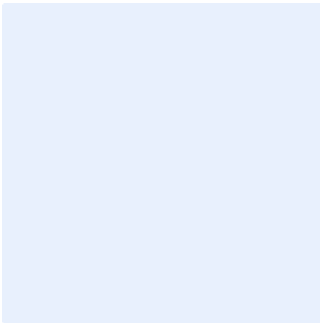
|    |                     |
|----|---------------------|
|    | Enter text          |
| 2. | Additional Comments |
|    | Enter text          |

|                    |  |      |  |
|--------------------|--|------|--|
| Report Prepared by |  | Date |  |
|--------------------|--|------|--|

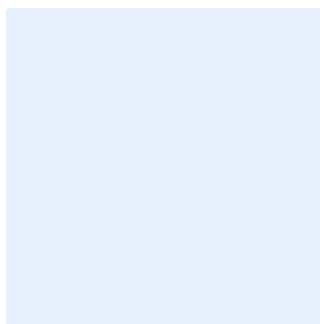
Enter diagram title



Enter diagram title



Enter diagram title



**Attachment AA-1** continuation of IX, 2-**Company** Sampling Analysis

| 2. I. Daily Violation |             |                 |              |                     |                       |         |                         |                                    |         |                               |
|-----------------------|-------------|-----------------|--------------|---------------------|-----------------------|---------|-------------------------|------------------------------------|---------|-------------------------------|
|                       | Sample Date | Parameter       | Conc. (mg/L) | Permit Limit (mg/L) | Notified within 24-hr |         | 24 hr Notification Date | Submitted 30-day Compliance Report |         | 30-day Compliance Report Date |
| h                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |
| i                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |
| j                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |
| k                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |
| l                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |
| m                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |
| n                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |
| o                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |
| p                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |
| q                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |
| r                     | Enter date  | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |

Comment/Action Taken

Enter text

**II. Monthly Average, 30-Days Average or 4-Days Average Violation** (Denote the appropriate type of exceedance)

| Mark              | Monthly Average Exceedance |                                | Mark                | 30-Days Average Exceedance |                         | Mark                               | 4-Days Average Exceedance     |          |         |            |
|-------------------|----------------------------|--------------------------------|---------------------|----------------------------|-------------------------|------------------------------------|-------------------------------|----------|---------|------------|
| Sample Month/Year | Parameter                  | Monthly / 30- / 4-Days Average |                     | Notified within 24-hr      | 24 hr Notification Date | Submitted 30-day Compliance Report | 30-day Compliance Report Date |          |         |            |
|                   |                            | Conc. (mg/L)                   | Permit Limit (mg/L) |                            |                         |                                    |                               |          |         |            |
| d                 | Month Year                 | Enter parameter                | Enter conc.         | Enter limit                | Mark Yes                | Mark No                            | Enter date                    | Mark Yes | Mark No | Enter date |
| e                 | Month Year                 | Enter parameter                | Enter conc.         | Enter limit                | Mark Yes                | Mark No                            | Enter date                    | Mark Yes | Mark No | Enter date |
| f                 | Month Year                 | Enter parameter                | Enter conc.         | Enter limit                | Mark Yes                | Mark No                            | Enter date                    | Mark Yes | Mark No | Enter date |

Comment/Action Taken

Enter text

**Attachment AA-2** continuation of IX, 3-**GLWA** Sampling Analysis

|                                                                                                                      |                            |                 |                                |                     |                            |                                    |         |                               |                               |  |  |
|----------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|--------------------------------|---------------------|----------------------------|------------------------------------|---------|-------------------------------|-------------------------------|--|--|
| 3.                                                                                                                   | <b>I. Daily Exceedance</b> |                 |                                |                     |                            |                                    |         |                               |                               |  |  |
|                                                                                                                      | Sample Date                | Parameter       | Conc. (mg/L)                   | Permit Limit (mg/L) | NOE/NOV Date               | Submitted 30-day Compliance Report |         | 30-day Compliance Report Date | Notice of Acknowledgment Date |  |  |
| h                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| l                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| j                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| k                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| l                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| m                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| n                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| o                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| p                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| q                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| r                                                                                                                    | Enter date                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| Comment/Action Taken                                                                                                 |                            | Enter text      |                                |                     |                            |                                    |         |                               |                               |  |  |
| <b>II. Monthly Average, 30-Days Average or 4-Days Average Exceedance</b> (Denote the appropriate type of exceedance) |                            |                 |                                |                     |                            |                                    |         |                               |                               |  |  |
| Mark                                                                                                                 | Monthly Average Exceedance |                 |                                | Mark                | 30-Days Average Exceedance |                                    |         | Mark                          | 4-Days Average Exceedance     |  |  |
| Sample Month/Year                                                                                                    |                            | Parameter       | Monthly / 30- / 4-Days Average |                     | NOE/NOV Date               | Submitted 30-day Compliance Report |         | 30-day Compliance Report Date | Notice of Acknowledgment Date |  |  |
|                                                                                                                      |                            |                 | Conc. (mg/L)                   | Permit Limit (mg/L) |                            |                                    |         |                               |                               |  |  |
| d                                                                                                                    | Month Year                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| e                                                                                                                    | Month Year                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| f                                                                                                                    | Month Year                 | Enter parameter | Enter conc.                    | Enter limit         | Enter date                 | Mark Yes                           | Mark No | Enter date                    | Enter date                    |  |  |
| Comment/Action Taken                                                                                                 |                            | Enter text      |                                |                     |                            |                                    |         |                               |                               |  |  |





**Attachment BB-April** continuation of X – April TRC/CV

|   | SNC Referral Date | Parameter in Violation | Period        | % | TRC  | CV   |
|---|-------------------|------------------------|---------------|---|------|------|
| f | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| g | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| h | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| i | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| j | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| k | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| l | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| m | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| n | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| o | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| p | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| q | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| r | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| s | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| t | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| u | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| v | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| w | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| x | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
|   | Comment           | Enter text             |               |   |      |      |

| Monthly, 30-Days or 4-Days Average Violation (Denote the applicable type of violation) |                        |                 |                   |               |                  |      |      |
|----------------------------------------------------------------------------------------|------------------------|-----------------|-------------------|---------------|------------------|------|------|
| Mark                                                                                   | Monthly Violation      | Mark            | 30-Days Violation | Mark          | 4-Days Violation |      |      |
| SNC Referral Date                                                                      | Parameter in Violation | Month           | Period            | %             | TRC              | CV   |      |
| d                                                                                      | Enter date             | Enter parameter | Choose month      | Choose period | %                | Mark | Mark |
| e                                                                                      | Enter date             | Enter parameter | Choose month      | Choose period | %                | Mark | Mark |
| f                                                                                      | Enter date             | Enter parameter | Choose month      | Choose period | %                | Mark | Mark |
| g                                                                                      | Enter date             | Enter parameter | Choose month      | Choose period | %                | Mark | Mark |
| h                                                                                      | Enter date             | Enter parameter | Choose month      | Choose period | %                | Mark | Mark |
|                                                                                        | Comment                | Enter text      |                   |               |                  |      |      |

**Attachment BB-October** continuation of X – October TRC/CV

|   | SNC Referral Date | Parameter in Violation | Period        | % | TRC  | CV   |
|---|-------------------|------------------------|---------------|---|------|------|
| f | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| g | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| h | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| i | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| j | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| k | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| l | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| m | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| n | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| o | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| p | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| q | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| r | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| s | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| t | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| u | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| v | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| w | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
| x | Enter date        | Enter parameter        | Choose period | % | Mark | Mark |
|   | Comment           | Enter text             |               |   |      |      |

| Monthly, 30-Days or 4-Days Average Violation (Denote the applicable type of violation) |                        |                 |                   |               |                  |      |      |
|----------------------------------------------------------------------------------------|------------------------|-----------------|-------------------|---------------|------------------|------|------|
| Mark                                                                                   | Monthly Violation      | Mark            | 30-Days Violation | Mark          | 4-Days Violation |      |      |
| SNC Referral Date                                                                      | Parameter in Violation | Month           | Period            | %             | TRC              | CV   |      |
| d                                                                                      | Enter date             | Enter parameter | Choose month      | Choose period | %                | Mark | Mark |
| e                                                                                      | Enter date             | Enter parameter | Choose month      | Choose period | %                | Mark | Mark |
| f                                                                                      | Enter date             | Enter parameter | Choose month      | Choose period | %                | Mark | Mark |
| g                                                                                      | Enter date             | Enter parameter | Choose month      | Choose period | %                | Mark | Mark |
| h                                                                                      | Enter date             | Enter parameter | Choose month      | Choose period | %                | Mark | Mark |
|                                                                                        | Comment                | Enter text      |                   |               |                  |      |      |

**CERTIFIED MAIL**

Enter text

Enter text  
Enter text  
Enter text  
Enter text

Re: Comprehensive Inspection Report - Permit No. Enter text-IU

Dear Enter text:

The Great Lakes Water Authority has completed the comprehensive inspection of your facility located at Enter text, Michigan on Enter text.

Please review the attached report and notify the Authority in writing within twenty (20) days upon receipt of any inaccurate information. This report is part of your facility's permanent compliance history, in accordance with the requirements of the Industrial Pretreatment Program.

Should you have any questions and/or concerns, please contact Enter text at (313) 297-Enter text.

Sincerely,

Enter text, P.E.  
Industrial Pretreatment Program  
Industrial Waste Control Division

Enter text/Enter text/Enter text  
Attachment

# COMPREHENSIVE INSPECTION REPORT

## I. GENERAL FACILITY INFORMATION

|    |                                |                                           |
|----|--------------------------------|-------------------------------------------|
| 1. | Facility Name                  | Enter company name                        |
| 2. | Facility Address               | Enter address                             |
| 3. | Mailing Address                | Enter mailing address                     |
| 4. | Permit Number                  | Enter permit number                       |
| 5. | Expiration Date                | Enter expiration date                     |
| 6. | Duly Authorized Representative | Enter duly authorized representative name |
|    | Title                          | Enter title                               |
|    | Phone Number                   | Enter telephone number                    |
| 7. | Facility Contact               | Enter contact name                        |
|    | Title                          | Enter title                               |
|    | Phone Number                   | Enter telephone number                    |

## II. GENERAL INSPECTION INFORMATION

|    |                                                              |                                        |                |            |
|----|--------------------------------------------------------------|----------------------------------------|----------------|------------|
| 1. | Comp. Inspection Date / Time                                 | Enter date                             | /              | Enter time |
| 2. | Date of last Comp. Inspection                                | Enter date                             |                |            |
| 3. | Last inspected by                                            | Enter inspector name                   |                |            |
| 4. | <b>Documents checked and discussed during the Inspection</b> |                                        |                |            |
|    | <b>Document</b>                                              |                                        | <b>Comment</b> |            |
|    | Mark                                                         | Permit                                 | Enter text     |            |
|    | Mark                                                         | Waste manifests                        | Enter text     |            |
|    | Mark                                                         | Self-Monitoring Reports                | Enter text     |            |
|    | Mark                                                         | Updated SC/SPP                         | Enter text     |            |
|    | Mark                                                         | Treatment Records                      | Enter text     |            |
|    | Mark                                                         | Updated Drawings                       | Enter text     |            |
|    | Mark                                                         | Reports from other regulatory agencies | Enter text     |            |
|    | Mark                                                         | Surcharge                              | Enter text     |            |
|    | Mark                                                         | Other                                  | Enter text     | Enter text |
| 5. | <b>Areas checked during the Inspection</b>                   |                                        |                |            |
|    | <b>Area</b>                                                  |                                        | <b>Comment</b> |            |
|    | Mark                                                         | Sampling Location                      | Enter text     |            |
|    | Mark                                                         | Production Area                        | Enter text     |            |
|    | Mark                                                         | Chemical Storage Area                  | Enter text     |            |
|    | Mark                                                         | Treatment Area                         | Enter text     |            |
|    | Mark                                                         | Flow Meter/Totalizer (Section V,5)     | Enter text     |            |

### III. IN ATTENDANCE DURING INSPECTION

| Name       | Affiliation       | Phone Number   |
|------------|-------------------|----------------|
| Enter name | Enter affiliation | Enter tel. no. |
| Enter name | Enter affiliation | Enter tel. no. |
| Enter name | Enter affiliation | Enter tel. no. |
| Enter name | Enter affiliation | Enter tel. no. |

### IV. BUSINESS ACTIVITY

|     |                                                                                                                      |                                                                                                                |            |                     |              |      |    |
|-----|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------|---------------------|--------------|------|----|
| 1.  | Nature of Business                                                                                                   | Enter text                                                                                                     |            |                     |              |      |    |
| 2.  | SIC Number                                                                                                           | Enter SIC                                                                                                      | 3.         | Number of Employees | Enter number |      |    |
| 4.  | Schedule of Operation                                                                                                | <div>Enter hours    hours/day</div> <div>Enter days    days/week</div> <div>Enter shifts    shift(s)/day</div> |            |                     |              |      |    |
| 5.  | Process Description(s)                                                                                               |                                                                                                                |            |                     |              |      |    |
|     | Enter text                                                                                                           |                                                                                                                |            |                     |              |      |    |
| 6.  | Process Wastewater Generating Operations                                                                             |                                                                                                                |            |                     |              |      |    |
|     | Enter text                                                                                                           |                                                                                                                |            |                     |              |      |    |
| 7.  | List of primary pollutants of concern that come in direct contact with the wastewater that is discharged to the POTW |                                                                                                                |            |                     |              |      |    |
|     | Enter text                                                                                                           |                                                                                                                |            |                     |              |      |    |
| 8.  | Does the company have seasonal production?                                                                           |                                                                                                                |            | Mark                | Yes          | Mark | No |
| 9.  | Does the company have scheduled shutdown periods (e.g. maintenance purpose)?                                         |                                                                                                                |            | Mark                | Yes          | Mark | No |
| 10. | How often are floors washed?                                                                                         |                                                                                                                | Enter text |                     |              |      |    |
|     | What chemicals are used?                                                                                             |                                                                                                                | Enter text |                     |              |      |    |
| 11. | How often are equipment washed?                                                                                      |                                                                                                                | Enter text |                     |              |      |    |
|     | What chemicals are used?                                                                                             |                                                                                                                | Enter text |                     |              |      |    |

## V. WATER USAGE and DISCHARGE

|          |                                                                                     |                         |                                                               |           |      |            |                   |         |            |                             |                           |                              |            |
|----------|-------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------|-----------|------|------------|-------------------|---------|------------|-----------------------------|---------------------------|------------------------------|------------|
| 1.       | Water Sources                                                                       |                         | Mark                                                          | municipal |      | Mark       | well              |         | Mark       | other:                      |                           | Enter text                   |            |
| 2.       | Water Usage Data (preferably last 12 months) ❶                                      |                         | from                                                          |           |      |            |                   |         | Enter text |                             | to                        |                              | Enter text |
|          |                                                                                     |                         |                                                               |           |      | Enter text |                   | gallons |            | Enter text                  |                           | gpd                          |            |
| 3.       | Water Flow Rates                                                                    |                         |                                                               |           |      |            |                   |         |            |                             |                           |                              |            |
|          | Type                                                                                |                         | Usage (gpd) ❶                                                 |           | M    | E          | Discharge (gpd) ❶ |         | M          | E                           | Type of Discharge         | Discharge Frequency          |            |
|          | a)                                                                                  | Process                 | Enter text                                                    | gpd       | Mark | Mark       | Enter text        | gpd     | Mark       | Mark                        | Choose type               | Enter text                   |            |
|          | b)                                                                                  | Contact Cooling Water ❷ | Enter text                                                    | gpd       | Mark | Mark       | Enter text        | gpd     | Mark       | Mark                        | Choose type               | Enter text                   |            |
|          | c)                                                                                  | Non-contact Cooling     | Enter text                                                    | gpd       | Mark | Mark       | Enter text        | gpd     | Mark       | Mark                        | Choose type               | Enter text                   |            |
|          | d)                                                                                  | Sanitary                | Enter text                                                    | gpd       | Mark | Mark       | Enter text        | gpd     | Mark       | Mark                        |                           |                              |            |
|          | e)                                                                                  | Boiler feed/blowdown    | Enter text                                                    | gpd       | Mark | Mark       | Enter text        | gpd     | Mark       | Mark                        | Choose type               | Enter text                   |            |
|          | f)                                                                                  | Product                 | Enter text                                                    | gpd       | Mark | Mark       | Enter text        | gpd     | Mark       | Mark                        |                           |                              |            |
|          | g)                                                                                  | Air Pollution Control ❷ | Enter text                                                    | gpd       | Mark | Mark       | Enter text        | gpd     | Mark       | Mark                        | Choose type               | Enter text                   |            |
|          | h)                                                                                  | Other                   | Enter text                                                    | gpd       | Mark | Mark       | Enter text        | gpd     | Mark       | Mark                        | Choose type               | Enter text                   |            |
|          | Total Process Wastewater Discharge ❷                                                |                         |                                                               |           |      |            | Enter text        | gpd     | Mark       | Mark                        |                           |                              |            |
|          | Total Plant Wastewater Discharge                                                    |                         |                                                               |           |      |            | Enter text        | gpd     | Mark       | Mark                        |                           |                              |            |
| 4.       | For batch or intermittent batch discharge denoted above, indicate or explain below: |                         | Day(s) of Discharge<br>(see Section B and/or C of the Permit) |           |      |            |                   |         |            | Average Length of Discharge |                           | Maximum Volume per Discharge |            |
|          | Letter    Enter text                                                                |                         | Mark                                                          | Mark      | Mark | Mark       | Mark              | Mark    | Mark       | Mark                        | Enter text    Choose type | Enter text    gallons        |            |
|          |                                                                                     |                         | Mon                                                           | Tue       | Wed  | Thu        | Fri               | Sat     | Sun        |                             | Enter text    Choose type | Enter text    gallons        |            |
|          | Letter    Enter text                                                                |                         | Mark                                                          | Mark      | Mark | Mark       | Mark              | Mark    | Mark       | Mark                        | Enter text    Choose type | Enter text    gallons        |            |
|          |                                                                                     |                         | Mon                                                           | Tue       | Wed  | Thu        | Fri               | Sat     | Sun        |                             | Enter text    Choose type | Enter text    gallons        |            |
|          | Letter    Enter text                                                                |                         | Mark                                                          | Mark      | Mark | Mark       | Mark              | Mark    | Mark       | Mark                        | Enter text    Choose type | Enter text    gallons        |            |
|          |                                                                                     |                         | Mon                                                           | Tue       | Wed  | Thu        | Fri               | Sat     | Sun        |                             | Enter text    Choose type | Enter text    gallons        |            |
| Comments |                                                                                     | Enter text              |                                                               |           |      |            |                   |         |            |                             |                           |                              |            |

❶ - specify whether measured (M) or estimated (E)

❷ - considered also as process water

Batch Discharge is a non-continuous release of treated/untreated wastewater whose volume, duration or frequency of generation warrant periodic release as the most efficient and effective means of discharge.

Intermittent Batch Discharge is the same as batch discharge; however, the period involved between batch discharges is more than 30 days. SIU with intermittent batch discharge frequency is required to:

- ☞ Sample and analyze the wastewater first prior to discharge (i.e. wastewater proposed to be discharged).
- ☞ Confirm that analytical results are in compliance with permit limitations.
- ☞ Notify the Authority at least 48 hours prior to the planned discharge at the:  
**Inspector's Telephone Number** ☎ (313) 297- **Enter telephone number**
- ☞ If analytical results show noncompliance, the batch wastewater must be pretreated further or hauled off-site.
- ☞ This discharge must occur only between 9:00 AM and 1:00 PM, Monday thru Thursday, except Fridays, Saturdays, Sundays and holidays.

|                                                                                                                                                                                                                                                       |                                                                                                                                                                                                         |            |      |                                    |                                 |                                           |                                                    |                                                      |                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------|------------------------------------|---------------------------------|-------------------------------------------|----------------------------------------------------|------------------------------------------------------|----------------------------------------|
| 5.                                                                                                                                                                                                                                                    | Denote which proportional composite sampling (PCS) method is the facility authorized / required to use. (For facility with multiple sampling locations, specify the applicable PCS to respective SL #). |            |      |                                    |                                 |                                           |                                                    |                                                      |                                        |
|                                                                                                                                                                                                                                                       | SL#                                                                                                                                                                                                     | PCS        |      | Flow Meter / Totalizer Information |                                 |                                           |                                                    |                                                      |                                        |
|                                                                                                                                                                                                                                                       |                                                                                                                                                                                                         | Time       | Flow | Manufacturer / Model Number        | Setting:<br>Volume<br>per pulse | Current Meter<br>Reading (denote<br>unit) | Frequency of meter<br>maintenance /<br>calibration | Date of recent<br>meter maintenance<br>/ calibration | Is this a<br>resettable flow<br>meter? |
|                                                                                                                                                                                                                                                       | No.                                                                                                                                                                                                     | Mark       | Mark | Enter text                         | Enter text                      | Enter text                                | Enter text                                         | Enter date                                           | Mark Yes Mark No                       |
|                                                                                                                                                                                                                                                       | No.                                                                                                                                                                                                     | Mark       | Mark | Enter text                         | Enter text                      | Enter text                                | Enter text                                         | Enter date                                           | Mark Yes Mark No                       |
|                                                                                                                                                                                                                                                       | No.                                                                                                                                                                                                     | Mark       | Mark | Enter text                         | Enter text                      | Enter text                                | Enter text                                         | Enter date                                           | Mark Yes Mark No                       |
|                                                                                                                                                                                                                                                       | No.                                                                                                                                                                                                     | Mark       | Mark | Enter text                         | Enter text                      | Enter text                                | Enter text                                         | Enter date                                           | Mark Yes Mark No                       |
| If Yes, the facility is mandated by the Authority to have the meter(s) replaced with non-resettable flow meter(s). The facility shall coordinate with the Authority the installation and replacement from resettable to non-resettable flow meter(s). |                                                                                                                                                                                                         |            |      |                                    |                                 |                                           |                                                    |                                                      |                                        |
| Comments                                                                                                                                                                                                                                              |                                                                                                                                                                                                         | Enter text |      |                                    |                                 |                                           |                                                    |                                                      |                                        |

|                                                                                                           |                                                                 |                                                                   |            |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------|------------|
| 6.                                                                                                        | The route(s) of wastewater generated from the facility lead to: |                                                                   |            |
|                                                                                                           | Mark                                                            | an on-site treatment system                                       |            |
|                                                                                                           | Mark                                                            | public sanitary sewer system (e.g. floor drains)                  |            |
|                                                                                                           | Mark                                                            | storm drain                                                       |            |
|                                                                                                           | Mark                                                            | ground                                                            |            |
|                                                                                                           | Mark                                                            | other, specify                                                    | Enter text |
|                                                                                                           | Mark                                                            | not applicable; no possible discharge to any of the above routes. |            |
| If not applicable, explain the remedial action taken to prevent possibility of an unauthorized discharge. |                                                                 |                                                                   |            |
| Enter text                                                                                                |                                                                 |                                                                   |            |

## VI. WASTE TREATMENT and DISPOSAL

|            |                                                                                                                                                                                                  |                   |      |                   |      |      |    |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------|-------------------|------|------|----|
| 1.         | Does the facility pretreat its wastewater prior to sewer discharge?                                                                                                                              |                   | Mark | Yes               | Mark | No   |    |
| 2.         | Does the facility pretreat all of its process wastewater on its pretreatment system?                                                                                                             |                   | Mark | Yes               | Mark | No   |    |
|            | If No, briefly describe the i) other generated spent waste and untreated process wastewater on site, ii) method of disposal, and provide the iii) name of transporter and iv) disposal facility. |                   |      |                   |      |      |    |
|            |                                                                                                                                                                                                  | Untreated Waste 1 |      | Untreated Waste 2 |      |      |    |
|            | i                                                                                                                                                                                                | Enter text        |      | Enter text        |      |      |    |
|            | ii                                                                                                                                                                                               | Enter text        |      | Enter text        |      |      |    |
|            | iii                                                                                                                                                                                              | Enter text        |      | Enter text        |      |      |    |
|            | iv                                                                                                                                                                                               | Enter text        |      | Enter text        |      |      |    |
|            |                                                                                                                                                                                                  | Untreated Waste 3 |      | Untreated Waste 4 |      |      |    |
|            | i                                                                                                                                                                                                | Enter text        |      | Enter text        |      |      |    |
|            | ii                                                                                                                                                                                               | Enter text        |      | Enter text        |      |      |    |
|            | iii                                                                                                                                                                                              | Enter text        |      | Enter text        |      |      |    |
|            | iv                                                                                                                                                                                               | Enter text        |      | Enter text        |      |      |    |
| 3.         | Describe the pretreatment operation(s) performed at the facility.                                                                                                                                |                   |      |                   |      |      |    |
| Enter text |                                                                                                                                                                                                  |                   |      |                   |      |      |    |
| 4.         | Type of wastewater treatment (continuous, batch)                                                                                                                                                 |                   |      | Choose type       |      |      |    |
| 5.         | Maximum design flow of the pretreatment system.                                                                                                                                                  |                   |      | Enter text    gpd |      |      |    |
| 6.         | Are replacement parts available on site for critical components (e.g. pumps, pH probe, etc.)?                                                                                                    |                   |      | Mark              | Yes  | Mark | No |
| 7.         | Are chemicals for use in the wastewater pretreatment readily available (e.g. caustic soda, lime, etc.)?                                                                                          |                   |      | Mark              | Yes  | Mark | No |
| 8.         | Does the facility have pretreatment Operational and Maintenance manual?                                                                                                                          |                   |      | Mark              | Yes  | Mark | No |
| 9.         | Is the pretreatment system operational? If No, explain below.                                                                                                                                    |                   |      | Mark              | Yes  | Mark | No |
|            | Enter text                                                                                                                                                                                       |                   |      |                   |      |      |    |



|            |                                                                                                                                                                        |                        |            |            |      |    |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|------------|------|----|
| 10.        | Has the pretreatment system experienced any operational upset/problem since the last inspection?                                                                       |                        | Mark       | Yes        | Mark | No |
|            | If No, proceed to 11; otherwise, describe the upset.                                                                                                                   |                        |            |            |      |    |
|            | Enter text                                                                                                                                                             |                        |            |            |      |    |
|            | Did the facility notify the Authority of the said upset? If No, explain below.                                                                                         |                        | Mark       | Yes        | Mark | No |
| Enter text |                                                                                                                                                                        |                        |            |            |      |    |
| 11.        | Does the facility maintain a record of its pretreatment system?                                                                                                        |                        | Mark       | Yes        | Mark | No |
|            | If Yes, briefly describe the Operational and Maintenance record of its pretreatment system.                                                                            |                        |            |            |      |    |
|            | Enter text                                                                                                                                                             |                        |            |            |      |    |
|            | If No, explain why the facility does not need to keep any records of its waste treatment system and operation.                                                         |                        |            |            |      |    |
| Enter text |                                                                                                                                                                        |                        |            |            |      |    |
| 12.        | Does the facility's waste treatment operation(s) generate sludge?                                                                                                      |                        | Mark       | Yes        | Mark | No |
|            | If Yes, describe the i) waste characterization of the generated sludge, ii) method of disposal, and provide the iii) name of transporter and iv) disposal facility.    |                        |            |            |      |    |
|            |                                                                                                                                                                        | Sludge 1               |            | Sludge 2   |      |    |
|            | i                                                                                                                                                                      | Enter text             |            | Enter text |      |    |
|            | ii                                                                                                                                                                     | Enter text             |            | Enter text |      |    |
|            | iii                                                                                                                                                                    | Enter text             |            | Enter text |      |    |
| iv         | Enter text                                                                                                                                                             |                        | Enter text |            |      |    |
| 13.        | Describe the facility's potential to bypass its pretreatment system and remedial measures taken to prevent this occurrence.                                            |                        |            |            |      |    |
|            | Enter text                                                                                                                                                             |                        |            |            |      |    |
| 14.        | Are there full time qualified personnel in charge of maintaining and operating the wastewater pretreatment system? If Yes, give the name, title, and telephone number. |                        | Mark       | Yes        | Mark | No |
|            | Name                                                                                                                                                                   | Enter name             |            |            |      |    |
|            | Title                                                                                                                                                                  | Enter title            |            |            |      |    |
|            | Telephone No.                                                                                                                                                          | Enter telephone number |            |            |      |    |

## VII. SIGNIFICANCE TEST

|            |                                                                                                                                                                                        |                                             |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Enter text |                                                                                                                                                                                        | is a Significant Industrial User being that |
| Mark       | its process wastewater discharge is $\geq 25,000$ gpd.                                                                                                                                 |                                             |
| Mark       | its discharge is subject to the national categorical pretreatment standards.                                                                                                           |                                             |
| Mark       | its wastewater discharge requires pretreatment to comply with the specific pollutant limitations.                                                                                      |                                             |
| Mark       | its wastewater discharge has toxic pollutants in concentrations and volumes subject to regulation as determined by the Authority.                                                      |                                             |
| Mark       | it is a treatment, storage, or disposal of hazardous waste.                                                                                                                            |                                             |
| Mark       | its wastewater discharge is found to have a reasonable potential for adverse effect, either singly or in combination with other contributing industries, on the POTW operation, sludge |                                             |

|  |                                                                       |
|--|-----------------------------------------------------------------------|
|  | quality, POTW effluent quality or air emission generated by the POTW. |
|--|-----------------------------------------------------------------------|

## VIII. PERMIT and SAMPLING LOCATION

|    |                                                                                                                                                                     |                  |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 1. | Are the Wastewater Discharge Permit conditions and requirements representative of the facility's current operations? If No, explain below.                          | Mark Yes Mark No |
|    | Enter text                                                                                                                                                          |                  |
| 2. | Describe the sampling location(s) as listed on the facility's Wastewater Discharge Permit.                                                                          |                  |
|    | Enter text                                                                                                                                                          |                  |
| 3. | Does the sampling location(s) listed on the facility's Wastewater Discharge Permit an appropriate sampling location for collecting representative samples?          | Mark Yes Mark No |
| 4. | Are there any concerns raised on the representativeness of the facility's sampling location(s) as listed on its Wastewater Discharge Permit? If Yes, explain below. | Mark Yes Mark No |
|    | Enter text                                                                                                                                                          |                  |

## IX. SAMPLING COMPLIANCE

|    |                                                                                                                                 |      |                                                                 |            |
|----|---------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------------------------------------------|------------|
| 1. | <b>Self-Monitoring Report or Six Month Report (SMR) Evaluation</b>                                                              |      |                                                                 |            |
|    | SMR Period                                                                                                                      | Year | Evaluation                                                      | Date       |
|    | January-June                                                                                                                    | Year | Choose an item.                                                 | Enter date |
|    |                                                                                                                                 |      | Choose an item.                                                 | Enter date |
|    | July-December                                                                                                                   | Year | Choose an item.                                                 | Enter date |
|    |                                                                                                                                 |      | Choose an item.                                                 | Enter date |
|    | The number of analytical results submitted by the facility on its SMR for the reporting period (mark applicable box(es) below): |      |                                                                 |            |
|    | January-June                                                                                                                    | Mark | are more than the number of analysis as required by its permit. |            |
|    |                                                                                                                                 | Mark | match the number of analysis as required by its permit.         |            |
|    |                                                                                                                                 | Mark | are less than the number of analysis as required by its permit. |            |
|    | July-December                                                                                                                   | Mark | are more than the number of analysis as required by its permit. |            |
|    |                                                                                                                                 | Mark | match the number of analysis as required by its permit.         |            |
|    |                                                                                                                                 | Mark | are less than the number of analysis as required by its permit. |            |

|                      |                                                                                                                                                                       |                 |              |                     |                       |         |                         |                                    |         |                               |  |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|---------------------|-----------------------|---------|-------------------------|------------------------------------|---------|-------------------------------|--|
| 2.                   | <b>Company Sampling Analysis</b>                                                                                                                                      |                 |              |                     |                       |         |                         |                                    |         |                               |  |
|                      | Did the facility's analytical results for the last 2 reporting periods show any violations? If No, proceed to 3; otherwise, continue completing the tabulation below. |                 |              |                     |                       |         |                         |                                    |         | Mark Yes Mark No              |  |
|                      | Sample Date                                                                                                                                                           | Parameter       | Conc. (mg/L) | Permit Limit (mg/L) | Notified within 24-hr |         | 24 hr Notification Date | Submitted 30-day Compliance Report |         | 30-day Compliance Report Date |  |
| a                    | Enter date                                                                                                                                                            | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |  |
| b                    | Enter date                                                                                                                                                            | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |  |
| c                    | Enter date                                                                                                                                                            | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |  |
| d                    | Enter date                                                                                                                                                            | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |  |
| e                    | Enter date                                                                                                                                                            | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |  |
| f                    | Enter date                                                                                                                                                            | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |  |
| g                    | Enter date                                                                                                                                                            | Enter parameter | Enter conc.  | Enter limit         | Mark Yes              | Mark No | Enter date              | Mark Yes                           | Mark No | Enter date                    |  |
| Comment/Action Taken |                                                                                                                                                                       | Enter text      |              |                     |                       |         |                         |                                    |         |                               |  |

|                      |                                                                                                                                                                          |                 |              |                     |              |                                    |         |                               |                               |                  |  |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|---------------------|--------------|------------------------------------|---------|-------------------------------|-------------------------------|------------------|--|
| 3.                   | <b>GLWA Sampling Analysis</b>                                                                                                                                            |                 |              |                     |              |                                    |         |                               |                               |                  |  |
|                      | Was the facility issued a Notice of Exceedance/Violation for the last 12 months? If No, proceed to Section X; otherwise, continue completing I and II tabulations below. |                 |              |                     |              |                                    |         |                               |                               | Mark Yes Mark No |  |
|                      | Sample Date                                                                                                                                                              | Parameter       | Conc. (mg/L) | Permit Limit (mg/L) | NOE/NOV Date | Submitted 30-day Compliance Report |         | 30-day Compliance Report Date | Notice of Acknowledgment Date |                  |  |
| a                    | Enter date                                                                                                                                                               | Enter parameter | Enter conc.  | Enter limit         | Enter date   | Mark Yes                           | Mark No | Enter date                    | Enter date                    |                  |  |
| b                    | Enter date                                                                                                                                                               | Enter parameter | Enter conc.  | Enter limit         | Enter date   | Mark Yes                           | Mark No | Enter date                    | Enter date                    |                  |  |
| c                    | Enter date                                                                                                                                                               | Enter parameter | Enter conc.  | Enter limit         | Enter date   | Mark Yes                           | Mark No | Enter date                    | Enter date                    |                  |  |
| d                    | Enter date                                                                                                                                                               | Enter parameter | Enter conc.  | Enter limit         | Enter date   | Mark Yes                           | Mark No | Enter date                    | Enter date                    |                  |  |
| e                    | Enter date                                                                                                                                                               | Enter parameter | Enter conc.  | Enter limit         | Enter date   | Mark Yes                           | Mark No | Enter date                    | Enter date                    |                  |  |
| f                    | Enter date                                                                                                                                                               | Enter parameter | Enter conc.  | Enter limit         | Enter date   | Mark Yes                           | Mark No | Enter date                    | Enter date                    |                  |  |
| g                    | Enter date                                                                                                                                                               | Enter parameter | Enter conc.  | Enter limit         | Enter date   | Mark Yes                           | Mark No | Enter date                    | Enter date                    |                  |  |
| Comment/Action Taken |                                                                                                                                                                          | Enter text      |              |                     |              |                                    |         |                               |                               |                  |  |

## X. TECHNICAL REVIEW CRITERIA / CHRONIC VIOLATION

| Based on the TRC/CV evaluation conducted on following months: April and October |      |                   |                                                                                                                                            |               |   |      |      |
|---------------------------------------------------------------------------------|------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------|---|------|------|
| Month                                                                           | Year | Action Taken      |                                                                                                                                            |               |   |      |      |
| April                                                                           | Year | Mark              | The company is in compliance. No action required.                                                                                          |               |   |      |      |
|                                                                                 |      | Mark              | The company was evaluated for TRC/CV; it did not meet the significant noncompliance (SNC) criteria.                                        |               |   |      |      |
|                                                                                 |      | Mark              | The company was evaluated for TRC/CV; it met the SNC criteria and will be/was referred for further action (complete the tabulation below). |               |   |      |      |
|                                                                                 |      | SNC Referral Date | Parameter in Violation                                                                                                                     | Period        | % | TRC  | CV   |
| a                                                                               |      | Enter date        | Enter parameter                                                                                                                            | Choose period | % | Mark | Mark |
| b                                                                               |      | Enter date        | Enter parameter                                                                                                                            | Choose period | % | Mark | Mark |
| c                                                                               |      | Enter date        | Enter parameter                                                                                                                            | Choose period | % | Mark | Mark |
| d                                                                               |      | Enter date        | Enter parameter                                                                                                                            | Choose period | % | Mark | Mark |
| e                                                                               |      | Enter date        | Enter parameter                                                                                                                            | Choose period | % | Mark | Mark |
|                                                                                 |      | Comment           | Enter text                                                                                                                                 |               |   |      |      |

| Month   | Year | Action Taken      |                                                                                                                                            |               |   |      |      |
|---------|------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------|---|------|------|
| October | Year | Mark              | The company is in compliance. No action required.                                                                                          |               |   |      |      |
|         |      | Mark              | The company was evaluated for TRC/CV; it did not meet the significant noncompliance (SNC) criteria.                                        |               |   |      |      |
|         |      | Mark              | The company was evaluated for TRC/CV; it met the SNC criteria and will be/was referred for further action (complete the tabulation below). |               |   |      |      |
|         |      | SNC Referral Date | Parameter in Violation                                                                                                                     | Period        | % | TRC  | CV   |
| a       |      | Enter date        | Enter parameter                                                                                                                            | Choose period | % | Mark | Mark |
| b       |      | Enter date        | Enter parameter                                                                                                                            | Choose period | % | Mark | Mark |
| c       |      | Enter date        | Enter parameter                                                                                                                            | Choose period | % | Mark | Mark |
| d       |      | Enter date        | Enter parameter                                                                                                                            | Choose period | % | Mark | Mark |
| e       |      | Enter date        | Enter parameter                                                                                                                            | Choose period | % | Mark | Mark |
|         |      | Comment           | Enter text                                                                                                                                 |               |   |      |      |

**Technical Review Criteria (TRC)** violation occurs when 33% or more of all the measurements taken during a six month period equal or exceed the product of the daily maximum limit or the average limit multiplied by 1.4 for BOD, TSS, FOG, and 1.2 for all other pollutants except pH.

**Chronic Violation (CV)** occurs when 66% or more of all the measurements taken during a six month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter.

## XI. HOUSEKEEPING

|    |                                                                                     |      |     |      |    |      |    |
|----|-------------------------------------------------------------------------------------|------|-----|------|----|------|----|
| 1. | Is the facility well organized?                                                     | Mark | Yes | Mark | No | Mark | NA |
|    | Are all packaged and bagged chemicals properly stored in appropriate storage areas? | Mark | Yes | Mark | No | Mark | NA |

|    |                                                                                                                                  |            |     |      |    |      |    |
|----|----------------------------------------------------------------------------------------------------------------------------------|------------|-----|------|----|------|----|
|    | Are containers for chemicals, waste materials, products clearly labeled, stored in orderly fashioned and visible for inspection? | Mark       | Yes | Mark | No | Mark | NA |
|    | Has alleviation of space constraints been considered to implement good housekeeping?                                             | Mark       | Yes | Mark | No | Mark | NA |
|    | Are walkways and passageways easily accessible, safe and free of protruding objects and equipment?                               | Mark       | Yes | Mark | No | Mark | NA |
|    | Comment                                                                                                                          | Enter text |     |      |    |      |    |
| 2. | Is the facility maintained in clean fashion?                                                                                     | Mark       | Yes | Mark | No | Mark | NA |
|    | Is the process debris removed regularly?                                                                                         | Mark       | Yes | Mark | No | Mark | NA |
|    | Is there any evidence of drippings or leaks from equipment or machinery?                                                         | Mark       | Yes | Mark | No | Mark | NA |
|    | Is there evidence of fumes and/or dust in the air or floor resulting from industrial operations?                                 | Mark       | Yes | Mark | No | Mark | NA |
|    | Comment                                                                                                                          | Enter text |     |      |    |      |    |
| 3. | Have procedures been developed to maintain good housekeeping measures?                                                           | Mark       | Yes | Mark | No | Mark | NA |
|    | Are all employees aware of the importance of good housekeeping through training?                                                 | Mark       | Yes | Mark | No | Mark | NA |
|    | Are publicity posters, bulletin boards and employee publications used for good housekeeping programs?                            | Mark       | Yes | Mark | No | Mark | NA |
|    | Are there regular housekeeping inspections to check for good housekeeping problems?                                              | Mark       | Yes | Mark | No | Mark | NA |
|    | Are good housekeeping measures employed in appropriate locations?                                                                | Mark       | Yes | Mark | No | Mark | NA |
|    | Comment                                                                                                                          | Enter text |     |      |    |      |    |
| 4. | Are outside areas kept neat and clean?                                                                                           | Mark       | Yes | Mark | No | Mark | NA |
|    | Is the site free from oil and/or chemical staining, spills or debris?                                                            | Mark       | Yes | Mark | No | Mark | NA |
|    | Are loading and unloading areas free of spills and/or debris?                                                                    | Mark       | Yes | Mark | No | Mark | NA |
|    | Are unpaved outdoor areas protected from wind and water erosion?                                                                 | Mark       | Yes | Mark | No | Mark | NA |
|    | Are paved outdoor areas properly maintained and kept free of pollutants that can be transported offsite?                         | Mark       | Yes | Mark | No | Mark | NA |
|    | Comment                                                                                                                          | Enter text |     |      |    |      |    |

## XII. SLUG CONTROL/SPILL PREVENTION PLAN

|    |                                                                                                                   |                                                  |     |      |    |
|----|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----|------|----|
| 1. | Does the facility store chemicals on site?                                                                        | Mark                                             | Yes | Mark | No |
| 2. | Are there floor drains within/near the chemical storage area?                                                     | Mark                                             | Yes | Mark | No |
| 3. | Is there waste in liquid form stored on site?                                                                     | Mark                                             | Yes | Mark | No |
| 4. | Is additional chemical containment needed? If Yes, explain below.                                                 | Mark                                             | Yes | Mark | No |
|    | Enter text                                                                                                        |                                                  |     |      |    |
| 5. | At the facility's chemical storage area and/or waste storage area, an accidental spill can lead to a discharge to |                                                  |     |      |    |
|    | Mark                                                                                                              | an on-site treatment system                      |     |      |    |
|    | Mark                                                                                                              | public sanitary sewer system (e.g. floor drains) |     |      |    |

|    |                                                                                                                                                                |                                                                   |                  |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------------------|
|    | Mark                                                                                                                                                           | storm drain                                                       |                  |
|    | Mark                                                                                                                                                           | other, specify                                                    | Enter text       |
|    | Mark                                                                                                                                                           | not applicable; no possible discharge to any of the above routes. |                  |
| 6. | Did the facility have past slug discharge(s) during the last twelve (12) months? If Yes, explain below.                                                        |                                                                   | Mark Yes Mark No |
|    | Enter text                                                                                                                                                     |                                                                   |                  |
| 7. | Does the facility need a Slug Control/Spill Prevention Plan (SC/SPP)? If No, explain below.                                                                    |                                                                   | Mark Yes Mark No |
|    | Enter text                                                                                                                                                     |                                                                   |                  |
| 8. | a) Date of latest SC/SPP submitted to the Authority                                                                                                            |                                                                   | Enter date       |
|    | b) Is the SC/SPP more than two (2) years old from the date the facility submitted its latest SC/SPP? If Yes, explain below.                                    |                                                                   | Mark Yes Mark No |
|    | Enter text                                                                                                                                                     |                                                                   |                  |
|    | c) Are there any substantial changes in the facility's operation(s) that will require it to update its SC/SPP? If Yes, describe the change in operation below. |                                                                   | Mark Yes Mark No |
|    | Enter text                                                                                                                                                     |                                                                   |                  |

**Slug** means any discharge of a non-routine episodic nature including, but not limited to, an accidental spill or a non-customary batch discharge.

### XIII. SURCHARGE

|    |                                                                                                                                                                 |              |                    |                     |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------|---------------------|
| 1. | Is the facility under surcharge program? If Yes, proceed to 2; otherwise, proceed to Section XIV.                                                               |              |                    | Mark Yes Mark No    |
| 2. | Provide the date of the latest waste strength determination conducted on site. For any comments, explain below.                                                 |              |                    | Enter date          |
|    | Enter text                                                                                                                                                      |              |                    |                     |
| 3. | Does the facility have a flow meter to determine the volume of its discharge? If Yes, describe below the type of the installed flow meter.                      |              |                    | Mark Yes Mark No    |
|    | Enter text                                                                                                                                                      |              |                    |                     |
| 4. | Does the facility need to install a flow meter to determine the volume of its discharge? If Yes, explain below the reason for the need to install a flow meter. |              |                    | Mark Yes Mark No    |
|    | Enter text                                                                                                                                                      |              |                    |                     |
| 5. | Surcharged Pollutants                                                                                                                                           | Limit (mg/L) | Assigned Pollutant | Actual Conc. (mg/L) |
|    | BOD                                                                                                                                                             | 275          | Mark Yes Mark No   | Enter text          |
|    | TSS                                                                                                                                                             | 350          | Mark Yes Mark No   | Enter text          |
|    | P                                                                                                                                                               | 12           | Mark Yes Mark No   | Enter text          |
|    | FOG                                                                                                                                                             | 100          | Mark Yes Mark No   | Enter text          |
| 6. | Time of Peak Water Usage                                                                                                                                        |              |                    | Enter text          |
| 7. | Time of Peak Wastewater Discharge                                                                                                                               |              |                    | Enter text          |
| 8. | Is the facility's sampling location appropriate for collecting representative surcharge samples? If No, explain below.                                          |              |                    | Mark Yes Mark No    |

|     |                                                                                                                       |      |     |      |    |
|-----|-----------------------------------------------------------------------------------------------------------------------|------|-----|------|----|
|     | Enter text                                                                                                            |      |     |      |    |
| 9.  | Does the facility's sampling location represent the facility's overall wastewater discharge? If No, explain below.    | Mark | Yes | Mark | No |
|     | Enter text                                                                                                            |      |     |      |    |
| 10. | Does the facility have any concerns raised on the representativeness of its sampling location? If Yes, explain below. | Mark | Yes | Mark | No |
|     | Enter text                                                                                                            |      |     |      |    |
| 11. | Is there a need to conduct another waste strength determination on site? If Yes, explain below.                       | Mark | Yes | Mark | No |
|     | Enter text                                                                                                            |      |     |      |    |

#### XIV. DRAWINGS

|    |                                                                                                                  |      |     |      |    |
|----|------------------------------------------------------------------------------------------------------------------|------|-----|------|----|
| 1. | Are drawings showing the facility layout, sewer connections, sampling location(s), and flow schematic available? | Mark | Yes | Mark | No |
| 2. | Are the above drawings updated?                                                                                  | Mark | Yes | Mark | No |
| 3. | If No for 1 or 2, explain below.                                                                                 |      |     |      |    |
|    | Enter text                                                                                                       |      |     |      |    |

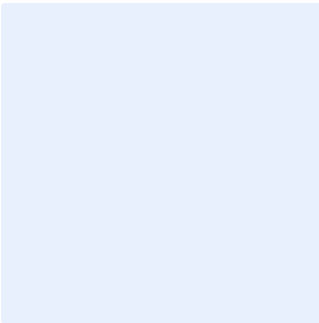
**NOTE:** These updated drawings must be incorporated with this report to assess the compliance status of the company.

#### XV. COMPLIANCE STATUS / OTHER COMMENTS

|    |                                                                 |
|----|-----------------------------------------------------------------|
| 1. | Compliance / Enforcement Status for the last twelve (12) months |
|    | Enter text                                                      |
| 2. | Additional Comments                                             |
|    | Enter text                                                      |

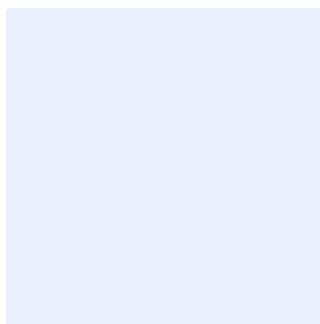
|                    |  |      |  |
|--------------------|--|------|--|
| Report Prepared by |  | Date |  |
|--------------------|--|------|--|

Enter diagram title





Enter diagram title





## Field Inspection

R E P O R T

---

**Company:** XXX

**Permit No.:** XXX

**Contact Name:** XXX

**Telephone No.:** XXX

**Insp. Date/Time:** XXX

**Subject:** XXX

**Comments:** XXX

**Conclusion:** XXX

**Reported by/Date:** XXX

**Transmitted to:** XXX

## Sample Field Monitoring Forms

DETROIT WATER AND SEWERAGE DEPARTMENT-INDUSTRIAL WASTE CONTROL  
SAMPLE COLLECTION WORK ORDER

MANUAL  
Sampling

Sample Number: 1700760-79

Permit Number:

Sample Type: Grab Sample

Sample Date: 02/01/2017

Sample Point Description: 01 - Sampling box in the pretreatment area; 6' S. of the restroom and adjacent to west wall.

Project Type: IWC Compliance Sampling

Special Instructions:

Split Taken (Y/N): NO

ATTN: Mr. Jeffrey Swanson

Facility ID = 27739

Color Coat Plating Company

355 W. Girard

Madison Heights, MI 48071

Acknowledged by: Mike Swanson  
(Print Name Of Company Representative)

No Split Given for FOG

[Signature]  
Company Representative Signature

Sampler Installed Date: \_\_\_\_\_ Time: \_\_\_\_\_ Sampler Operating Hrs. : \_\_\_\_\_

Sampler Retrieved Date: \_\_\_\_\_ Time: \_\_\_\_\_ Actual Discharging Hrs. : \_\_\_\_\_

Grab Sample 2-6-17 9am DAMS 9AM - 9:10AM

Collector Observations: cloudy

Delivery to Lab Date: 02/06/17 Time: 12:55 AM \_\_\_\_\_ PM X

[Signature] Cannon  
Print Name of IWC Collector(s)

ARUNA MANDAVA  
Print Name of Lab Custodian

[Signature] Cannon  
IWC Collector(s) Signature

[Signature]  
Lab Custodian's Signature

Sample Analysis Results and Chemist's Initials:

AVCN  
PHENOL

CN

FOG

pH 7.56

Additional analyses added in field: TEMP 18.5 °C #741050 @ 9AM 2.6.17MSP

Instructions To Lab: \_\_\_\_\_

Chemist's Comments: \_\_\_\_\_

\_\_\_\_\_  
Chemist's Signature

\_\_\_\_\_  
Date

TH

DETROIT WATER AND SEWERAGE DEPARTMENT-INDUSTRIAL WASTE CONTROL  
SAMPLE COLLECTION WORK ORDER

Sample Number: 1700763-82

Permit Number:

Sample Type: Composite Sample

Sample Date: 02/01/2017

Sample Point Description: 01 - Sampling box in the pretreatment area; 6' S. of the restroom and adjacent to west wall.

Project Type: IWC Compliance Sampling

Special Instructions:

Split Taken (Y/N): Yes

No Split Given for FOG

ATTN: Mr. Jeffrey Swanson

Facility ID = 27739

Color Coat Plating Company

355 W. Girard

Madison Heights, MI 48071

Acknowledged by: Mike Swanson  
(Print Name Of Company Representative)

[Signature]  
Company Representative Signature

Sampler Installed Date: \_\_\_\_\_ Time: \_\_\_\_\_ Sampler Operating Hrs. : \_\_\_\_\_

Sampler Retrieved Date: \_\_\_\_\_ Time: \_\_\_\_\_ Actual Discharging Hrs. : \_\_\_\_\_

Composite Sample 2-6-17 9am 1st 9am - 9:10 AM

Collector Observations: cloudy samples taken 9am, 9:02 AM, 9:05 AM, 9:10 AM

Delivery to Lab Date: 02/06/17 Time: 12:55 AM \_\_\_\_\_ PM X

[Signature] Cannon  
Print Name of IWC Collector(s)

[Signature] Cannon  
IWC Collector(s) Signature

ARUNA KAWDAVA  
Print Name of Lab Custodian

[Signature]  
Lab Custodian's Signature

Sample Analysis Results and Chemist's Initials:

|     |    |     |
|-----|----|-----|
| Ag  | As | BOD |
| Cd  | Cr | Cu  |
| Fe  | Hg | Ni  |
| P   | Pb | PCB |
| TSS | Zn |     |

Additional analyses added in field: \_\_\_\_\_

Instructions To Lab: \_\_\_\_\_

Chemist's Comments: \_\_\_\_\_

\_\_\_\_\_  
Chemist's Signature

\_\_\_\_\_  
Date

TH

DETROIT WATER AND SEWERAGE DEPARTMENT-INDUSTRIAL WASTE CONTROL  
SAMPLE COLLECTION WORK ORDER

Flow Sampling

Sample Number: 1700638-60

Permit Number:

Sample Type: Grab Sample

Sample Date: 02/07/2017

Sample Point Description: 01 - Sampling box inside the DAF Building; 12' W. of east wall, adjacent to south wall.

ATTN: Mr. Michael Drops  
Facility ID = 94075  
EnviroSolids, L.L.C.  
6011 Wyoming Ave.  
Dearborn, MI 48126

Special Instructions:

Split Taken

~~YES~~ NO

Acknowledged by:

Michael Drops  
(Print Name Of Company Representative)

*[Signature]*  
Company Representative Signature

No Split Given for FOG

Sampler Installed Date: \_\_\_\_\_ Time: \_\_\_\_\_ Sampler Operating Hrs. : \_\_\_\_\_

Sampler Retrieved Date: \_\_\_\_\_ Time: \_\_\_\_\_ Actual Discharging Hrs. : \_\_\_\_\_

Grab Sample 2-8-17- 9AM 2-hrs 3AM-9AM

Collector Observations: cloudy

Delivery to Lab Date: 2/8/17 Time: 12:45 AM (PM)

J. Swick

Print Name of IWC Collector(s)

P. JULIEN

Print Name of Lab Custodian

*[Signature]*

IWC Collector(s) Signature

*[Signature]*

Lab Custodian's Signature

Sample Analysis Results and Chemist's Initials:

AVCN

FOG

pH 6.07

Additional analyses added in field: Temp 7.4c 2-8-17- 9AM #741058

Instructions To Lab: \_\_\_\_\_

Chemist's Comments: \_\_\_\_\_

Chemist's Signature

Date



# DETROIT WATER AND SEWERAGE DEPARTMENT-INDUSTRIAL WASTE CONTROL SAMPLE COLLECTION WORK ORDER

*Flow Sampling*

Sample Number: 1700642-64

Permit Number:

Sample Type: Composite Sample

Sample Date: 02/08/2017

Sample Point Description: 01 - Sampling box inside the DAF Building; 12' W. of east wall, adjacent to south wall.

ATTN: Mr. Michael Drops  
Facility ID = 94075  
EnviroSolids, L.L.C.  
6011 Wyoming Ave.  
Dearborn, MI 48126

Special Instructions:

Split Taken ☒ YES

No Split Given for FOG

Acknowledged by: Michael Drops  
(Print Name Of Company Representative)  
Michael Drops  
Company Representative Signature

Sampler Installed Date: 2-7-17 Time: 8:30 AM Sampler Operating Hrs.: 2  
Sampler Retrieved Date: 2-8-17 Time: 9:00 AM Actual Discharging Hrs.: 3 AM - 9 AM  
Composite Sample Sampler # 0027 - 3700 - 3 FT, pulser Flowmeter set up  
Collector Observations: cloudy - meter reading 691425 - 87515  
Delivery to Lab Date: 2/8/17 Time: 12:45 AM (PM)

J. Suck  
Print Name of IWC Collector(s)

J. Suck  
IWC Collector(s) Signature

P. Jucien  
Print Name of Lab Custodian

P. Jucien  
Lab Custodian's Signature

Sample Analysis Results and Chemist's Initials:

|      |      |      |
|------|------|------|
| Ag   | As   | BEHP |
| BOD  | CARB | Cd   |
| Co   | Cr   | Cu   |
| Fe   | FLAN | Hg   |
| NDEC | Ni   | NOCT |
| P    | Pb   | PCRE |
| Sn   | TCPH | TSS  |
| Zn   |      |      |

Additional analyses added in field: \_\_\_\_\_

Instructions To Lab: \_\_\_\_\_

Chemist's Comments: \_\_\_\_\_

\_\_\_\_\_  
Chemist's Signature Date

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DETROIT WATER AND SEWERAGE DEPARTMENT-INDUSTRIAL WASTE CONTROL  
SAMPLE COLLECTION WORK ORDER

Time Sampling

File Number: 1700681-04

ATTN: Mr. David Keffer  
Facility ID = 79686  
Xcel Steel Pickling  
4343 Wyoming  
Dearborn, MI 48126

Permit Number:

Sample Type: Grab Sample

Sample Date: 02/08/2017

Sample Point Description: 01 - Rectangular sampling station in pickling building; 7' S. of south wall of tool room, 9' W. of east side of neutralizer

Special Instructions:

Split Taken (Y/N): NO

Acknowledged by:

Henry Vey  
(Print Name Of Company Representative)

No Split Given for FOG

[Signature]  
Company Representative Signature

Sampler Installed Date: \_\_\_\_\_ Time: \_\_\_\_\_ Sampler Operating Hrs. : \_\_\_\_\_

Sampler Retrieved Date: \_\_\_\_\_ Time: \_\_\_\_\_ Actual Discharging Hrs. : \_\_\_\_\_

Grab Sample 2-1-17 9am d-hrs 7am-3pm

Collector Observations: cloudy Rust tint

Delivery to Lab Date: 02/01/17 Time: 12:50 AM \_\_\_\_\_ PM X

J. Sushk

Print Name of IWC Collector(s)

[Signature]

IWC Collector(s) Signature

ARUNA MANDAVA

Print Name of Lab Custodian

[Signature]

Lab Custodian's Signature

Sample Analysis Results and Chemist's Initials:

AVCN

FOG

pH 7.95 1A

Additional analyses added in field: Temp 31.8c 2-1-17 9AM #741058

Instructions To Lab: \_\_\_\_\_

Chemist's Comments: \_\_\_\_\_

Chemist's Signature

Date



DETROIT WATER AND SEWERAGE DEPARTMENT-INDUSTRIAL WASTE CONTROL  
SAMPLE COLLECTION WORK ORDER

Time Sampling

Sample Number: 1700684-07

Permit Number:

Sample Type: Composite Sample

Sample Date: 02/08/2017

Sample Point Description: 01 - Rectangular sampling station in pickling building; 7' S. of south wall of tool room, 9' W. of east side of neutralizer

Special Instructions:

Split Taken (Y/N): NO

No Split Given for FOG

ATTN: Mr. David Keffer  
Facility ID = 79686  
Xcel Steel Pickling  
4343 Wyoming  
Dearborn, MI 48126

Acknowledged by:

(Print Name Of Company Representative)

Company Representative Signature

Sampler Installed Date: 2-1-17 Time: 9am Sampler Operating Hrs.: 7am-3pm  
Sampler Retrieved Date: 2-2-17 Time: 10:30am Actual Discharging Hrs.: 7am-3pm  
Composite Sample Sampler # 1082 GLS 3 FT, 10min  
Collector Observations: cloudy rus + tint  
Delivery to Lab Date: 2-2-17 Time: 10 AM X PM

J. Smith

Print Name of IWC Collector(s)

J. Smith

IWC Collector(s) Signature

K. Cheevers

Print Name of Lab Custodian

K. Cheevers

Lab Custodian's Signature

Sample Analysis Results and Chemist's Initials:

Ag  
Cd  
Fe  
P

As  
Cr  
Hg  
TSS

BOD  
Cu  
Ni

Additional analyses added in field:

Instructions To Lab:

Chemist's Comments:

Chemist's Signature

Date

## I.W.C PH Meter Calibration Sheet

[illegible]



I.W.C PH Meter Calibration Sheet

| Meter # <u>730727</u>                         |           | Model # _____ |           | Assigned to: <u>M. PIPPEN</u> |            |       |          |          |
|-----------------------------------------------|-----------|---------------|-----------|-------------------------------|------------|-------|----------|----------|
| Calibration for the month of: <u>FEBRUARY</u> |           |               |           | Year: <u>2017</u>             |            |       |          |          |
| Each day calibration must be initiated        |           |               |           | BEF = Before Calibrat         |            |       |          |          |
|                                               |           |               |           | AFT = Calibrat                |            |       |          |          |
| Date                                          | PH = 4.00 |               | PH = 7.00 |                               | PH = 10.00 |       | Initials | Comments |
|                                               | BEF       | AFT           | BEF       | AFT                           | BEF        | AFT   |          |          |
| 2-1-2017                                      | 368       | 4.00          | 680       | 7.00                          |            |       | m.f.     |          |
| 2-2-2017                                      |           |               | 674       | 7.00                          | 980        | 10.00 | m.f.     |          |
| 2-3-2017                                      | 372       | 4.00          | 680       | 7.01                          |            |       | m.f.     |          |
| 2-6-17                                        |           |               | 668       | 7.00                          | 962        | 10.00 | m.f.     |          |
| 2-7-17                                        | 380       | 4.00          | 684       | 7.01                          |            |       | m.f.     |          |
| 2-8-17                                        |           |               | 672       | 7.00                          | 980        | 10.00 | m.f.     |          |
| 2-9-17                                        | 386       | 4.00          | 682       | 7.00                          |            |       | m.f.     |          |
| 2-10-17                                       |           |               | 674       | 7.01                          | 970        | 10.00 | m.f.     |          |
| 2-13-17                                       | 390       | 4.01          | 670       | 7.00                          |            |       | m.f.     |          |
| 2-14-17                                       |           |               | 690       | 7.00                          | 982        | 10.00 | m.f.     |          |
| 2-15-17                                       | 374       | 4.00          | 672       | 7.01                          |            |       | m.f.     |          |
| 2-16-17                                       |           |               | 680       | 7.00                          | 964        | 10.01 | m.f.     |          |
| 2-17-17                                       | 382       | 4.01          | 692       | 7.01                          |            |       | m.f.     |          |
| 2-20-17                                       |           |               | 680       | 7.00                          | 980        | 10.00 | m.f.     |          |
| 2-21-17                                       | 360       | 4.00          | 674       | 7.00                          |            |       | m.f.     |          |
| 2-22-17                                       |           |               | 682       | 7.00                          | 972        | 10.00 | m.f.     |          |
| 2-23-17                                       | 382       | 4.01          | 670       | 7.00                          |            |       | m.f.     |          |
| 2-24-17                                       |           |               | 682       | 7.00                          | 984        | 10.00 | m.f.     |          |
| 2-27-17                                       | 374       | 4.00          | 674       | 7.01                          |            |       | m.f.     |          |
| 2-28-17                                       |           |               | 690       | 698                           | 972        | 10.00 | m.f.     |          |

## SAMPLER CLEANING RECORD

SAMPLER # \_\_\_\_\_

Reviewed BY\_\_\_\_\_

[illegible]

SAMPLER # GLS # 1243

SAMPLER # 1243

[illegible]



# DAILY EQUIPMENT CLEANING RECORD

INVESTIGATOR \_\_\_\_\_

REVIEWED BY \_\_\_\_\_ DATE \_\_\_\_\_

[illegible]

# DAILY EQUIPMENT CLEANING RECORD

INVESTIGATOR M. J. Popen

REVIEWED BY \_\_\_\_\_ DATE \_\_\_\_\_

| DATE:   | Grab container | Buckets | Mixing Paddle | Misc. (cooler, rope, water cont.) | PH Meter # | Int. |
|---------|----------------|---------|---------------|-----------------------------------|------------|------|
| 1-4-17  | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 1-5-17  | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 1-6-17  | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 1-9-17  | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 1-10-17 | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 1-11-17 | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 1-18-17 | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 1-19-17 | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 1-20-17 | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 1-24-17 | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 1-31-17 | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 2-2-17  | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 2-3-17  | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 2-6-17  | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 2-7-17  | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 2-8-17  | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 2-9-17  | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 2-10-17 | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |
| 2-13-17 | ✓              | ✓       | ✓             | ✓                                 | ✓          | inf  |

Sample Forms - Other



# Great Lakes Water Authority

## Self-Monitoring Report Section A - Evaluations and Actions

|   |                        |      |
|---|------------------------|------|
| ✓ | Self-Monitoring Report | Year |
|   | January – June         |      |
|   | July – December        |      |

|                     |   |  |                    |   |
|---------------------|---|--|--------------------|---|
| Company Name        |   |  | Permit No.         |   |
| Processed by / Date | / |  | Reviewed by / Date | / |

|          | Yes | NA   | Comments (Check (✓) the appropriate box for the required action(s))                                                                                                                                           |
|----------|-----|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1        |     |      | Permit Expiration Date                                                                                                                                                                                        |
|          |     |      | Renew company's permit (If permit expiration date is within the next 3 months.)                                                                                                                               |
| 2        |     |      | Issue <b>NOTICE of ACCEPTANCE</b> (NOA) to the company.<br>NOA is issued when SMR is timely, complete (i.e. without deficiency) and in compliance.                                                            |
|          |     |      | Issue <b>NOTICE of VIOLATION</b> (NOV) to the company.<br>NOV is issued when the company commits any violations listed in Section B and/or <b>NR-iv</b> (☞) below.                                            |
|          |     |      | Issue <b>SMR REVIEW LETTER</b> to the company (i.e. with exception of <b>NR-iv</b> (☞) below).<br>If Yes, check (✓) condition(s) below that applies to the company's SMR.                                     |
|          |     |      | I. SMR Receipt Date                                                                                                                                                                                           |
|          |     |      | SMR is submitted late (i.e. when SMR Receipt Date is after January 15 <sup>th</sup> or July 15 <sup>th</sup> )                                                                                                |
|          |     |      | II. SMR denotes noncompliance(s) (see Notification Requirements below and Section E)                                                                                                                          |
|          |     |      | <b>Notification Requirements (NR)</b>                                                                                                                                                                         |
|          |     |      | A. Notify the Authority within 24 hour of becoming aware of the self-monitoring noncompliance. (A 24-hour notification report must be in the company's main file.) and                                        |
|          |     |      | B. Submit a 30-day Compliance Report to demonstrate compliance with applicable effluent limit. (The report must be submitted within 30 days of becoming aware of the noncompliance.)                          |
|          |     |      | ✓ Check (✓) one only applicable action listed below pertaining to the company's <b>NR</b>                                                                                                                     |
|          |     | i    | If the company has both reports A and B; then, issue Notice of Acknowledgment (NOAck) to the company.                                                                                                         |
|          |     | ii   | If the company has report A and still in the process of submitting report B; then, evaluate B upon receipt. If it complies, issue NOAck accordingly. If not, refer the company for Significant Noncompliance. |
|          |     | iii  | If the company has report B but not report A; then, issue Notice of Noncompliance to the company.                                                                                                             |
|          |     | ☞ iv | If the company does not have both reports A and B; then, issue/mark NOV above (i.e. instead of issuing SMR Review Letter (☞)). Refer also the company for Significant Noncompliance. (See Section B 9 also.)  |
|          |     | v    | If the company has report A but not report B; then, refer the company for Significant Noncompliance.                                                                                                          |
| 3        |     |      | Conduct a follow-up inspection on missing, inconsistent and/or discrepant information in company's SMR (see Section C).                                                                                       |
| 4        |     |      | Refer the company for enforcement action due to patterns of noncompliance on submitted SMR (See Section E). This may be in combination with the already existing exceedance(s) issued to the company.         |
| 5        | #   |      | Specify the number of sampling location(s) as specified in the company's discharge permit. For company with multiple sampling locations, ensure to evaluate all sampling locations (see Section D).           |
| Comments |     |      |                                                                                                                                                                                                               |
|          |     |      |                                                                                                                                                                                                               |
|          |     |      |                                                                                                                                                                                                               |

# Great Lakes Water Authority

## Self-Monitoring Report Section B – Main Requirements

|   |                        |      |
|---|------------------------|------|
| ✓ | Self-Monitoring Report | Year |
|   | January – June         |      |
|   | July – December        |      |

|              |  |            |  |
|--------------|--|------------|--|
| Company Name |  | Permit No. |  |
|--------------|--|------------|--|

Copy and attach only the applicable page(s) with violation(s) to the issued Notice of Violation.

|   | Yes                   | No | Comments (Check (✓) the appropriate box that applies to the company's SMR)                                                             |                                                                          |                                 |
|---|-----------------------|----|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------|
| 1 |                       |    | Specified/conducted proper Sampling Method (If No, check (✓) the affected parameter below)                                             |                                                                          |                                 |
|   |                       | ✓  | Parameters (Grab Sampling)                                                                                                             | ✓                                                                        | Parameters (Composite Sampling) |
|   |                       |    | pH (Alkalinity/Acidity)                                                                                                                |                                                                          | Biochemical Oxygen Demand       |
|   |                       |    | Fats, Oil or Grease                                                                                                                    |                                                                          | Phosphorus                      |
|   |                       |    | Total Cyanide                                                                                                                          |                                                                          | Total Suspended Solids          |
|   |                       |    | Amenable Cyanide                                                                                                                       |                                                                          | PCB                             |
|   |                       |    | Available Cyanide                                                                                                                      |                                                                          | Metals                          |
|   |                       |    | Total Phenolic Compounds                                                                                                               |                                                                          | Individual Phenolic Compounds   |
|   |                       |    | TTO volatile organics                                                                                                                  |                                                                          | TTO non-volatile organics       |
| 2 |                       |    | Specified/conducted proper Composite Sampling Method (CSM) as specified in company's permit (If No, (✓) check the affected CSM below.) |                                                                          |                                 |
|   |                       |    | flow-proportional CSM                                                                                                                  | time-proportional CSM                                                    |                                 |
| 3 |                       |    | Identified/analyzed samples within the Maximum Holding Time (If No, check (✓) the affected parameter below)                            |                                                                          |                                 |
|   |                       | ✓  | Parameter                                                                                                                              | Maximum Holding Time                                                     |                                 |
|   |                       |    | pH (Alkalinity/Acidity)                                                                                                                | Immediately (i.e. within 15 min.; compare sampling time & analysis time) |                                 |
|   |                       |    | Biochemical Oxygen Demand                                                                                                              | 48 hours (for planting) and 5 days (analysis time after planting)        |                                 |
|   |                       |    | Total Suspended Solids                                                                                                                 | 7 days                                                                   |                                 |
|   |                       |    | Individual Phenolic Compounds                                                                                                          | 7 days (until extraction) and 40 days (after extraction)                 |                                 |
|   |                       |    | TTO non-volatile organics                                                                                                              |                                                                          |                                 |
|   |                       |    | PCB                                                                                                                                    | 1 year (until extraction) and 1 year (after extraction)                  |                                 |
|   |                       |    | Cyanide                                                                                                                                | 14 days                                                                  |                                 |
|   | TTO volatile organics |    |                                                                                                                                        |                                                                          |                                 |

|          |  |
|----------|--|
| Comments |  |
|          |  |
|          |  |

continued next page

# Great Lakes Water Authority

## Self-Monitoring Report Section B – Main Requirements

|   |                        |      |
|---|------------------------|------|
| ✓ | Self-Monitoring Report | Year |
|   | January – June         |      |
|   | July – December        |      |

|              |  |            |  |
|--------------|--|------------|--|
| Company Name |  | Permit No. |  |
|--------------|--|------------|--|

Copy and attach only the applicable page(s) with violation(s) to the issued Notice of Violation.

continuation of Section B

|    | Yes | No | Comments (Check (✓) the appropriate box that applies to the company's SMR)                                                                                                                                                                                                   |                                                                                                                                                                  |                                 |     |  |    |
|----|-----|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----|--|----|
| 3  |     |    | Identified/analyzed samples within the Maximum Holding Time (If No, check (✓) the affected parameter below)                                                                                                                                                                  |                                                                                                                                                                  |                                 |     |  |    |
|    |     |    | ✓                                                                                                                                                                                                                                                                            | Parameter                                                                                                                                                        | Maximum Holding Time            |     |  |    |
|    |     |    |                                                                                                                                                                                                                                                                              | Fats, Oil or Grease                                                                                                                                              | 28 days                         |     |  |    |
|    |     |    |                                                                                                                                                                                                                                                                              | Mercury                                                                                                                                                          |                                 |     |  |    |
|    |     |    |                                                                                                                                                                                                                                                                              | Phosphorus                                                                                                                                                       |                                 |     |  |    |
|    |     |    |                                                                                                                                                                                                                                                                              | Total Phenolic Compounds                                                                                                                                         |                                 |     |  |    |
|    |     |    | Metals                                                                                                                                                                                                                                                                       | 6 months                                                                                                                                                         |                                 |     |  |    |
| 4  |     |    | Identified/utilized proper Analytical Methods (If No, specify below the affected parameter and the improper analytical method used. Note: If the company provides supporting MDEQ documentation approving the alternative method; then, it is considered acceptable method.) |                                                                                                                                                                  |                                 |     |  |    |
|    |     |    | Parameter                                                                                                                                                                                                                                                                    |                                                                                                                                                                  | Improper Analytical Method Used |     |  |    |
|    |     |    |                                                                                                                                                                                                                                                                              |                                                                                                                                                                  |                                 |     |  |    |
|    |     |    |                                                                                                                                                                                                                                                                              |                                                                                                                                                                  |                                 |     |  |    |
|    |     |    |                                                                                                                                                                                                                                                                              |                                                                                                                                                                  |                                 |     |  |    |
| 5A |     |    | i                                                                                                                                                                                                                                                                            | Analyzed PCB utilizing a quantification level $\leq 0.2\mu\text{g/L}$ . (If Yes proceed to iv. If No, proceed to ii.)                                            |                                 | Yes |  | No |
|    |     |    | ii                                                                                                                                                                                                                                                                           | Provided demonstration on sample matrix interference (DSMI). (If Yes, denote the date of DSMI and proceed to iv. If No, proceed to iii.)                         |                                 | Yes |  | No |
|    |     |    |                                                                                                                                                                                                                                                                              | Date of DSMI                                                                                                                                                     |                                 |     |  |    |
|    |     |    | iii                                                                                                                                                                                                                                                                          | Submitted BMP in accordance with Detroit Ordinance 08-05, 56-3-66.1(d). (If Yes, provide the date of the submitted BMP and proceed to iv. If No, proceed to iv.) |                                 | Yes |  | No |
|    |     |    |                                                                                                                                                                                                                                                                              | Date of BMP                                                                                                                                                      |                                 |     |  |    |
|    |     |    | iv                                                                                                                                                                                                                                                                           | Complied with the requirement(s) for analyzing PCB                                                                                                               |                                 |     |  |    |

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| Comments |  |
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continued next page

# Great Lakes Water Authority

## Self-Monitoring Report Section B – Main Requirements

|   |                        |      |
|---|------------------------|------|
| ✓ | Self-Monitoring Report | Year |
|   | January – June         |      |
|   | July – December        |      |

|              |  |            |  |
|--------------|--|------------|--|
| Company Name |  | Permit No. |  |
|--------------|--|------------|--|

Copy and attach only the applicable page(s) with violation(s) to the issued Notice of Violation.

continuation of Section B

|    | Yes | No | Comments (Check (✓) the appropriate box that applies to the company's SMR)                                                                                                                                                                                                                                                        |                                                                                                                                                                  |                      |                     |  |    |
|----|-----|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|--|----|
| 5B |     |    | i                                                                                                                                                                                                                                                                                                                                 | Analyzed Mercury utilizing a quantification level $\leq 0.2\mu\text{g/L}$ . (If Yes proceed to iv. If No, proceed to ii.)                                        |                      | Yes                 |  | No |
|    |     |    | ii                                                                                                                                                                                                                                                                                                                                | Provided demonstration on sample matrix interference (DSMI). (If Yes, denote the date of DSMI and proceed to iv. If No, proceed to iii.)                         |                      | Yes                 |  | No |
|    |     |    |                                                                                                                                                                                                                                                                                                                                   | Date of DSMI                                                                                                                                                     |                      |                     |  |    |
|    |     |    | iii                                                                                                                                                                                                                                                                                                                               | Submitted BMP in accordance with Detroit Ordinance 08-05, 56-3-66.1(d). (If Yes, provide the date of the submitted BMP and proceed to iv. If No, proceed to iv.) |                      | Yes                 |  | No |
|    |     |    |                                                                                                                                                                                                                                                                                                                                   | Date of BMP                                                                                                                                                      |                      |                     |  |    |
|    |     |    | iv                                                                                                                                                                                                                                                                                                                                | Complied with the requirement(s) for analyzing Mercury                                                                                                           |                      |                     |  |    |
| 6  |     |    | Indicated the Regulated and/or Non-Regulated Process Flow                                                                                                                                                                                                                                                                         |                                                                                                                                                                  |                      |                     |  |    |
| 7  |     |    | Indicated the Non-Regulated Cooling and/or Sanitary Flow                                                                                                                                                                                                                                                                          |                                                                                                                                                                  |                      |                     |  |    |
| 8  |     |    | Has sampled and analyzed the required number of samples/analyses per sampling location(s) as specified in the company's permit (Identify below the affected parameter that is analyzed below the required self-monitoring frequency. See also Section D)                                                                          |                                                                                                                                                                  |                      |                     |  |    |
|    |     |    | Parameter                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                  | # Analyses Submitted | # Analyses Required |  |    |
|    |     |    |                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                  |                      |                     |  |    |
|    |     |    |                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                  |                      |                     |  |    |
| 9  |     |    | Indicated that Pretreatment Standards are being met                                                                                                                                                                                                                                                                               |                                                                                                                                                                  |                      |                     |  |    |
| 10 |     |    | Are Pretreatment Standards being met? (If SIU has self-monitoring exceedance and complied with both: A) 24-hour call notification and B) 30-day Compliance Report, then, check "Yes". If not, check "No". Identify below the affected parameter(s) that did not have the corresponding A and B requirements. See also Section E.) |                                                                                                                                                                  |                      |                     |  |    |
|    |     |    | Parameter                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                  | Sample Date          |                     |  |    |
|    |     |    |                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                  |                      |                     |  |    |
|    |     |    |                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                  |                      |                     |  |    |
| 11 |     |    | Has submitted Periodic Certification Statement (due on December 31 <sup>st</sup> ) <b>CWT</b>                                                                                                                                                                                                                                     |                                                                                                                                                                  |                      |                     |  |    |
| 12 |     |    | Has submitted one of the documents below (Check (✓) the document submitted by the company.)                                                                                                                                                                                                                                       |                                                                                                                                                                  |                      |                     |  |    |
|    |     |    | Total Toxic Organic (TTO) Analysis (to be submitted once per year, evaluate Section D - TTO) <b>MetalFinishing/Electroplating</b>                                                                                                                                                                                                 |                                                                                                                                                                  |                      |                     |  |    |
|    |     |    | Toxic Organic Management Plan (TOMP) Certification Statement (to be submitted every reporting period)                                                                                                                                                                                                                             |                                                                                                                                                                  |                      |                     |  |    |

continuation of Section B

|    |  |  |                                                                                                       |
|----|--|--|-------------------------------------------------------------------------------------------------------|
| 13 |  |  | Submitted Monthly Discharge Log as required by the company's Wastewater Discharge Permit <b>OCPSF</b> |
|    |  |  | January                                                                                               |
|    |  |  | February                                                                                              |
|    |  |  | March                                                                                                 |
|    |  |  | April                                                                                                 |
|    |  |  | May                                                                                                   |
|    |  |  | June                                                                                                  |
|    |  |  | July                                                                                                  |
|    |  |  | August                                                                                                |
|    |  |  | September                                                                                             |
|    |  |  | October                                                                                               |
|    |  |  | November                                                                                              |
|    |  |  | December                                                                                              |
| 14 |  |  | Signed and dated by the company's Authorized Representative                                           |

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| Comments |  |
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**Great Lakes Water Authority**Self-Monitoring Report  
Section C – Other Requirements

|   |                        |      |
|---|------------------------|------|
| ✓ | Self-Monitoring Report | Year |
|   | January – June         |      |
|   | July – December        |      |

|              |  |            |  |
|--------------|--|------------|--|
| Company Name |  | Permit No. |  |
|--------------|--|------------|--|

|   | Yes | No | Comments (Check (✓) the appropriate box that applies to the company's SMR) |
|---|-----|----|----------------------------------------------------------------------------|
| 1 |     |    | Indicated the Reporting Period in the SMR                                  |
| 2 |     |    | Indicated the Permit Number in the SMR                                     |
| 3 |     |    | Identified the Sampling Location(s) (SL) in the SMR                        |
| 4 |     |    | SL description(s) is consistent with the SL description(s) in the Permit   |
| 5 |     |    | Provided the Time and Date of Sampling Events                              |
| 6 |     |    | Identified the Person(s) who did the Actual Sampling                       |
| 7 |     |    | Identified the Person(s) who did the Actual Analysis                       |

|   | Discrepancy          |                        | Comparison of wastewater flow information between the 2 documents depicts (Check (✓) the appropriate box pertaining to the discrepancy) |
|---|----------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
|   | ≤10%<br>(acceptable) | >10%<br>(unacceptable) |                                                                                                                                         |
| 8 |                      |                        | <ul style="list-style-type: none"><li>submitted SMR</li><li>recent CIR</li></ul>                                                        |
| 9 |                      |                        | <ul style="list-style-type: none"><li>submitted SMR</li><li>current discharge permit</li></ul>                                          |

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| Comments |  |
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**Great Lakes Water Authority**  
Self-Monitoring Report  
Section D **CWT** – SM Frequency for  
Categorical Parameters

|   |                        |      |
|---|------------------------|------|
| ✓ | Self-Monitoring Report | Year |
|   | January – June         |      |
|   | July – December        |      |

|              |  |            |  |
|--------------|--|------------|--|
| Company Name |  | Permit No. |  |
|--------------|--|------------|--|

Use the tabulation below to evaluate the company's compliance on self-monitoring frequency for its **categorical parameters only** based on its submitted Monthly Operational Logs or equivalent (see also Section B 8). **CWT**

| Month |           |            |         |      |           |            |         |      |           |            |         |      |           |            |         |      |           |            |         |
|-------|-----------|------------|---------|------|-----------|------------|---------|------|-----------|------------|---------|------|-----------|------------|---------|------|-----------|------------|---------|
|       |           |            |         |      |           |            |         |      |           |            |         |      |           |            |         |      |           |            |         |
| Days  | Frequency | Discharged | Sampled | Days | Frequency | Discharged | Sampled | Days | Frequency | Discharged | Sampled | Days | Frequency | Discharged | Sampled | Days | Frequency | Discharged | Sampled |
| 1     |           |            |         | 1    |           |            |         | 1    |           |            |         | 1    |           |            |         | 1    |           |            |         |
| 2     |           |            |         | 2    |           |            |         | 2    |           |            |         | 2    |           |            |         | 2    |           |            |         |
| 3     |           |            |         | 3    |           |            |         | 3    |           |            |         | 3    |           |            |         | 3    |           |            |         |
| 4     |           |            |         | 4    |           |            |         | 4    |           |            |         | 4    |           |            |         | 4    |           |            |         |
| 5     |           |            |         | 5    |           |            |         | 5    |           |            |         | 5    |           |            |         | 5    |           |            |         |
| 6     |           |            |         | 6    |           |            |         | 6    |           |            |         | 6    |           |            |         | 6    |           |            |         |
| 7     |           |            |         | 7    |           |            |         | 7    |           |            |         | 7    |           |            |         | 7    |           |            |         |
| 8     |           |            |         | 8    |           |            |         | 8    |           |            |         | 8    |           |            |         | 8    |           |            |         |
| 9     |           |            |         | 9    |           |            |         | 9    |           |            |         | 9    |           |            |         | 9    |           |            |         |
| 10    |           |            |         | 10   |           |            |         | 10   |           |            |         | 10   |           |            |         | 10   |           |            |         |
| 11    |           |            |         | 11   |           |            |         | 11   |           |            |         | 11   |           |            |         | 11   |           |            |         |
| 12    |           |            |         | 12   |           |            |         | 12   |           |            |         | 12   |           |            |         | 12   |           |            |         |
| 13    |           |            |         | 13   |           |            |         | 13   |           |            |         | 13   |           |            |         | 13   |           |            |         |
| 14    |           |            |         | 14   |           |            |         | 14   |           |            |         | 14   |           |            |         | 14   |           |            |         |
| 15    |           |            |         | 15   |           |            |         | 15   |           |            |         | 15   |           |            |         | 15   |           |            |         |
| 16    |           |            |         | 16   |           |            |         | 16   |           |            |         | 16   |           |            |         | 16   |           |            |         |
| 17    |           |            |         | 17   |           |            |         | 17   |           |            |         | 17   |           |            |         | 17   |           |            |         |
| 18    |           |            |         | 18   |           |            |         | 18   |           |            |         | 18   |           |            |         | 18   |           |            |         |
| 19    |           |            |         | 19   |           |            |         | 19   |           |            |         | 19   |           |            |         | 19   |           |            |         |
| 20    |           |            |         | 20   |           |            |         | 20   |           |            |         | 20   |           |            |         | 20   |           |            |         |
| 21    |           |            |         | 21   |           |            |         | 21   |           |            |         | 21   |           |            |         | 21   |           |            |         |
| 22    |           |            |         | 22   |           |            |         | 22   |           |            |         | 22   |           |            |         | 22   |           |            |         |
| 23    |           |            |         | 23   |           |            |         | 23   |           |            |         | 23   |           |            |         | 23   |           |            |         |
| 24    |           |            |         | 24   |           |            |         | 24   |           |            |         | 24   |           |            |         | 24   |           |            |         |
| 25    |           |            |         | 25   |           |            |         | 25   |           |            |         | 25   |           |            |         | 25   |           |            |         |
| 26    |           |            |         | 26   |           |            |         | 26   |           |            |         | 26   |           |            |         | 26   |           |            |         |
| 27    |           |            |         | 27   |           |            |         | 27   |           |            |         | 27   |           |            |         | 27   |           |            |         |
| 28    |           |            |         | 28   |           |            |         | 28   |           |            |         | 28   |           |            |         | 28   |           |            |         |
| 29    |           |            |         | 29   |           |            |         | 29   |           |            |         | 29   |           |            |         | 29   |           |            |         |
| 30    |           |            |         | 30   |           |            |         | 30   |           |            |         | 30   |           |            |         | 30   |           |            |         |
| 31    |           |            |         | 31   |           |            |         | 31   |           |            |         | 31   |           |            |         | 31   |           |            |         |

# Great Lakes Water Authority

## Self-Monitoring Report Section D – Data Evaluation

|   |                        |      |
|---|------------------------|------|
| ✓ | Self-Monitoring Report | Year |
|   | January – June         |      |
|   | July – December        |      |

|              |  |            |  |
|--------------|--|------------|--|
| Company Name |  | Permit No. |  |
|--------------|--|------------|--|

This section summarizes the actual number of samples/analysis submitted by the company vs. the required number of samples/analysis as per the company's permit (see also Section B, 8).

|                   |    |
|-------------------|----|
| Sampling Location | of |
|-------------------|----|

| LOCAL and CATEGORICAL PARAMETERS                          |                              |                      |                        |               |     |     |                                                           |                              |                      |                        |               |     |     |
|-----------------------------------------------------------|------------------------------|----------------------|------------------------|---------------|-----|-----|-----------------------------------------------------------|------------------------------|----------------------|------------------------|---------------|-----|-----|
| Parameter<br>(check only if not required to be monitored) |                              | # Data               |                        | Data Analysis |     |     | Parameter<br>(check only if not required to be monitored) |                              | # Data               |                        | Data Analysis |     |     |
|                                                           |                              | Submitted in SMR (A) | Required in permit (B) | A=B           | A>B | A<B |                                                           |                              | Submitted in SMR (A) | Required in permit (B) | A=B           | A>B | A<B |
| ✓                                                         |                              |                      |                        |               |     |     | ✓                                                         |                              |                      |                        |               |     |     |
|                                                           | pH (Acidity/Alkalinity)      |                      |                        |               |     |     |                                                           | Total PCB                    |                      |                        |               |     |     |
|                                                           | Ammonia (as N)               |                      |                        |               |     |     |                                                           | Total Phenolic Compounds     |                      |                        |               |     |     |
|                                                           | Antimony                     |                      |                        |               |     |     |                                                           | 2-Chlorophenol               |                      |                        |               |     |     |
|                                                           | Arsenic                      |                      |                        |               |     |     |                                                           | 4-Chlorophenol               |                      |                        |               |     |     |
|                                                           | Cadmium                      |                      |                        |               |     |     |                                                           | 4-Chloro-3-methylphenol      |                      |                        |               |     |     |
|                                                           | Chromium                     |                      |                        |               |     |     |                                                           | 2,4-Dichlorophenol           |                      |                        |               |     |     |
|                                                           | Cobalt                       |                      |                        |               |     |     |                                                           | 2,4-Dinitrophenol            |                      |                        |               |     |     |
|                                                           | Copper                       |                      |                        |               |     |     |                                                           | 4-Nitrophenol                |                      |                        |               |     |     |
|                                                           | Cyanide (Available)          |                      |                        |               |     |     |                                                           | Phenol Alcohol               |                      |                        |               |     |     |
|                                                           | Cyanide (Total)              |                      |                        |               |     |     |                                                           | 2,4,6-Trichlorophenol        |                      |                        |               |     |     |
|                                                           | Iron                         |                      |                        |               |     |     |                                                           | Bis(2-Ethylhexyl) Phthalate  |                      |                        |               |     |     |
|                                                           | Lead                         |                      |                        |               |     |     |                                                           | Carbazole                    |                      |                        |               |     |     |
|                                                           | Mercury                      |                      |                        |               |     |     |                                                           | Fluoranthene                 |                      |                        |               |     |     |
|                                                           | Nickel                       |                      |                        |               |     |     |                                                           | Naphthalene                  |                      |                        |               |     |     |
|                                                           | Non-Polar Material (SGT-HEM) |                      |                        |               |     |     |                                                           | n-Decane                     |                      |                        |               |     |     |
|                                                           | Silver                       |                      |                        |               |     |     |                                                           | n-Octadecane                 |                      |                        |               |     |     |
|                                                           | Tin                          |                      |                        |               |     |     |                                                           | o-Cresol or (2-Methylphenol) |                      |                        |               |     |     |
|                                                           | Titanium                     |                      |                        |               |     |     |                                                           | p-Cresol or (4-Methylphenol) |                      |                        |               |     |     |
|                                                           | Vanadium                     |                      |                        |               |     |     |                                                           | Acetone                      |                      |                        |               |     |     |
|                                                           | Zinc                         |                      |                        |               |     |     |                                                           | Ethyl Acetate                |                      |                        |               |     |     |
|                                                           | Biochemical Oxygen Demand    |                      |                        |               |     |     |                                                           | Isopropyl Acetate            |                      |                        |               |     |     |
|                                                           | Fats, Oil or Grease          |                      |                        |               |     |     |                                                           | Methylene Chloride           |                      |                        |               |     |     |
|                                                           | Phosphorus                   |                      |                        |               |     |     |                                                           | n-Amyl Acetate               |                      |                        |               |     |     |
|                                                           | Total Suspended Solids       |                      |                        |               |     |     |                                                           | Total Toxic Organics         | See next page        |                        |               |     |     |



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| Comments |  |
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|                   |    |            |
|-------------------|----|------------|
| Sampling Location | of | Permit No. |
|-------------------|----|------------|

| TOTAL TOXIC ORGANICS PARAMETERS                       |                      |                        |               |     |     |                                                |                      |                        |               |     |     |
|-------------------------------------------------------|----------------------|------------------------|---------------|-----|-----|------------------------------------------------|----------------------|------------------------|---------------|-----|-----|
| Parameter                                             | # Data               |                        | Data Analysis |     |     | Parameter                                      | # Data               |                        | Data Analysis |     |     |
|                                                       | Submitted in SMR (A) | Required in permit (B) | A=B           | A>B | A<B |                                                | Submitted in SMR (A) | Required in permit (B) | A=B           | A>B | A<B |
| Purgeable Compounds                                   |                      |                        |               |     |     | Tetrachloroethylene (Tetrachloroethene)        |                      |                        |               |     |     |
| 1,1,1-Trichloroethane                                 |                      |                        |               |     |     | Toluene                                        |                      |                        |               |     |     |
| 1,1,2,2-Tetrachloroethane                             |                      |                        |               |     |     | Trichloroethylene (Trichloroethene)            |                      |                        |               |     |     |
| 1,1,2-Trichloroethane                                 |                      |                        |               |     |     | Vinyl Chloride (Chloroethylene)                |                      |                        |               |     |     |
| 1,1-Dichloroethane                                    |                      |                        |               |     |     | Extractable Compounds                          |                      |                        |               |     |     |
| 1,1-Dichloroethylene                                  |                      |                        |               |     |     | 1,2,4-Trichlorobenzene                         |                      |                        |               |     |     |
| 1,2-Dichlorobenzene                                   |                      |                        |               |     |     | 1,2-Diphenylhydrazine                          |                      |                        |               |     |     |
| 1,2-Dichloroethane                                    |                      |                        |               |     |     | 2,4,6-Trichlorophenol                          |                      |                        |               |     |     |
| 1,2-Dichloropropane                                   |                      |                        |               |     |     | 2,4-Dichlorophenol                             |                      |                        |               |     |     |
| 1,2-Trans-Dichloroethylene (Trans-1,2-Dichloroethene) |                      |                        |               |     |     | 2,4-Dimethylphenol                             |                      |                        |               |     |     |
| 1,3-Dichlorobenzene                                   |                      |                        |               |     |     | 2,4-Dinitrophenol                              |                      |                        |               |     |     |
| 1,3-Dichloropropylene (1,3-Dichloropropene)           |                      |                        |               |     |     | 2,4-Dinitrotoluene                             |                      |                        |               |     |     |
| 1,4-Dichlorobenzene                                   |                      |                        |               |     |     | 2,6-Dinitrotoluene                             |                      |                        |               |     |     |
| 2-Chloroethylvinyl Ether                              |                      |                        |               |     |     | 2-Chloronapthalene                             |                      |                        |               |     |     |
| Acrolein                                              |                      |                        |               |     |     | 2-Chlorophenol                                 |                      |                        |               |     |     |
| Acrylonitrile                                         |                      |                        |               |     |     | 2-Nitrophenol                                  |                      |                        |               |     |     |
| Benzene                                               |                      |                        |               |     |     | 3,3-Dichlorobenzidine                          |                      |                        |               |     |     |
| Bromoform (Tribromomethane)                           |                      |                        |               |     |     | 4,6-Dinitro-O-Cresol                           |                      |                        |               |     |     |
| Carbon Tetrachloride (Tetrachloromethane)             |                      |                        |               |     |     | 4-Bromophenyl Phenyl Ether                     |                      |                        |               |     |     |
| Chlorobenzene                                         |                      |                        |               |     |     | 4-Chlorophenyl Phenyl Ether                    |                      |                        |               |     |     |
| Chlorodibromomethane (Dibromochloromethane)           |                      |                        |               |     |     | 4-Nitrophenol                                  |                      |                        |               |     |     |
| Chloroethane                                          |                      |                        |               |     |     | Acenaphthene                                   |                      |                        |               |     |     |
| Chloroform (Trichloromethane)                         |                      |                        |               |     |     | Acenaphthylene                                 |                      |                        |               |     |     |
| Dichlorobromomethane (Bromodichloromethane)           |                      |                        |               |     |     | Anthracene                                     |                      |                        |               |     |     |
| Ethylbenzene                                          |                      |                        |               |     |     | Benzidine                                      |                      |                        |               |     |     |
| Methyl Bromide (Bromomethane)                         |                      |                        |               |     |     | Benzo (a) Anthracene (1,2-Benzanthracene)      |                      |                        |               |     |     |
| Methyl Chloride (Chloromethane)                       |                      |                        |               |     |     | Benzo (a) Pyrene (3,4-Benzopyrene)             |                      |                        |               |     |     |
| Methylene Chloride (Dichloromethane)                  |                      |                        |               |     |     | Benzo (b) Fluoranthene (3,4-Benzofluoranthene) |                      |                        |               |     |     |

continued next page

| TOTAL TOXIC ORGANICS PARAMETERS                     |                      |                        |               |     |     |                                                |                      |                        |               |     |     |
|-----------------------------------------------------|----------------------|------------------------|---------------|-----|-----|------------------------------------------------|----------------------|------------------------|---------------|-----|-----|
| Parameter                                           | # Data               |                        | Data Analysis |     |     | Parameter                                      | # Data               |                        | Data Analysis |     |     |
|                                                     | Submitted in SMR (A) | Required in permit (B) | A=B           | A>B | A<B |                                                | Submitted in SMR (A) | Required in permit (B) | A=B           | A>B | A<B |
| Extractable Compounds                               |                      |                        |               |     |     | Pyrene                                         |                      |                        |               |     |     |
| Benzo (ghi) Perylene (1,12-Benzoperylene)           |                      |                        |               |     |     | Pesticides & PCB                               |                      |                        |               |     |     |
| Benzo (k) Fluoranthene (11,12-Benzofluoranthene)    |                      |                        |               |     |     | 2,3,7,8-Tetrachlorodibenzo-p-Dioxin            |                      |                        |               |     |     |
| Bis (2-Chloroethoxy) Methane                        |                      |                        |               |     |     | 4,4-DDD (p,p-TDE)                              |                      |                        |               |     |     |
| Bis (2-Chloroethyl) Ether                           |                      |                        |               |     |     | 4,4-DDE (p,p-DDX)                              |                      |                        |               |     |     |
| Bis (2-Chloroisopropyl) Ether                       |                      |                        |               |     |     | 4,4-DDT                                        |                      |                        |               |     |     |
| Bis (2-Ethylhexyl) Phthalate                        |                      |                        |               |     |     | Aldrin                                         |                      |                        |               |     |     |
| Butylbenzyl Phthalate (Benzyl butyl phthalate)      |                      |                        |               |     |     | Alpha-BHC                                      |                      |                        |               |     |     |
| Chrysene                                            |                      |                        |               |     |     | Alpha-Endosulfan (Endosulfan I)                |                      |                        |               |     |     |
| Dibenzo (a,h) Anthracene (1,2,5,6-Dibenzanthracene) |                      |                        |               |     |     | Beta-BHC                                       |                      |                        |               |     |     |
| Diethyl Phthalate                                   |                      |                        |               |     |     | Beta-Endosulfan (Endosulfan II)                |                      |                        |               |     |     |
| Dimethyl Phthalate                                  |                      |                        |               |     |     | Chlordane                                      |                      |                        |               |     |     |
| Di-N-Butyl Phthalate                                |                      |                        |               |     |     | Delta-BHC                                      |                      |                        |               |     |     |
| Di-N-Octyl Phthalate                                |                      |                        |               |     |     | Dieldrin                                       |                      |                        |               |     |     |
| Fluoranthene                                        |                      |                        |               |     |     | Endosulfan Sulfate                             |                      |                        |               |     |     |
| Hexachlorobenzene                                   |                      |                        |               |     |     | Endrin                                         |                      |                        |               |     |     |
| Hexachlorobutadiene                                 |                      |                        |               |     |     | Endrin Aldehyde                                |                      |                        |               |     |     |
| Hexachlorocyclopentadiene                           |                      |                        |               |     |     | Fluorene                                       |                      |                        |               |     |     |
| Hexachloroethane                                    |                      |                        |               |     |     | Gamma-BHC                                      |                      |                        |               |     |     |
| Indeno (1,2,3-cd) Pyrene (2,3-o-Phenylene Pyrene)   |                      |                        |               |     |     | Heptachlor                                     |                      |                        |               |     |     |
| Isophorone                                          |                      |                        |               |     |     | Heptachlor Epoxide (BHC-Hexachlorocyclohexane) |                      |                        |               |     |     |
| Naphthalene                                         |                      |                        |               |     |     | Toxaphene                                      |                      |                        |               |     |     |
| Nitrobenzene                                        |                      |                        |               |     |     | PCB-1016 (Arochlor 1016)                       |                      |                        |               |     |     |
| N-Nitrosodimethylamine                              |                      |                        |               |     |     | PCB-1221 (Arochlor 1221)                       |                      |                        |               |     |     |
| N-Nitrosodi-N-Propylamine                           |                      |                        |               |     |     | PCB-1232 (Arochlor 1232)                       |                      |                        |               |     |     |
| N-Nitrosodiphenylamine                              |                      |                        |               |     |     | PCB-1242 (Arochlor 1242)                       |                      |                        |               |     |     |
| p-Chloro-m-Cresol (4-Chloro-3-Methyl Phenol)        |                      |                        |               |     |     | PCB-1248 (Arochlor 1248)                       |                      |                        |               |     |     |
| Pentachlorophenol                                   |                      |                        |               |     |     | PCB-1254 (Arochlor 1254)                       |                      |                        |               |     |     |
| Phenanthrene                                        |                      |                        |               |     |     | PCB-1260 (Arochlor 1260)                       |                      |                        |               |     |     |
| Phenol                                              |                      |                        |               |     |     |                                                |                      |                        |               |     |     |

|                   |    |            |  |
|-------------------|----|------------|--|
| Sampling Location | of | Permit No. |  |
|-------------------|----|------------|--|

| GROUNDWATER REMEDIATION PARAMETERS                    |                      |                        |               |     |     |                                                |                      |                        |               |     |     |
|-------------------------------------------------------|----------------------|------------------------|---------------|-----|-----|------------------------------------------------|----------------------|------------------------|---------------|-----|-----|
| Parameter                                             | # Data               |                        | Data Analysis |     |     | Parameter                                      | # Data               |                        | Data Analysis |     |     |
|                                                       | Submitted in SMR (A) | Required in permit (B) | A=B           | A>B | A<B |                                                | Submitted in SMR (A) | Required in permit (B) | A=B           | A>B | A<B |
| Purgeable Compounds                                   |                      |                        |               |     |     | Toluene                                        |                      |                        |               |     |     |
| 1,1,1-Trichloroethane                                 |                      |                        |               |     |     | Trichloroethylene (Trichloroethene)            |                      |                        |               |     |     |
| 1,1,2,2-Tetrachloroethane                             |                      |                        |               |     |     | Vinyl Chloride (Chloroethylene)                |                      |                        |               |     |     |
| 1,1,2-Trichloroethane                                 |                      |                        |               |     |     | Xylene                                         |                      |                        |               |     |     |
| 1,1-Dichloroethane                                    |                      |                        |               |     |     | Extractable Compounds                          |                      |                        |               |     |     |
| 1,1-Dichloroethylene                                  |                      |                        |               |     |     | 1,2,4-Trichlorobenzene                         |                      |                        |               |     |     |
| 1,2-Dichlorobenzene                                   |                      |                        |               |     |     | 1,2-Diphenylhydrazine                          |                      |                        |               |     |     |
| 1,2-Dichloroethane                                    |                      |                        |               |     |     | 2,4,6-Trichlorophenol                          |                      |                        |               |     |     |
| 1,2-Dichloropropane                                   |                      |                        |               |     |     | 2,4-Dichlorophenol                             |                      |                        |               |     |     |
| 1,3-Dichloropropylene (1,3-Dichloropropene)           |                      |                        |               |     |     | 2,4-Dimethylphenol                             |                      |                        |               |     |     |
| 1,2-Trans-Dichloroethylene (Trans-1,2-Dichloroethene) |                      |                        |               |     |     | 2,4-Dinitrophenol                              |                      |                        |               |     |     |
| 1,3-Dichlorobenzene                                   |                      |                        |               |     |     | 2,4-Dinitrotoluene                             |                      |                        |               |     |     |
| 1,4-Dichlorobenzene                                   |                      |                        |               |     |     | 2,6-Dinitrotoluene                             |                      |                        |               |     |     |
| 2-Chloroethylvinyl Ether                              |                      |                        |               |     |     | 2-Chloronapthalene                             |                      |                        |               |     |     |
| Acrolein                                              |                      |                        |               |     |     | 2-Chlorophenol                                 |                      |                        |               |     |     |
| Acrylonitrile                                         |                      |                        |               |     |     | 2-Nitrophenol                                  |                      |                        |               |     |     |
| Benzene                                               |                      |                        |               |     |     | 3,3-Dichlorobenzidine                          |                      |                        |               |     |     |
| Bromoform (Tribromomethane)                           |                      |                        |               |     |     | 4,6-Dinitro-O-Cresol                           |                      |                        |               |     |     |
| Carbon Tetrachloride (Tetrachloromethane)             |                      |                        |               |     |     | 4-Bromophenyl Phenyl Ether                     |                      |                        |               |     |     |
| Chlorobenzene                                         |                      |                        |               |     |     | 4-Chlorophenyl Phenyl Ether                    |                      |                        |               |     |     |
| Chlorodibromomethane (Dibromochloromethane)           |                      |                        |               |     |     | 4-Nitrophenol                                  |                      |                        |               |     |     |
| Chloroethane                                          |                      |                        |               |     |     | Acenaphthene                                   |                      |                        |               |     |     |
| Chloroform (Trichloromethane)                         |                      |                        |               |     |     | Acenaphthylene                                 |                      |                        |               |     |     |
| Dichlorobromomethane (Bromodichloromethane)           |                      |                        |               |     |     | Anthracene                                     |                      |                        |               |     |     |
| Ethylbenzene                                          |                      |                        |               |     |     | Benzidine                                      |                      |                        |               |     |     |
| Methyl Chloride (Chloromethane)                       |                      |                        |               |     |     | Benzo (a) Anthracene (1,2-Benzanthracene)      |                      |                        |               |     |     |
| Methylene Chloride (Dichloromethane)                  |                      |                        |               |     |     | Benzo (a) Pyrene (3,4-Benzopyrene)             |                      |                        |               |     |     |
| Tetrachloroethylene (Tetrachloroethene)               |                      |                        |               |     |     | Benzo (b) Fluoranthene (3,4-Benzofluoranthene) |                      |                        |               |     |     |

continued next page

| GROUNDWATER REMEDIATION PARAMETERS                  |                      |                        |               |     |     |                                                |                      |                        |               |     |     |
|-----------------------------------------------------|----------------------|------------------------|---------------|-----|-----|------------------------------------------------|----------------------|------------------------|---------------|-----|-----|
| Parameter                                           | # Data               |                        | Data Analysis |     |     | Parameter                                      | # Data               |                        | Data Analysis |     |     |
|                                                     | Submitted in SMR (A) | Required in permit (B) | A=B           | A>B | A<B |                                                | Submitted in SMR (A) | Required in permit (B) | A=B           | A>B | A<B |
| Extractable Compounds                               |                      |                        |               |     |     | Pyrene                                         |                      |                        |               |     |     |
| Benzo (ghi) Perylene (1,12-Benzoperylene)           |                      |                        |               |     |     | Pesticides & PCB                               |                      |                        |               |     |     |
| Benzo (k) Fluoranthene (11,12-Benzofluoranthene)    |                      |                        |               |     |     | 2,3,7,8-Tetrachlorodibenzo-p-Dioxin            |                      |                        |               |     |     |
| Bis (2-Chloroethoxy) Methane                        |                      |                        |               |     |     | 4,4-DDD (p,p-TDE)                              |                      |                        |               |     |     |
| Bis (2-Chloroethyl) Ether                           |                      |                        |               |     |     | 4,4-DDE (p,p-DDX)                              |                      |                        |               |     |     |
| Bis (2-Chloroisopropyl) Ether                       |                      |                        |               |     |     | 4,4-DDT                                        |                      |                        |               |     |     |
| Bis (2-Ethylhexyl) Phthalate                        |                      |                        |               |     |     | Aldrin                                         |                      |                        |               |     |     |
| Butylbenzyl Phthalate (Benzyl butyl phthalate)      |                      |                        |               |     |     | Alpha-BHC                                      |                      |                        |               |     |     |
| Chrysene                                            |                      |                        |               |     |     | Alpha-Endosulfan (Endosulfan I)                |                      |                        |               |     |     |
| Dibenzo (a,h) Anthracene (1,2,5,6-Dibenzanthracene) |                      |                        |               |     |     | Beta-BHC                                       |                      |                        |               |     |     |
| Diethyl Phthalate                                   |                      |                        |               |     |     | Beta-Endosulfan (Endosulfan II)                |                      |                        |               |     |     |
| Dimethyl Phthalate                                  |                      |                        |               |     |     | Chlordane                                      |                      |                        |               |     |     |
| Di-N-Butyl Phthalate                                |                      |                        |               |     |     | Delta-BHC                                      |                      |                        |               |     |     |
| Di-N-Octyl Phthalate                                |                      |                        |               |     |     | Dieldrin                                       |                      |                        |               |     |     |
| Fluoranthene                                        |                      |                        |               |     |     | Endosulfan Sulfate                             |                      |                        |               |     |     |
| Hexachlorobenzene                                   |                      |                        |               |     |     | Endrin                                         |                      |                        |               |     |     |
| Hexachlorobutadiene                                 |                      |                        |               |     |     | Endrin Aldehyde                                |                      |                        |               |     |     |
| Hexachlorocyclopentadiene                           |                      |                        |               |     |     | Fluorene                                       |                      |                        |               |     |     |
| Hexachloroethane                                    |                      |                        |               |     |     | Gamma-BHC                                      |                      |                        |               |     |     |
| Indeno (1,2,3-cd) Pyrene (2,3-o-Phenylene Pyrene)   |                      |                        |               |     |     | Heptachlor                                     |                      |                        |               |     |     |
| Isophorone                                          |                      |                        |               |     |     | Heptachlor Epoxide (BHC-Hexachlorocyclohexane) |                      |                        |               |     |     |
| Naphthalene                                         |                      |                        |               |     |     | Toxaphene                                      |                      |                        |               |     |     |
| Nitrobenzene                                        |                      |                        |               |     |     | PCB-1016 (Arochlor 1016)                       |                      |                        |               |     |     |
| N-Nitrosodimethylamine                              |                      |                        |               |     |     | PCB-1221 (Arochlor 1221)                       |                      |                        |               |     |     |
| N-Nitrosodi-N-Propylamine                           |                      |                        |               |     |     | PCB-1232 (Arochlor 1232)                       |                      |                        |               |     |     |
| N-Nitrosodiphenylamine                              |                      |                        |               |     |     | PCB-1242 (Arochlor 1242)                       |                      |                        |               |     |     |
| p-Chloro-m-Cresol (4-Chloro-3-Methyl Phenol)        |                      |                        |               |     |     | PCB-1248 (Arochlor 1248)                       |                      |                        |               |     |     |
| Pentachlorophenol                                   |                      |                        |               |     |     | PCB-1254 (Arochlor 1254)                       |                      |                        |               |     |     |
| Phenanthrene                                        |                      |                        |               |     |     | PCB-1260 (Arochlor 1260)                       |                      |                        |               |     |     |
| Phenol                                              |                      |                        |               |     |     |                                                |                      |                        |               |     |     |

|                   |    |
|-------------------|----|
| Sampling Location | of |
|-------------------|----|

|            |  |
|------------|--|
| Permit No. |  |
|------------|--|

| ORGANIC    PARAMETERS                        |                         |                           |               |     |     |                                            |                         |                           |               |     |     |
|----------------------------------------------|-------------------------|---------------------------|---------------|-----|-----|--------------------------------------------|-------------------------|---------------------------|---------------|-----|-----|
| Parameter                                    | # Data                  |                           | Data Analysis |     |     | Parameter                                  | # Data                  |                           | Data Analysis |     |     |
|                                              | Submitted in<br>SMR (A) | Required in<br>permit (B) | A=B           | A>B | A<B |                                            | Submitted in<br>SMR (A) | Required in<br>permit (B) | A=B           | A>B | A<B |
| 1,1-Dichloroethylene                         |                         |                           |               |     |     | p-Cresol<br>(4-Methylphenol)               |                         |                           |               |     |     |
| 1,2-Dichloroethane                           |                         |                           |               |     |     | Endrin                                     |                         |                           |               |     |     |
| 1,4-Dichlorobenzene                          |                         |                           |               |     |     | Heptachlor                                 |                         |                           |               |     |     |
| 2,4,5-TP<br>(Silvex)                         |                         |                           |               |     |     | Hexachlorobenzene                          |                         |                           |               |     |     |
| 2,4,5-Trichlorophenol                        |                         |                           |               |     |     | Hexachlorobutadiene                        |                         |                           |               |     |     |
| 2,4,6-Trichlorophenol                        |                         |                           |               |     |     | Hexachloroethane                           |                         |                           |               |     |     |
| 2,4 -D                                       |                         |                           |               |     |     | Lindane<br>(Gamma-BHC)                     |                         |                           |               |     |     |
| 2,4 -Dinitrotoluene                          |                         |                           |               |     |     | Methoxychlor                               |                         |                           |               |     |     |
| Benzene                                      |                         |                           |               |     |     | Methyl Ethyl Ketone                        |                         |                           |               |     |     |
| Carbon Tetrachloride<br>(Tetrachloromethane) |                         |                           |               |     |     | Nitrobenzene                               |                         |                           |               |     |     |
| Chlordane                                    |                         |                           |               |     |     | Pentachlorophenol                          |                         |                           |               |     |     |
| Chlorobenzene                                |                         |                           |               |     |     | Pyridine                                   |                         |                           |               |     |     |
| Chloroform<br>(Trichloromethane)             |                         |                           |               |     |     | Tetrachloroethylene<br>(Tetrachloroethene) |                         |                           |               |     |     |
| Cresol                                       |                         |                           |               |     |     | Toxaphene                                  |                         |                           |               |     |     |
| m-Cresol<br>(3-Methylphenol)                 |                         |                           |               |     |     | Trichloroethylene<br>(Trichloroethene)     |                         |                           |               |     |     |
| o-Cresol<br>(2-Methylphenol)                 |                         |                           |               |     |     | Vinyl Chloride<br>(Chloroethylene)         |                         |                           |               |     |     |

|          |  |
|----------|--|
| Comments |  |
|          |  |
|          |  |
|          |  |
|          |  |

**Great Lakes Water Authority**

Self-Monitoring Report  
Section E – Noncompliance

|   |                        |      |
|---|------------------------|------|
| ✓ | Self-Monitoring Report | Year |
|   | January – June         |      |
|   | July – December        |      |

|              |  |            |  |
|--------------|--|------------|--|
| Company Name |  | Permit No. |  |
|--------------|--|------------|--|

|   |     |    |                                                                                                                                                   |
|---|-----|----|---------------------------------------------------------------------------------------------------------------------------------------------------|
|   | Yes | No | Comments (Check (✓) the appropriate box that applies to the company)                                                                              |
| 1 |     |    | Is the SMR Analytical Data in compliance? (If No, fill out the noncompliance table below)                                                         |
| 2 |     |    | Is the Monthly Average Data in compliance? (If No, fill out the noncompliance table below and specify the month the company is on noncompliance.) |

**Noncompliance Table**

| Parameter | Sample Date | Sample Concentration |                      | Permit Limit |                      | Valid Data |    | Notified within 24 hour |    | Submitted 30-day Compliance Report |    |
|-----------|-------------|----------------------|----------------------|--------------|----------------------|------------|----|-------------------------|----|------------------------------------|----|
|           |             | Daily                | 4-Day Monthly 30-Day | Daily        | 4-Day Monthly 30-Day | Yes        | No | Yes                     | No | Yes                                | No |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |
|           |             |                      |                      |              |                      |            |    |                         |    |                                    |    |

|          |  |
|----------|--|
| Comments |  |
|          |  |
|          |  |
|          |  |

# Great Lakes Water Authority

## Industrial Waste Control Division

### Self-Monitoring Report / Six Month Report

Note: Read Guidelines and Instructions before completing this form. Please type or print.

|          |          |                 |                                                      |  |                         |               |       |    |
|----------|----------|-----------------|------------------------------------------------------|--|-------------------------|---------------|-------|----|
| <b>I</b> | <b>A</b> | Facility Name   |                                                      |  |                         |               |       |    |
|          |          | Address         |                                                      |  |                         |               |       |    |
|          | <b>B</b> | Contact Person  |                                                      |  |                         |               |       |    |
|          |          | Title           |                                                      |  |                         | Telephone No. |       |    |
|          | <b>C</b> | Permit Number   |                                                      |  |                         |               |       |    |
|          | <b>D</b> | <b>SIU Type</b> |                                                      |  | <b>Reporting Period</b> |               |       |    |
|          |          |                 | *Significant Industrial User                         |  | January – June          |               | 20    |    |
|          |          |                 |                                                      |  | July – December         |               | 20    |    |
|          |          |                 | **Centralized Waste Treatment and other affected SIU |  | December                | 20            | - May | 20 |
|          |          |                 |                                                      |  | June – November         |               | 20    |    |

|           |          |                                                                                     |                              |         |                                                                                                                    |   |   |           |
|-----------|----------|-------------------------------------------------------------------------------------|------------------------------|---------|--------------------------------------------------------------------------------------------------------------------|---|---|-----------|
| <b>II</b> | <b>A</b> | <b>Production Rate (Applies to SIUs subject to Production Based Standards only)</b> |                              |         |                                                                                                                    |   |   |           |
|           |          | Materials processed on-site                                                         |                              |         |                                                                                                                    |   |   |           |
|           |          | Amount Materials Processed during 6-Months period<br>(Specify the unit used)        |                              |         |                                                                                                                    |   |   |           |
|           | <b>B</b> | <b>Wastewater Flow Rate (Applies to all Users)</b>                                  |                              |         |                                                                                                                    |   |   |           |
|           |          | Wastewater Type                                                                     | Flow Rate<br>(gallons / day) |         | Discharge Frequency:<br><u>C</u> ontinuous, <b>B</b> atch or <u>I</u> ntermittent Batch<br>(Specify the frequency) |   |   |           |
|           |          | Process (Describe)                                                                  | Average                      | Maximum | C                                                                                                                  | B | I | Frequency |
|           |          |                                                                                     |                              |         |                                                                                                                    |   |   |           |
|           |          |                                                                                     |                              |         |                                                                                                                    |   |   |           |
|           |          |                                                                                     |                              |         |                                                                                                                    |   |   |           |
|           |          | Non-Contact Cooling Water (if applicable)                                           |                              |         |                                                                                                                    |   |   |           |
|           |          | Sanitary                                                                            |                              |         |                                                                                                                    |   |   |           |
|           |          | Total Plant Flow                                                                    |                              |         |                                                                                                                    |   |   |           |

|            |                         |                                                   |  |      |  |  |           |  |
|------------|-------------------------|---------------------------------------------------|--|------|--|--|-----------|--|
| <b>III</b> | <b>Sampling Details</b> |                                                   |  |      |  |  |           |  |
|            | <b>A</b>                | Sampling Location (Specific Description Required) |  |      |  |  |           |  |
|            |                         | SL#1                                              |  |      |  |  |           |  |
|            |                         | SL#2                                              |  |      |  |  |           |  |
|            |                         | SL#3                                              |  |      |  |  |           |  |
|            |                         | SL#4                                              |  |      |  |  |           |  |
|            | <b>B</b>                | Date & Time of Sampling                           |  |      |  |  |           |  |
| <b>C</b>   | Method of Sampling      |                                                   |  | Grab |  |  | Composite |  |



|     |   |                                        |  |                   |  |                   |
|-----|---|----------------------------------------|--|-------------------|--|-------------------|
| III | D | Composite Sampling Method              |  | Time-Proportional |  | Flow-Proportional |
|     | E | Name(s) of Person(s) Obtaining Samples |  |                   |  |                   |

|                                                                                   |                                               |                                                                               |  |                                 |     |     |                                                     |    |                |                |
|-----------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------|--|---------------------------------|-----|-----|-----------------------------------------------------|----|----------------|----------------|
| IV                                                                                | <b>Analytical Data and Other Requirements</b> |                                                                               |  |                                 |     |     |                                                     |    |                |                |
|                                                                                   | A                                             | Required Analytical Reports included                                          |  |                                 |     | Yes |                                                     | No |                |                |
|                                                                                   |                                               | If No, explain                                                                |  |                                 |     |     |                                                     |    |                |                |
|                                                                                   |                                               |                                                                               |  |                                 |     |     |                                                     |    |                |                |
|                                                                                   | B                                             | Date(s) of Analysis included                                                  |  |                                 |     | Yes |                                                     | No |                |                |
|                                                                                   | C                                             | Name(s) of Analyst included                                                   |  |                                 |     | Yes |                                                     | No |                |                |
|                                                                                   | D                                             | Analytical Methods Used included                                              |  |                                 |     | Yes |                                                     | No |                |                |
|                                                                                   | E                                             | Total PCB<br>(mark the one that applies)                                      |  | Submitted this reporting period |     |     | Has submitted during January-June reporting period* |    |                |                |
|                                                                                   |                                               |                                                                               |  | Exempted                        |     |     | Will submit during July-December reporting period** |    |                |                |
|                                                                                   | F                                             | Total Phenols or Individual Phenolic Compounds<br>(mark the one that applies) |  | Submitted this reporting period |     |     | Has submitted during January-June reporting period* |    |                |                |
|                                                                                   |                                               |                                                                               |  | Exempted                        |     |     | Will submit during July-December reporting period** |    |                |                |
|                                                                                   | G                                             | 4-day, 30-day or Monthly Average data included                                |  |                                 |     | Yes |                                                     | No |                | Not Applicable |
|                                                                                   | H                                             | TTO Analysis included (if required)                                           |  |                                 |     | Yes |                                                     | No |                | Not Applicable |
|                                                                                   | I                                             | TOMP Certification included (if required)                                     |  |                                 |     | Yes |                                                     | No |                | Not Applicable |
| If submitting TOMP Certification, provide the date of your current operating TOMP |                                               |                                                                               |  |                                 |     |     |                                                     |    |                |                |
| J                                                                                 | Waste Manifest included (if required)         |                                                                               |  |                                 | Yes |     | No                                                  |    | Not Applicable |                |
| K                                                                                 | Operating Day Logs (if required)              |                                                                               |  |                                 | Yes |     | No                                                  |    | Not Applicable |                |

|   |                                                                       |  |  |  |     |  |    |
|---|-----------------------------------------------------------------------|--|--|--|-----|--|----|
| V | <b>Certified Statement</b>                                            |  |  |  |     |  |    |
|   | Are Pretreatment Standards being met?                                 |  |  |  | Yes |  | No |
|   | If No, specify operations or maintenance taken to achieve compliance. |  |  |  |     |  |    |
|   |                                                                       |  |  |  |     |  |    |
|   |                                                                       |  |  |  |     |  |    |

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| VI        | <b>Certification</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |       |
|           | I certify under penalty of law that this document and all attachments were prepared under my direction, or supervision, in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. |       |
|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       |
|           | Name of Authorized Representative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Title |
|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       |
| Signature |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Date  |

## **Guidelines for Completing the Self-Monitoring Report or Six Month Report**

The General Pretreatment Regulation 40 CFR 403.12(e) and the City of Detroit Ordinance 08-05, Section 56-3-61.1 (e)(8) provides authority to the Publicly Owned Treatment Works, in this case the Great Lakes Water Authority (GLWA) requires all Significant Industrial Users (SIUs) to submit a Self-Monitoring Report or Six Month Report (SMR).

The SMR is to be submitted on or before June 30<sup>th</sup> and December 31<sup>st</sup> of each year or as defined in the user's permit, and be representative of the facility's activity during the reporting period. Incomplete reports and/or reports submitted after these dates are considered delinquent.

Complete the attached SMR form and original analytical data pertaining to the said reporting period and submit to the:

**Great Lakes Water Authority  
Industrial Waste Control Division  
303 S. Livernois  
Detroit, Michigan 48209-3070**

Additional Information:

1. SIUs shall maintain records of all information included in this report for at least three (3) years and make it readily accessible to the Department at all times. The period of record retention shall be extended during the course of any unresolved issues.
2. If sampling performed by an Industrial User indicates a violation of the permit limitations (daily maximum and/or other average limitation), then notification must be made to the Authority within 24-hours of becoming aware of the violation. Repeat the sampling and analysis for two (2) days and submit the results of the repeat analyses to GLWA within thirty (30) days of becoming aware of the violation.

For more information/inquiry, please call your respective field engineer.

## **Instructions to Complete the SMR Form**

### **Item I**

- A. Give the complete name and address of the facility.
- B. Give the name, title and telephone number of the contact person at the facility.
- C. Denote the permit number.
- D. Mark the respective period of the report.

### **Item II**

- A. SIUs subjected to production based standards under the Federal Categorical Pretreatment Regulation must specify the materials processed on-site and actual average production rates (e.g. pound/unit time, sq. ft./unit time, sq. meter/unit time, kg/unit time, etc.).
- B. Provide the total daily plant flow (average and maximum in gallons per day) discharged to the sewer (if accurate flow is not available, provide a verified estimated value). The total plant flow should include regulated and non-regulated wastewater, cooling water, sanitary water and any other wastewater involved in operations. Indicate whether Continuous, Batch, or Intermittent batch and specify the discharge type frequency (see explanation below):
  - Batch discharge is defined when wastewater discharge frequency occurs at least once a month (e.g. twice a month, once a week, once every 2 days, etc.).
  - Intermittent batch discharge is defined when wastewater discharge frequency occurs at a period of more than thirty (30) days between batch discharges (e.g. once every 2 months, once every quarter, once every 6 weeks, etc.).

### **Item III**

Give complete details of the sampling procedure. This includes, but not limited to, the sampling location(s) as described in the Wastewater Discharge Permit, date and time of sampling, method of sampling (grab or composite), composite sampling method (time-proportional or flow-proportional) and name(s) of person(s) obtaining the samples.

### **Item IV**

All Industrial Users subject to self-monitoring requirements shall include:

- A. Only original analytical reports/laboratory reports are accepted by the Authority. Reports should indicate a representative discharge sample taken during that reporting period (refer to the issued Wastewater Discharge Permit to check the required number of samples and respective parameters to be analyzed). The analytical report should include also the name and address of the laboratory, the date of sample received (Chain of Custody),
- B. Date(s) of analysis,
- C. Name(s) of person(s) performing the analysis and
- D. Analytical techniques or methods used. The report should be signed by an authorized representative of the laboratory.
- E. Denote the status of PCB analyses whether submitted, to be submitted, has been submitted or exempted from the self-monitoring requirement.
- F. Denote the status of Total Phenols or Individual Phenolic Compounds analysis whether submitted, to be submitted, has been submitted or exempted from the self-monitoring requirement.
- G. When applicable, Industrial Users subject to 4-day average limits must calculate and submit the average value for each parameter for the four (4) consecutive sampling events. These sampling events need not occur on consecutive calendar days.  
All Industrial Users subject to 30-day or monthly average limits must calculate and submit the average value for each parameter per month separately.
- H. Significant Industrial Users (SIU) subject to Metal Finishing and Electroplating categories are required to submit Total Toxic Organics (TTO) analysis per year for those individual compounds which would reasonably be expected to be present in their wastestream.
- I. As an alternative to the TTO analysis, the SIU, as described in H above, may submit a Toxic Organic Management Plan (TOMP) to the Authority for its approval. Should the TOMP be approved, the SIU shall include the following certification with each SMR submitted to the Authority.

*"Based on my inquiry of the persons directly responsible for managing compliance with the pretreatment standard for toxic organics (TTO), I certify that to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewater has occurred since filing of the last semi-annual compliance report. I further certify that this facility is implementing the solvent management plan submitted on **specify date.**"*

*(Signed and dated by the Authorized Company Representative.)*

- J. if required, submit copies of waste manifests and
- K. if required, submit Operating Day Logs.

### **Item V**

Indicate if pretreatment standards are being met. If not, then indicate what additional operation or maintenance will be taken to achieve compliance.

### **Item VI**

The SMR is to be certified and signed by an authorized representative of the company.

*Additional SMR forms can be availed through your respective GLWA-IWC field engineer.*

**SLUG CONTROL/SPILL PREVENTION PLAN**  
**GREAT LAKES WATER AUTHORITY**  
**INDUSTRIAL WASTE CONTROL DIVISION**

## **GUIDELINES FOR PREPARATION: SLUG CONTROL/SPILL PREVENTION PLAN**

### **LEGAL AUTHORITY**

The General Pretreatment Regulation 40 CFR 403.8(f)(2)(v) provides authority to the Publicly Owned Treatment Works (POTW), in this case the Wastewater Treatment Plant - Great Lakes Water Authority (GLWA), to request any Industrial User (IU) to develop a Slug Control Spill Prevention Plan in order to protect the sewer from slug and/or accidental discharges.

City of Detroit Ordinance No. 08-05 Chapter 56 Section 56-3-59.l(g) declares that each IU discharging into the GLWA sewerage collection and treatment system shall provide protection from the accidental discharges of prohibited materials and other substances regulated by the Ordinance. Further, the Ordinance adds that facilities and measures to prevent and abate accidental discharges should be provided and maintained at the owner's or IU's cost or expenses.

### **DEFINITIONS**

**Slug Discharge** is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge at a flow rate and/or concentration, which will cause interference or pass through at POTW.

**Upset** means an exceptional incident in which there is unintentional and temporary noncompliance with the categorical pretreatment standards, or local pretreatment standards, because of factors beyond the reasonable control of the IU. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset shall constitute an affirmative defense to an action brought for noncompliance with limits imposed under the permit if the following requirements are met:

- I. An IU who wishes to establish the affirmative defense shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and IU can identify the specific cause(s) of the upset;
  - b. The facility was at the time being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures;
  - c. The IU has submitted the information on the upset to the Department, orally or in writing, within twenty-four (24) hours of becoming aware of the upset (if this information is provided orally, a written submission must be made within five (5) calendar days).

2. In any enforcement proceeding, the IU seeking to establish the occurrence of an upset shall have the burden of proof;
3. The IU shall control production of all discharges to the extent necessary to maintain compliance with this ordinance upon reduction, loss, or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

Bypass means the intentional diversion of wastestreams from any portion of an IU's treatment facility.

Bypass is prohibited, and the Department may take enforcement action against an IU for a bypass, unless:

1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage,
2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
3. The IU submitted notices as required.

### MATERIALS PROHIBITED FROM REACHING THE SEWER

#### GENERAL PROHIBITIONS:

An IU shall not introduce into a POTW any pollutant(s) which cause pass through or interference.

A list of EPA priority pollutants and Michigan critical materials is attached for your reference/use.

#### SPECIFIC PROHIBITIONS:

1. Pollutants which create a fire or explosion hazard in the POTW;
2. Pollutants which will cause corrosive structural damage to the POTW;
3. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW result in interference;
4. Any pollutant, including Oxygen Demanding Pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;

5. Heat in amounts which will inhibit biological activity in the POTW resulting in interference;
6. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems.
8. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

### **CONTENTS OF THE PLAN**

#### Facility Identification

- i) Process description and schematic of wastewater flow
- ii) Inventory of materials stored, raw materials, liquid wastes, by-products/products, solvents, and/or oils.
- iii) Procedures for slug control/spill prevention and response
- iv) Method of disposal
- v) Notification requirements
- vi) Slug history
- vii) Inspection procedure
- viii) Employee training
- ix) Implementation date
- x) Certification of the plan
- xi) The nature and volume of information to be provided under each section as described in the subsequent "Guidelines for Preparation" followed by a blank form for your use and/or reference.

### **GUIDELINES FOR PREPARATION**

#### **I) Facility Identification:**

This section contains general information and is self-explanatory

#### **II) Process Description and Schematic of Wastewater Flow:**

This section should contain the following information related to the facility identified in Section 1 above.

1. Product or Service Operation details;
2. Description of discharges including non-routine batch discharges;
3. Number of shifts per day, shift hours, the number of employees in each shift, and number of working days per week;
4. A drawing of appropriate size showing the following details; facility layout, property boundaries, entrance and exit routes to facility, areas occupied by manufacturing service or commercial activities, storage area of hazardous or prohibited or listed materials, solvents and oils, loading and unloading facilities, waste or wastewater handling, storage and treatment facilities, direction of drainage from storage areas, waste handling, process storage and

treatment areas, floor drains, pipes and channels which lead away from potential spill areas identifying where the drains connect to sanitary sewer/holding tank, flow directions with flow rates, tank capacities, treatment system, GLWA and company sampling points and outlet connection to the street sewer.

**III) Inventory of Materials Stored in the Facility:**

A list of hazardous/listed/prohibited materials, by-products or products, liquid wastes, solvents and oils or any other materials such as large quantities of non-contact cooling water and/or wastewater containing non-toxic organics, solids, and nutrients stored inside the facility and their approximate average and maximum quantities with concentrations stored in the facility should be provided. Also show their respective locations on the drawing explained in Section II above. Only materials which are in a form which could readily be carried into the wastewater treatment plant and which constitute a concentration of 5% or greater on a dry weight basis in the raw materials, chemical solutions or waste material are required to be reported.

**IV) Procedures for Slug Control/Spill Prevention and Response:**

Details of measures and installations required to protect the sewer system from slug/spill discharges should be explained.

a) Equipment:

Identify the type of equipment and structure used in slug prevention and response activities and their location in the facility (dikes, berms, sealed drains, alarms, leak detection equipment, diversionary structures, sumps, protective equipment, decontamination equipment, ventilation equipment, absorbents, etc.)

b) Procedures:

Provide procedures to prevent adverse impact on the GLWA sewer system from slug discharges, including handling and transferring of materials, loading and unloading operation, a control of plant site-run off, etc.

**V) Method of Disposal:**

Briefly describe the procedures for disposing of or treating spilled materials in your facility.

**VI) Notification and Report Requirements:**

This section should contain a list of the federal, state, local agencies, contractors, consultants, etc., who will be informed during slug discharge. The following is the procedure required for notifying the GLWA on slug incidents.



## **Notification to GLWA**

### **Slug Loading/Accidental Discharge:**

Within one (1) hour of becoming aware of a discharge entering into the sewer, the company shall telephone the GLWA System Control Center, twenty-four (24) hour phone number at (313) 267-6000, and inform the Authority about the details of the discharge.

### **Upset at the IU's Pretreatment Facility:**

Within twenty-four (24) hours of becoming aware of an upset, the company shall telephone the GLWA at the System Control Center (313) 267- 6000 and inform the Authority about the details of the upset and discharge.

### **Unanticipated Bypass of W's Pretreatment Facility:**

Within twenty-four (24) hours of becoming aware of the bypass, the company shall telephone the GLWA at the System Control Center (24 hr. phone no.) inform the Authority about the details of the discharge.

All these notifications shall include the name of the caller, location, and time of discharge, type of wastewater, estimated concentration and volume.

### **Submission of Report:**

For the above mentioned three (3) incident, a written report shall be submitted within five (5) calendar days of becoming aware of the incident This report shall contain the following:

- i) A description of the discharge and the cause of the incident;
- ii) The duration of the incident including exact dates and times or, if not corrected, the anticipated time the incident is expected to continue;
- iii) Steps being taken and/or planned to reduce, eliminate, and prevent similar future occurrences of the incident

### **Anticipated Bypass:**

If an IU anticipates the need for a bypass, it shall submit a prior notice to the Department, if possible at least ten (10) days before the date of the bypass. The report shall be accompanied by the analytical data, which shows the characteristics of the material to be bypassed. Upon evaluation, the Authority provides the IU with its determination on the bypass.

### **Details Of The Reports For Specific Incidents**

**SPILL:** Causes and details of the discharge, and the measures to be taken to prevent similar future occurrences.

**UPSET:** A description of the discharge and cause of noncompliance; the period of noncompliance including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; steps being taken and/or planned to reduce, eliminate and prevent recurrence if the noncompliance.

**BYPASS:**

- i) Anticipated -prior notice, with the sample analysis of the material that is going to be bypassed, for the department's approval to bypass.
- ii) Unanticipated -description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue, and steps Taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

**NONCOMPLIANCE:** The user shall repeat the sampling and analysis and submit the results of the repeat analysis.

All these reports shall be submitted to the attention of the inspector concerned.

**NOTIFICATION & REPORTING REQUIREMENTS FOR SPECIFIC INCIDENTS**

| INCIDENT                           | DEFINITION                                                                                                                 | NOTIFICATION                                                    | REPORT                                                                                                                             | CONTACT                                         | TEL. NO                                          |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------|
| <b>Spill 40 CFR 403.12f</b>        | Accidental discharge to the City sewer system                                                                              | Shall call within (1) hour of becoming aware of the spill       | Shall submit within (5) days of the spill                                                                                          | William Ware<br>GLWA<br>System Control          | (313) 297-5894<br>24 hr. no.<br>(313) 267-6000   |
| <b>Upset 40 CFR 403.16</b>         | Pretreatment System upset<br>Causing noncompliance                                                                         | Shall call within (24) hours of becoming aware of the upset     | Shall submit within (5) days of the upset                                                                                          | Akshay Chauhan<br>GLWA System<br>Control Center | (313) 297-5826<br>24 hours no.<br>(313) 267-6000 |
| <b>Bypass 40 CFR 403.17</b>        | Intentional diversion of waste streams from the pretreatment facility<br>i) Anticipated Bypass<br>ii) Unanticipated Bypass | Shall call within (24) hours of becoming aware of bypass        | Shall submit sample reports of material to be bypassed, 10 days prior to the by pass<br><br>Shall submit within (5) days of bypass | GLWA System<br>Control Center                   | 24 hr. no. (313) 267-6000                        |
| <b>Noncompliance 40CFR 403.12g</b> | Violation of any regulated parameters of wastewater to the sewer, identified while self-monitoring                         | Shall call within (24) hours of becoming aware of the violation | Shall submit in (30) days of the violation                                                                                         | Akshay Chauhan<br>GLWA System<br>Control Center | (313) 297-5826<br>24 hr. no.<br>(313)267-6000    |

**See back of the page for the details about the individual report –Days denotes calendars days**

**All reports shall be submitted to the following address:**

The Emergency Response Coordinator  
Great Lakes Water Authority  
Industrial Waste Control Division  
303 S. Livernois Avenue  
Detroit, Michigan 48209

A notice shall be permanently posted on the company's bulletin board or other prominent place(s) advising employees to contact GLWA System Control Center (24 hr. phone no.) in the event of a potential excessive discharge to the sewer system.

**VII) Company's Slug History:**

This section should contain the details of the slug discharges that occurred in the facility during the past three (3) years. It should also contain the dates, and volumes of wastewater/chemicals discharged into the sewer, names of pollutants and their respective concentrations, authorities informed and remedial measures instituted.

**VIII) Inspection Procedure:**

This section should contain details of inspection schedules established to check the conditions of the IU's facilities, equipment's, tools, supplies, etc., to detect and correct the potential sources of slug discharges and related containment activities. It should also contain the skill level of the person, performing inspection, periodicity of inspection, areas covered, records maintained, and the follow up procedures of inspection report.

**IX) Employee Training:**

This section should contain the skill types of the IU's employees and the number of employees who were formally instructed or trained periodically to act during the incidents of slug discharges. List the formal classroom lectures and demonstrations the operators attended. Also list the ongoing training classes conducted periodically for this purpose.

**X) Implementation Date:**

This information is required to determine the time period from when the protection against slug discharges has been provided. List the date, month and the year on which the Slug Control/Spill Prevention Plan being submitted to the GLWA took effect.

**XI) Certification of Implementation:**

The Slug Control/Spill Prevention Plan submitted by your company shall be signed by an authorized representative. The Certification statement shall read as follows:

"I certify that the information provided in this Slug Control/Spill Prevention Plan is accurate and true to the best of my knowledge and that the incidental slug control/spill prevention measures described in this plan will be implemented as described". Print the name of the certifying officer, title, and the date of certification.

**X) This Slug Control/Spill Prevention Plan shall be reviewed and Immediately amended, if necessary, whenever:**

- The facility permit is reviewed (only the IU's with Wastewater Discharge Permit;
- The plan fails in an emergency;
- The facility changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for slug/accidental discharges to the sewer;
- The list of emergency coordinators or facility contacts persons change.

**INDUSTRIAL USER SLUG/CONTROL SPILL PREVENTION PLAN**

1) **FACILITY NOTIFICATION :**                      **PERMIT NO.:** \_\_\_\_\_

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

Facility Address: \_\_\_\_\_

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

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

Phone No. (Work): \_\_\_\_\_

Facility Spill Coordinator: \_\_\_\_\_ Title: \_\_\_\_\_

Phone No. (Work): \_\_\_\_\_ Phone No. (Cell): (\_\_\_\_) \_\_\_\_\_

Other Emergency Coordinator: \_\_\_\_\_ Title: \_\_\_\_\_

Phone No.(Work): (\_\_\_\_) \_\_\_\_\_ Phone No. (Cell): (\_\_\_\_) \_\_\_\_\_

**PROCESS DESCRIPTION AND SCHEMATIC: 1)**

**1) Type of Business/Manufacturer:**

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**2) Description of discharges (including non-routine batch discharges):**

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**Operating Schedule:**

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**Number of Employees: 1st Shift \_\_\_\_\_ 2nd Shift \_\_\_\_\_ 3rd Shift \_\_\_\_\_**

4) Attach Schematics or Drawings:

North

III) **INVENTORY OF MATERIALS STORED IN THE FACILITY:**

| Material Name* | Quantity**<br>gallons<br>(Otherwise specify) | Location in<br>the facility | Container Type<br>and Capacity |
|----------------|----------------------------------------------|-----------------------------|--------------------------------|
|----------------|----------------------------------------------|-----------------------------|--------------------------------|

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\* Attach Material Safety Sheet (MSDS), if the chemical name is commercial

\*\* Yearly/Daily Average



**INVENTORY OF MATERIALS STORED IN THE FACILITY:**

| Material Name* | Quantity**<br>gallons<br>(Otherwise specify) | Location in<br>the facility | Container Type<br>and Capacity |
|----------------|----------------------------------------------|-----------------------------|--------------------------------|
|----------------|----------------------------------------------|-----------------------------|--------------------------------|

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\* Attach Material Safety Sheet (MSDS), if the chemical name is commercial

\*\* Yearly/Daily Average

**IV) PROCEDURES FOR SLUG CONTROL/SPILL PREVENTION AND RESPONSE:**

**a) Equipment:**

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**b) Procedures:**

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**V) METHOD OF DISPOSAL:**

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**VI) NOTIFICATION & REPORTING PROCEDURE:**

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**VII) PREVIOUS SPILL EVENTS:**

| Description of Incident | Quantity | Date | Remedial Action |
|-------------------------|----------|------|-----------------|
|                         |          |      |                 |

**VIII) INSPECTION PROCEDURES:**

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**XI) TRAINING PROGRAM:**

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**X) Implementation Date:**

**Date:** \_\_\_\_\_

**XI) Certification:**

I certify that the information provided in this document is to the best of my knowledge, accurate and true, and that the slug control/accidental spill measures described in this document will be implemented as described.

An Authorized Representative of the company whom is responsible for the Slug Control/Spill Prevention Plan, please sign below:

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date



## Sample Enforcement Forms

**CERTIFIED MAIL**

«Contact»  
«Company»  
«Mailingaddress»  
«City»

Date: «Date»  
Permit No.: «PermitNo»

**NOTICE OF EXCEEDANCE**

**LEGAL AUTHORITY**

**THE FOLLOWING FINDINGS HAVE BEEN MADE BY THE DETROIT WATER AND SEWERAGE DEPARTMENT AND A NOTICE IS HEREBY ISSUED PURSUANT TO SECTION 56-3-66.1(f) OF THE CITY OF DETROIT ORDINANCE NO. 08-05. THIS NOTICE IS BASED ON FINDINGS ON VIOLATION OF THE CONDITIONS OF THE WASTEWATER DISCHARGE PERMIT UNDER SECTION 56-3-66.1 OF THE CITY OF DETROIT ORDINANCE NO. 08-05.**

**FINDINGS**

- 1) The City of Detroit is the Control Authority for implementing, administering and enforcing an Industrial Pretreatment Program.
- 2) Under this pretreatment program, «Company», hereinafter referred to as “The Company”, was issued a Wastewater Discharge Permit.
- 3) The Wastewater Discharge Permit issued to The Company contained numerical limits on the quality of pollutants which The Company could discharge.
- 4) Pollutant analysis revealed exceedances of the Wastewater Discharge Permit limitation as identified in the enclosed noncompliance table.

**NOTICE**

**THEREFORE, BASED ON THE ABOVE FINDINGS, THE COMPANY IS HEREBY NOTIFIED THAT:**

- 1) It is in noncompliance with its Discharge Permit No.: «PermitNo».

«Contact»  
«Company»  
«Date»  
Page 2

- 2) A compliance report shall be submitted to the Industrial Waste Control Division within thirty **(30 days)** of this notice. The following information shall be included in this report:
  - a) The cause of the exceedance and the corrective measures which have been made to prevent future noncompliance.
  - b) Analytical results for a minimum of two samples collected by The Company after the noncompliance date to demonstrate compliance with the permit limitation of the exceeded pollutant(s). The sampling and analysis must be conducted in accordance with Federal Regulations, 40 CFR Part 136.
- 3) Failure to comply with the requirements of this notice will be considered a significant noncompliance and could result in escalation of enforcement action.

---

«Eng»  
Industrial Waste Control Division  
(313) 297-«Phone»

«EngInit»/«YourInit»  
Enclosures



«Company»  
«Facilityaddress»  
«Facilitycity»

Permit No.: «PermitNo»

Date: «Date»

**EFFLUENT EXCEEDANCES**

| SAMPLE<br>DATE | SAMPLE<br>NUMBER | PARAMETER<br>NAME | ANALYTICAL<br>RESULT | PERMIT<br>LIMITATION |
|----------------|------------------|-------------------|----------------------|----------------------|
|                |                  |                   |                      |                      |
|                |                  |                   |                      |                      |
|                |                  |                   |                      |                      |

**Sample Location:**   «Sampling\_Location»

**CERTIFIED MAIL**

«contact»  
«Company»  
«mailingaddress»  
«City»

Date: «date»  
Permit No.: «permitno»

**NOTICE OF NONCOMPLIANCE**

The Great Lakes Water Authority, Industrial Waste Control Division (IWC) hereby notify your facility, located at «facilityaddress», in «facilitycity», Michigan was cited for noncompliance with the notification requirements established in the General Pretreatment Regulations 40 CFR Part 403 and your Wastewater Discharge Permit No. «permitno».

«Company» failed to notify the Great Lakes Water Authority within twenty-four (24) hours of becoming aware of the self-monitoring noncompliance with the limits of the parameter «parameters» as shown below:

| <u>Parameter</u>    | <u>Sample Date</u> |
|---------------------|--------------------|
| BEHP (daily Max.)   | January 13, 2016   |
| BEHP (monthly Avg.) | February, 2016     |
| Hg                  | April 8, 2016      |

Establishing a pattern of violations will result in an enforcement action as may be appropriate.

Should you have any questions, please contact me at (313) 297-«phone».

---

«engineer»  
Pretreatment Engineer  
Industrial Waste Control Division

«enginitial»/yr

**CERTIFIED MAIL**

«Contact»  
«FacilityName»  
«Mailingaddress»  
«City»

Date: September 16, 2016  
Permit No.: «PermitNo»

**NOTICE OF VIOLATION**

**LEGAL AUTHORITY**

**THE FOLLOWING FINDINGS ARE MADE AND NOTICE ISSUED PURSUANT TO SECTION 56-3-66.1(f) OF THE CITY OF DETROIT ORDINANCE NO. 08-05 AND THE GENERAL PRETREATMENT REGULATIONS 40 CFR PART 403. THIS NOTICE IS BASED ON FINDINGS OF VIOLATION OF THE CONDITIONS OF THE WASTEWATER DISCHARGE PERMIT ISSUED UNDER SECTION 56-3-61.1 OF THE CITY OF DETROIT ORDINANCE NO. 08-05.**

**FINDINGS**

- 1) «FacilityName», located at «FacilityAddress», Michigan, `discharges non-domestic wastewater containing toxic pollutants into the Great Lakes Water Authority Sewer System.
- 2) «FacilityName», is a “Significant Industrial User,” as defined by the City of Detroit Ordinance No. 08-05, Section 56-3-58.1 and 40 CFR Part 403 and 40 CFR Part 420.35(a)
- 3) «FacilityName», operates the facility and discharges wastewater into the Great Lakes Water Authority Sewer System under the Wastewater Discharge Permit No. «PermitNo», issued on November 26, 2003 which contains requirements, prohibitions, restrictions and other limitations on the wastewater discharged to the sewer system.
- 4) «FacilityName»
- 5) «FacilityName»

«Contact»  
«FacilityName»  
July 30, 2013  
Page 2

**NOTICE**

**THEREFORE, BASED ON THE ABOVE FINDINGS, «FacilityName» IS IN VIOLATION OF ITS WASTEWATER DISCHARGE PERMIT NO. «PermitNo», THE CITY OF DETROIT ORDINANCE NO. 08-05 AND THE GENERAL PRETREATMENT REGULATIONS 40 CFR PART 403, AND IS HEREBY REQUIRED TO:**

Submit a report to the Industrial Waste Control Division within thirty (30) days of this notice. The following information shall be included in the report.

The cause of the exceedance and the corrective measures which have been made to prevent future noncompliance.

Analytical results for a minimum of two (2) samples collected by the company after the non-compliance date to demonstrate compliance with the permit limitation of the exceeded pollutant(s). The sampling and analysis must be conducted in accordance with Federal Regulation, 40 CFR Part 136.

Should you have any questions, please call «Engineer» at (313) 297-«Phone».

**YOUR FAILURE TO RESPOND TO THIS NOTICE WILL SUBJECT YOU TO FURTHER ENFORCEMENT ACTION AS PROVIDED IN THE CITY OF DETROIT ORDINANCE NO. 08-05.**

---

Thomas Eapen P.E.  
Manager  
Industrial Waste Control Division

TE/«Enginitial»/yr

«FacilityName»  
«Facilityaddress»  
«City»

«PermitNo»

Date:

**EFFLUENT EXCEEDANCES**

| <b>SAMPLE<br/>DATE</b> | <b>SAMPLE<br/>NUMBER</b> | <b>PARAMETER<br/>NAME</b> | <b>ANALYTICAL<br/>RESULT</b> | <b>PERMIT<br/>LIMITATION</b> |
|------------------------|--------------------------|---------------------------|------------------------------|------------------------------|
|                        |                          |                           |                              |                              |
|                        |                          |                           |                              |                              |
|                        |                          |                           |                              |                              |

**Sample Location:**

## Penalty Calculation Sheet

**Total**

- 1    Violations  
     Enter number and type of violations
- a Reporting                    *(Enter Value#)*                    \_\_\_\_\_
- b Effluent                    *(Enter Value#)*                    \_\_\_\_\_
- c Notification                    *(Enter Value#)*                    \_\_\_\_\_
- d Total # of Violations =                    \_\_\_\_\_
- 2    Penalty \$ =                              (Insert Amount)            
     (Multiply d x Penalty)                    \_\_\_\_\_
- 3    Economic Benefit                    \_\_\_\_\_
- 4    Gravity/Severity Factor                    \_\_\_\_\_
- 5    IWC Monitoring/Inspection Costs                    \_\_\_\_\_
- 6    Other Damages                    \_\_\_\_\_

|                                  |
|----------------------------------|
| Grand Total =<br>(Add 2+3+4+5+6) |
|----------------------------------|

\_\_\_\_\_







APPENDIX B:  
ENFORCEMENT RESPONSE  
GUIDE

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE   | NATURE OF NON-COMPLIANCE                                                      | NATURE OF VIOLATION                               | ENFORCEMENT RESPONSE(S)                                                                                           |
|--------------------------|-------------------------------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Discharge (Unauthorized) | No record of survey, permit application or<br>Baseline Monitoring Report w/CA | Minor User                                        | None, if survey form filed within<br>60 days of notice                                                            |
|                          |                                                                               | Failure to notify                                 | Notice of Violation if > 60 days                                                                                  |
|                          |                                                                               |                                                   |                                                                                                                   |
|                          | NO HARM TO POTW                                                               | Categorical &/or NonCategorical SIU               | NOV & Citation: Penalty<br>Show Cause Order<br>Cease & Desist Order if > 180<br>days<br>Civil Litigation Referral |
|                          |                                                                               | Other (Groundwater, Septage, Stormwater,<br>etc.) | Notice of Violation                                                                                               |
|                          |                                                                               |                                                   |                                                                                                                   |
|                          | HARM TO POTW                                                                  | All                                               | Notice of Violation<br>Cease & Desist Order<br>Civil Litigation Referral                                          |
|                          |                                                                               | All                                               | Notice of Violation<br>Cease & Desist Order<br>Criminal Litigation Referral                                       |
|                          |                                                                               |                                                   |                                                                                                                   |
| Discharge (Authorized)   | Unpermitted wastewater<br>Categorical &/or NonCategorical SIU                 | Failure to notify                                 | NOV & Citation: Penalty<br>Show Cause Order<br>Cease & Desist Order if > 180<br>days                              |
|                          |                                                                               | Reporting                                         | Civil Litigation Referral                                                                                         |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE | NATURE OF NON-COMPLIANCE                                                           | NATURE OF VIOLATION | ENFORCEMENT RESPONSE(S)                                                             |
|------------------------|------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|
| Discharge (Authorized) | <b>Failure to report Production-based Information Changes</b>                      | Failure to notify   | NOV & Citation: Penalty                                                             |
|                        | Categorical SIU (Subject to Production Standards)                                  | Reporting           | Show Casue Order<br>Cease & Desist Order if > 180 days<br>Civil Litigation Referral |
|                        | <b>Failure to report change in Sample Location or Methods</b>                      | Failure to notify   | NOV & Citation: Penalty<br>Show Casue Order                                         |
|                        | Categorical &/or NonCategorical SIU                                                | Reporting           | Cease & Desist Order if > 180 days<br>Civil Litigation Referral                     |
|                        | <b>Failure to report other changes in operationg condition</b>                     | Failure to notify   | NOV & Citation: Penalty<br>Show Casue Order                                         |
|                        |                                                                                    | Reporting           | Cease & Desist Order if > 180 days<br>Civil Litigation Referral                     |
|                        | <b>Failure to notify of spill, upset, bypass, self-monitoring violation, other</b> | Failure to notify   | NOV & Citation: Penalty<br>Show Casue Order                                         |
|                        | Categorical &/or NonCategorical SIU                                                | Reporting           | Cease & Desist Order if > 180 days<br>Civil Litigation Referral                     |
|                        |                                                                                    |                     |                                                                                     |
|                        |                                                                                    |                     |                                                                                     |
|                        |                                                                                    |                     |                                                                                     |
|                        |                                                                                    |                     |                                                                                     |

NOTICE & REPORTING

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE | NATURE OF NON-COMPLIANCE                            | NATURE OF VIOLATION                                           | ENFORCEMENT RESPONSE(S)                                                                          |
|------------------------|-----------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Discharge (Authorized) | Failure to submit timely permit re-application form |                                                               |                                                                                                  |
|                        | Categorical &/or NonCategorical SIU                 | Termination of discharge by permit expiration date            | None, based on confirming inspection w/l 30 days<br>Administrative Order w/ Stipulated Penalties |
|                        |                                                     | Continuation of Discharge after permit expiration date        | Cease & Desist Order                                                                             |
|                        | Failure to submit 90-day report                     |                                                               | Notice of Violation<br>Cease & Desist Order                                                      |
|                        | Categorical SIU                                     |                                                               |                                                                                                  |
|                        | Failure to submit Six Month Report                  |                                                               |                                                                                                  |
|                        | Categorical &/or NonCategorical SIU                 | Inadequate Report (lack of analytical data or certifications) | Notice of Violation                                                                              |
|                        |                                                     | Failure to Report (>45 days)                                  | NOV & Citation: Penalty if > 45 days                                                             |
|                        | Failure to meet other Permit Condition              |                                                               | Notice of Violation<br>Show Cause Order                                                          |
|                        | Categorical &/or NonCategorical SIU                 | Infrequent or isolated                                        | Cease & Desist Order if > 180 days<br>Civil Litigation Referral                                  |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE         | NATURE OF NON-COMPLIANCE                                                                  | NATURE OF VIOLATION                                               | ENFORCEMENT RESPONSE(S)                                                                        |
|--------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Discharge Violation (Sampling) | Exceedance of Daily Permit Limitation (any amount)<br>Categorical &/or NonCategorical SIU | Infrequent or isolated                                            | Notice of Exceedance<br>Notice of Violation                                                    |
|                                |                                                                                           | Infrequent but Exceedance<br>Magnitude > 110%                     | Notice of Violation<br>Conference<br>Administrative Order                                      |
|                                |                                                                                           | Recurring Exceedance (No<br>pattern evident)                      | Notice of Violation<br>Conference<br>Administrative Order                                      |
|                                |                                                                                           | Recurring Exceedance (Pattern<br>evident)                         | Notice of Violation<br>Conference<br>Administrative Order<br>Civil Litigation Referral         |
|                                |                                                                                           | Recurring Exceedance (Pattern<br>evident) & Triggers SNC Criteria | NOV & Citation: Penalty<br><br>Conference<br>Administrative Order<br>Civil Litigation Referral |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE         | NATURE OF NON-COMPLIANCE                                         | NATURE OF VIOLATION                                            | ENFORCEMENT RESPONSE(S)                                                                    |
|--------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Discharge Violation (Sampling) | Exceedance of Categorical Average Permit Limitation (any amount) | Categorical SIU                                                | Infrequent or isolated<br>Notice of Exceedance<br>Notice of Violation                      |
|                                |                                                                  | Infrequent but Exceedance Magnitude > 110%                     | Notice of Violation<br>Conference<br>Administrative Order                                  |
|                                |                                                                  | Recurring Exceedance (No pattern evident)                      | Notice of Violation<br>Conference<br>Administrative Order                                  |
|                                |                                                                  | Recurring Exceedance (Pattern evident)                         | Notice of Violation<br>Conference<br>Administrative Order<br>Civil Litigation Referral     |
|                                |                                                                  | Recurring Exceedance (Pattern evident) & Triggers SNC Criteria | NOV & Citation: Penalty<br>Conference<br>Administrative Order<br>Civil Litigation Referral |
|                                | Exceedance of Instantaneous Limit (pH, Temp.)                    | Categorical &/or NonCategorical SIU                            | Infrequent or isolated<br>Notice of Exceedance<br>Notice of Violation                      |
|                                |                                                                  | Infrequent but Exceedance Magnitude > 110%                     | Notice of Violation<br>Conference<br>Administrative Order                                  |
|                                |                                                                  |                                                                |                                                                                            |
|                                |                                                                  |                                                                |                                                                                            |
|                                |                                                                  |                                                                |                                                                                            |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE           | NATURE OF NON-COMPLIANCE                                                                             | NATURE OF VIOLATION                                             | ENFORCEMENT RESPONSE(S)                                                                    |
|----------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Discharge Violation (Sampling)   | Exceedance of Instantaneous Limit (pH, Temp.)<br>Categorical &/or NonCategorical SIU                 | Recurring Exceedance (No pattern evident)                       | Notice of Violation<br>Conference<br>Administrative Order                                  |
|                                  |                                                                                                      | Recurring Exceedance (Pattern evident)                          | Notice of Violation<br>Conference<br>Administrative Order                                  |
|                                  |                                                                                                      | Recurring Exceedance (Pattern evident) & Triggers SNC Criteria  | NOV & Citation: Penalty<br>Conference<br>Administrative Order<br>Civil Litigation Referral |
| Inspection Violations (Observed) | Failure to properly operate or maintain Pretreatment Facility<br>Categorical &/or NonCategorical SIU | No violation of Pretreatment Limitations; infrequent & isolated | Notice of Noncompliance<br>Notice of Violation<br>Conference                               |
|                                  |                                                                                                      | Violation of Pretreatment Limitations; Infrequent & Isolated    | Notice of Noncompliance<br>Notice of Violation<br>Conference                               |
|                                  |                                                                                                      | No violation of Pretreatment Limitations; Recurring or pattern  | Notice of Violation<br>Conference                                                          |
|                                  |                                                                                                      | Violation of Pretreatment Limitations; Recurring or pattern     | Notice of Violation<br>Conference<br>Administrative Order<br>Civil Litigation Referral     |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE           | NATURE OF NON-COMPLIANCE                                                           | NATURE OF VIOLATION                                        | ENFORCEMENT RESPONSE(S)                                                                            |
|----------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Inspection Violations (Observed) | Wastestream is diluted in lieu of treatment<br>Categorical &/or NonCategorical SIU | Non-intentional or accidental                              | Notice of Noncompliance<br>Notice of Violation<br>Conference                                       |
|                                  |                                                                                    | Intentional                                                | Notice of Violation<br>Show Cause Order<br>Civil Litigation Referral                               |
|                                  | Entry Denial<br>Categorical &/or NonCategorical SIU                                | Based on Report from Field<br>Monitoring Crew or Inspector | Phone Call<br>Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order |
|                                  |                                                                                    |                                                            |                                                                                                    |
|                                  | Improper sampling procedure (Observed)<br>Categorical &/or NonCategorical SIU      | Based on Report from Field<br>Monitoring Crew              | Phone Call<br>Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order |
|                                  |                                                                                    | Self-Monitoring                                            | Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order               |



## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE           | NATURE OF NON-COMPLIANCE                                                                                                | NATURE OF VIOLATION    | ENFORCEMENT RESPONSE(S)                                                              |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------|
| Inspection Violations (Observed) | Inadequate recordkeeping<br>Categorical &/or NonCategorical SIU                                                         | Infrequent or isolated | Notice of Noncompliance<br>Notice of Violation<br>Conference                         |
|                                  |                                                                                                                         | Recurring or pattern   | Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order |
|                                  | Failure to report all self-monitoring results<br>in addition to SMR requirements<br>Categorical &/or NonCategorical SIU | Infrequent or isolated | Notice of Noncompliance<br>Notice of Violation<br>Conference                         |
|                                  |                                                                                                                         | Recurring or pattern   | Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order |
|                                  | Failure to meet compliance date(s)<br>Categorical &/or NonCategorical SIU                                               | Infrequent or isolated | Notice of Noncompliance<br>Notice of Violation<br>Conference                         |
|                                  |                                                                                                                         | Recurring or pattern   | Notice of Noncompliance<br>Notice of Violation<br>Conference<br>Administrative Order |
|                                  | Failure to inform of Authorized<br>Representative Change<br>Categorical &/or NonCategorical SIU                         |                        |                                                                                      |
|                                  |                                                                                                                         |                        |                                                                                      |

## ENFORCEMENT RESPONSE GUIDE

| TYPE OF NON-COMPLIANCE           | NATURE OF NON-COMPLIANCE                                                                      | NATURE OF VIOLATION                   | ENFORCEMENT RESPONSE(S)                                                         |
|----------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------|
| Inspection Violations (Observed) | Reporting false information<br>Categorical &/or NonCategorical SIU                            | SIU or SIU Employee:<br>Unintentional | Notice of Noncompliance<br>Notice of Violation & Citation                       |
|                                  |                                                                                               | SIU or SIU Employee: intentional      | Notice of Violation<br>Adminsitrative Order                                     |
|                                  | Tampering with Control Authority<br>Sampling Equipment<br>Categorical &/or NonCategorical SIU |                                       |                                                                                 |
|                                  |                                                                                               | SIU or SIU Employee:<br>Unintentional | Notice of Violation<br>Show Cause Order                                         |
|                                  |                                                                                               | SIU or SIU Employee: intentional      | Notice of Violation & Citation<br>Show Cause Order<br>Civil Litigation Refferal |
|                                  |                                                                                               |                                       |                                                                                 |



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**PREAMBLE**

WHEREAS the GREAT LAKES WATER AUTHORITY (the “GLWA”), a municipal authority and public body corporation organized and existing under and pursuant to the provisions of Act No. 233, Public Acts of Michigan, 1955, as amended (“Act 233”), for the purpose of establishing a regional SEWAGE DISPOSAL SYSTEM to operate, control, and improve the Sewage Disposal System leased from the City of Detroit;

WHEREAS the GLWA has been incorporated for the purpose of, among other things, acquiring, owning, leasing, improving, enlarging, extending, financing, refinancing, and operating a sewage disposal system, including stormwater collection and treatment system, or combination of such systems;

WHEREAS the GLWA promulgates these Rules and Regulations for the protection of the environment, the public health and safety by abating and preventing pollution through the regulation and control of the quantity and quality of sewage, industrial wastes, and other wastes admitted to or discharged into the sewerage systems, and sewage treatment facilities under the jurisdiction of the GLWA and enabling the GLWA to comply with all applicable state and federal laws required by the Federal Water Pollution Control Act, being 33U.S.C. §1251, et. seq.; the General Pretreatment Regulations for Existing and New Sources of Pollution (40 CFR 403); and the National Categorical Pretreatment Standards at 40 CFR §§ 405 – 471;

WHEREAS the GLWA seeks to create a uniform code for the regulation of wastes and wastewaters discharged into the collection system for all participating municipalities; Prevent the introduction of pollutants into the wastewater systems which will interfere with the operation of the system; contaminate the resulting sludge; would pose a hazard to the health or welfare and safety of people, their communities and to employees of the GLWA; Prevent the introduction of pollutants into the wastewater system which will pass inadequately treated, through the system, into receiving waters, the atmosphere, the environment or otherwise be incompatible with the system; Provide for the recovery of the costs from users of the wastewater collection and treatment system sufficient to administer regulatory activities and meet the costs of the operation, maintenance, improvement or replacement of the system;

WHEREAS the GLWA promulgates these Rules and Regulations to establish additional requirements and limitations for classes of wastewater originating from non-domestic sources, and those qualifying under one or more of the promulgated National Pretreatment Standards, establishes systems for authorizing and permitting wastewater discharges and the enforcement of the limitations and requirements stated herein.

NOW, THEREFORE, THE GREAT LAKES WATER AUTHORITY ENACTS THESE RULES AND REGULATIONS AS FOLLOWS IN CHAPTERS I - VIII

## CHAPTER I - DEFINITIONS

---

There are a number of regulatory phrases and terms which are used in these Rules and Regulations that warrant definition. The terms included in this Chapter apply to all successive chapters and rules that have been or may be developed by the Authority. Where applicable, the terms reference the applicable federal regulation. Terms that have not been listed and defined here have their standard and ordinary meaning.

The meaning of the terms used in these Rules shall be as follows:

**“Act”**, or **“Clean Water Act”** shall mean the Federal Water Pollution Control Act as amended by the Clean Water Act of 1977 (Pub. L. 95-217), 33 U.S.C. 1251, et seq. It establishes responsibilities of Federal, State, and local government, industry and the public to implement National Pretreatment Standards to control pollutants which pass through or interfere with treatment processes in Publicly Owned Treatment Works (POTWs) or which may contaminate sewage sludge.

**“Administrator”** shall mean the Administrator of the United States Environmental Protection Agency.

**“Authorized representative of Industrial User”** or **“Authorized Representative”** means (1) If the Industrial User is a corporation; (a) the president, vice-president, secretary, or treasurer of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (b) the manager of one or more manufacturing, production, or operation facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000.00) in second-quarter 1980 dollars, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures; or (2) If the Industrial User is a partnership or sole proprietorship: a general partner or proprietor respectively; or (3) if the Industrial User is a Federal, State or local government facility: a director or highest official appointed or designated to oversee the operation and performance of activities of the government facility, or their designee. The individual described in sub-paragraphs 1 through 3, above, may designate another duly-authorized representative if the authorization is in writing; the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for the environmental matters for the company; and the written authorization is submitted to the GLWA.

**“Baseline monitoring report”** or **“BMR”** shall mean the report containing information required by 40 CFR 403.12(b) from any Industrial Users subject to a Categorical Pretreatment Standard.

**“Best Management Practice Plan”** or (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b). BMPs include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

**“Biochemical oxygen demand”** (BOD) means the quantity of dissolved oxygen utilized in the biochemical

oxidation of organic matter under standard laboratory procedure five (5) days at twenty (20) degrees centigrade expressed in terms of mass and concentration (milligrams per liter (mg/l)) as measured by standard methods.

**“Board”** means the Board of the Great Lakes Water Authority.

**“Bypass”** means the intentional diversion of wastestreams from any portion of an Industrial User’s treatment facility.

**“Categorical Industrial User”** means an Industrial User subject to a categorical pretreatment standard or a categorical standard.

**“Categorical Pretreatment Standard or Categorical Standard”** means any regulation containing pollutant discharge limits promulgated by EPA in accordance with sections 307(b) and (c) of the Act (33 U.S.C. section 1317) that apply to a specific category of Industrial Users and that appear in 40 CFR Chapter I, Subchapter N, Parts 405-471.

**“Centralized Waste Treatment facility”** (CWT) means any facility that treats any hazardous or nonhazardous industrial waste received from off-site by tanker truck, trailer/roll-off bins, drums, barges, or any other forms of shipment including: a facility that treats industrial waste received exclusively from off-site; and a facility that treats industrial waste generated on-site as well as industrial waste received from off-site.

**“Chief Executive Officer”** means the Executive Director of the Great Lakes Water Authority, or his or her designee.

**“Code of Federal Regulations”** or **“CFR”** shall mean the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the United States Government.

**“Collection System”** shall mean the sewers, pump stations, force mains, air release valves, vacuum release valves, flow meters, sampling equipment, regulators, and other appurtenant equipment or devices used to convey sewage to the Waste Treatment Plant.

**“Combined Wastestream Formula”** shall mean the formulae contained in 40 CFR 403.6(e) for calculating alternative concentration limits or alternative mass limits where regulated wastewater is mixed prior to treatment with unregulated and diluting wastewater; and necessary for determining compliance with categorical pretreatment standards.

**“Control Authority”** means the Board of the Great Lakes Water Authority, upon being officially designated as such by the State of Michigan under the provisions of 40 CFR 403.11, and the persons included in the designation enumerated in Chapter II, Article I.

**“Cooling Water”** means the noncontact water discharged from any use, including but not limited to air conditioning, cooling or refrigeration, and whose only function is the exchange of heat.

**“Daily Maximum”** means the arithmetic average of all effluent samples for a pollutant collected during a 24-hour period used to represent a day.

**“Daily Maximum Limit”** means the maximum allowable discharge limit of a pollutant during a 24-hour period used to represent a day. Where Daily Maximum Limits are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where Daily Maximum Limits are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

**“Days”** means consecutive calendar days for the purpose of computing a period of time prescribed or allowed by these Rules.

**“Dental Industrial User”**, upon promulgation of final national categorical pretreatment standards, shall mean a source of wastewater to a publicly owned treatment works from a facility where the practice of Dentistry is performed.

**“Direct Discharge”** means the discharge of treated or untreated wastewater directly into the waters of the State of Michigan.

**“Discharger”** means a person who, directly or indirectly, with or without intent, contributes, causes, or permits wastewater to be discharged into the POTW by means of, but not limited to, pipes, conduits, pumping stations, ditches or tank trucks and all constructed devices and appliances appurtenant thereto.

**“Domestic Sewage”** means the liquid and water-carried waste and wastewater typically generated from humans or household operations which is discharged to, or otherwise enters, a treatment works from sanitary activities such as kitchens, bathrooms, lavatories and toilets.

**“Domestic Strength of Sewage”** means the pollutant and pollutant concentrations adopted by the GLWA Board for the purpose of representing waste and wastewater contributions from Domestic Sources for the Surcharge Program for High Strength Wastewater.

**“Domestic Source”** shall mean residential dwellings including single family and multifamily (regardless of size) from which only domestic sewage is discharged.

**“Environmental Remediation Wastewater”** means wastewater in the form of leachate or wastewaters from clean-up actions pursuant to CERCLA, or sites of leaking underground storage tanks which are discharged to and commingled with sewage and conveyed to the GLWA sewerage system.

**“Existing source”** shall mean any point source (i) whose operations commenced prior to the date of proposal by the USEPA of any applicable categorical pretreatment standard in the Federal Register, or who (ii) discharges wastewater to the POTW as of the effective date of these Rules.

**“Fats, Oils and Greases (FOG)”** means organic polar and non-polar compounds. Polar compounds are derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules. Organic non-polar fraction of oil and grease (petroleum hydrocarbons) is identified as Silica gel treated n-hexane extractable materials (SGT-HEM) in the pretreatment standards.

**“Great Lakes Water Authority”** or GLWA means the Board of the Great Lakes Water Authority or Chief Executive Officer of the Great Lakes Water Authority.

**“Great Lakes Water Authority (GLWA) Member Community”** means any county, township, city or



village that signed or becomes a signatory to the articles of incorporation of the Great Lakes Water Authority.

**“Hazardous Waste”** means any industrial waste, production residue, sewage or sludge which is classified as a hazardous waste pursuant to 40 CFR 261.

**“High Strength Wastewater”** includes any wastewater discharged from an Industrial User in excess of the Domestic Strength of Sewage adopted by the GLWA Board, and for which a Pollutant Surcharge has been developed and adopted.

**“Michigan Department of Environmental Quality”** or **“MDEQ”** means the Agency of the State of Michigan responsible for Environmental Protection and designated by US EPA as the Approval Authority.

**“Indirect discharge”** or discharge means the discharge or the introduction of pollutants into the POTW from any non-domestic source regulated under 33 U.S.C. § 1317(b), (c) or (d).

**“Industrial User”** or **“IU”** means a person who conducts any industrial, manufacturing, agricultural, trade or business process or who conducts the development, recovery or processing of natural resources; and is a source of indirect discharge.

**“Industrial Waste”** means the liquid and water-carried wastes and all solid, liquid or gaseous waste components thereof, resulting from any commercial, industrial, manufacturing, agricultural, trade or business operation or process or from the development, recovery or processing of natural resources, but does not include Domestic sewage.

**“Industrial Waste Control Group”** or **“IWC”** means the organizational group responsible for administration, implementation and enforcement of the Industrial Pretreatment Program, Surcharge Program, Hauled Waste Program and similar regulatory programs on behalf of the GLWA.

**“Industrial Waste Control Operations Manager”** means the Operations Manager of Industrial Waste of the Great Lakes Water Authority, and authorized staff of the Industrial Waste Control Division.

**“Infiltration”** means water entering a sewer system, including sewer service connections from the ground through such means as, but not limited to, defective pipes, porous pipes, pipe joints, connections or manhole walls. Infiltration does not include, and is distinguished from, inflow.

**“Inflow”** means water discharged into a sewer system, including service connections, from such sources as, but not limited to, roof leaders, cellars, yards, and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, manhole covers, cross connections from storm sewers and combined sewers, catch-basins, stormwater, surface run-off, street wash-waters, or drainage and river inflow. Inflow does not include, and is distinguished from, infiltration.

**“Interference”** means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both: (i) inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and (ii) therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or

permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

**“Monthly Average”** means the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.

**“May”** means permissive.

**“Minor User”** means any Industrial User who does not meet the definition of a Significant Industrial User, or qualify for a Wastewater Discharge Permit under the Industrial Pretreatment Program.

**“National Pretreatment Standard”, “Pretreatment Standard” or “Standard”** means any regulation containing pollutant discharge limits promulgated by the EPA in accordance with section 307 (b) and (c) of the Act, which applies to Industrial Users. This term includes prohibitive discharge limits established pursuant to 40 CFR 403.5.

**“National Pollutant Discharge Elimination System” or “NPDES”** means the permit and regulation system governing direct discharges into navigable waters administered by the MDEQ and USEPA.

**“New source”** means any building, structure, facility or installation from which there is or may be the discharge of pollutants, the construction of which is commenced after the publication of proposed regulations prescribing a standard of performance under section 306 of the Act which will be applicable to such source if such standard is thereafter promulgated in accordance with section 306 of the Act.

**“Non-detect”** means the achievable laboratory testing quantification level for ascertaining the amount of a pollutant in a wastestream using analytical methods specified in or approved under 40 CFR 136, or pursuant to rules adopted by the MDEQ or the EPA.

**“Non-significant Categorical Industrial User”** means an Industrial User who never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the Control Authority determines that: (i) The Industrial User, prior to the Control Authority’s finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements; and (ii) The Industrial User annually submits the certification statement required in § 403.12(q) together with any additional information necessary to support the certification statement; and (iii) The Industrial User never discharges any untreated concentrated wastewater.

**“North American Industrial Classification System or NAICS”** means a standard used by Federal statistical agencies to classify business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy, as developed by the Office of Management and Budget (OMB), and adopted in 1997 to replace the Standard Industrial Classification (SIC) system.

**“Rules and regulations”** means the Sewage and Waste Control Rules and Regulations of the GLWA and

any rules, regulations and orders adopted by the Board pertaining thereto.

**“Pass-through”** means a discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW’s NPDES permit (including an increase in the magnitude or duration of a violation).

**“Person”** means any individual, partnership, co-partnership, firm, company, corporation, association, joint venture, joint stock company, sole proprietorship, trust, estate, co-partnership, unit of government, school authority, or private corporation organized or existing under the laws of the State of Michigan or any other state or country.

**“pH”** means the intensity of the acid or base condition of a solution, calculated by taking the negative base-ten logarithm of the hydrogen ion activity. Activity is deemed to be equal to concentration in moles per liter.

**“Pollution”** means the man-made or man induced alteration of the chemical, physical, biological and radiological integrity of water.

**“Pollutant Strength Level”** means the concentrations of BOD, TSS, Phosphorus and FOG determined to be present in the wastewater discharged from an Industrial User, and used to calculate the Surcharge for the High Strength Wastewater contributed by the Industrial User.

**“Phosphorus”** means the total concentration of all forms of organic and inorganic phosphorus compounds as measured by standard methods, expressed in mg/l.

**“Pretreatment”** means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to, or in lieu of, introducing such pollutants into a POTW. This reduction or alteration can be obtained by physical, chemical or biological processes; by process changes; or by other means, except by diluting the concentration of pollutants unless allowed by an applicable Pretreatment Standard.

**“Pretreatment requirements”** means any substantive or procedural requirement related to pretreatment, other than a National Pretreatment Standard, imposed on an Industrial User.

**“Process Wastewater”** means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product or waste product.

**“Publicly Owned Treatment Works (POTW)”** means a treatment works as defined by 33 U.S.C. 1292(2)(A) which is owned by a state or municipality, as defined in 33 U.S.C. 1362, including: Any devices and systems used in the storage, treatment, recycling, or reclamation of municipal sewage or industrial wastes of a liquid nature; or sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant; or the municipality, as defined in 33 U.S.C. 1362, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

**“Regulatory Activities”** include all programs and activities conducted by the Industrial Waste Control

group to meet its obligations under the NPDES Permit MI 0022802 and the Clean Water Act, and any rules adopted by the Great Lakes Water Authority Board, including, but not limited to, an Industrial Pretreatment Program; Surcharge Program; Hauled Waste Program, Groundwater and Special Discharge Program.

**“Septage, or Septage Waste”** means Domestic Sewage generated by sources without a direct connection to the sewerage system, including untreated and partially treated sewage solids, liquids, and sludge of human or domestic origin that is removed from a wastewater system for disposal through truck or other hauling.

**“Sewerage System”** means sewers, intercepting sewers, pipes or conduits, pumping stations, force mains, constructed drainage ditches, surface water intercepting ditches, and all other constructions, devices and appliances appurtenant thereto used for collecting or conducting sewage, industrial waste or other wastes to a point of treatment or ultimate disposal.

**“Significant Noncompliance”** means any Significant Industrial User who violates one (1) or more of the criteria of 40 CFR 403.8(f)(2)(viii)(A)-(H); or any Industrial User who violates one (1) or more of the criteria of 40 CFR 403.8(f)(2)(viii)(C), (D) or (H). (See Article XIII).

**“Significant Industrial User”** means any User who discharges to the POTW and which:

- (1) Has an average discharge flow of twenty-five thousand (25,000) gallons per day or more of process wastewater excluding sanitary, boiler blowdown, and noncontact cooling water; or
- (2) Has discharges subject to the national categorical pretreatment standards; or
- (3) Requires pretreatment to comply with the specific pollutant limitations of these Rules; or
- (4) Has in its discharge, toxic pollutants as defined pursuant to 33 U.S.C. 1317, or other applicable federal and state laws or regulations, that are in concentrations and volumes which are subject to regulation under these Rules as determined by the Control Authority; or
- (5) Is required to obtain a permit for the treatment, storage or disposal of hazardous waste pursuant to regulations adopted by this state or adopted under the Federal Solid Waste Disposal Act, as amended by the Federal Resource Conservation and Recovery Act, as amended, and may or does contribute or allow waste or wastewater into the POTW including, but not limited to, leachate or runoff; or
- (6) Is found by the GLWA to have a reasonable potential for adverse effect, either singly or in combination with other contributing industries, on the POTW operation, the quality of sludge, the POTW's effluent quality, or air emission generated by the POTW.

**“Sludge”** means liquid and precipitated or suspended solid material therein contained, generated from the treatment of water, sewage, industrial waste or other wastes.

**“Slug Discharge”** means any discharge of a non-routine, episodic nature, including, but not limited to, an accidental spill or non-customary batch Discharge, which has a reasonable potential to cause interference, pass-through, or in any other way to cause a violation of the GLWA's regulations, local limits or Permit conditions.

**“Standard Industrial Classification (SIC)”** means a classification pursuant to the Standard Industrial

Classification Manual issued by the Executive Office of the President, Office of Management and Budget, 1987, as amended.

**“Standard Methods”** means the *Standard Methods for the Examination of Water and Wastewater*, published by the American Public Health Association, and the version(s) approved for use by 40 CFR 136.

**“Storm Water”** means any waste or wastewater occurring during or following any form of natural precipitation and resulting therefrom.

**“Surcharge or Pollutant Surcharge”** means a fee representing the cost of service determined by the GLWA for each pollutant comprising Domestic Sewage, expressed in Dollars per pound (\$/lb.).

**“Suspended Solids (total)”** means the total suspended matter which floats on the surface of, or is suspended in, water, wastewater or other liquids, and is removable by laboratory filtration or as measured by standard methods.

**“Total Phenolic Compounds”** means the sum of the individual analytical results for each of the following phenolic compounds during any single sampling event: 2-Chlorophenol, 4-Chlorophenol, 4-Chloro-3-methylphenol, 2,4-Dichlorophenol, 2,4-Dinitrophenol, 3-Methylphenol (o-cresol) and 4-Methylphenol (p-cresol).

**“Total PCB”** (or Total Poly-Chlorinated Biphenyls) means the sum of the individual analytical results for each of the following PCB aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260 during any single sampling event with any aroclor result less than the quantification level, or non-detect, being numerically treated as zero.

**“Toxic Pollutant”** means any pollutant or combination of pollutants designated as toxic in regulations promulgated by the Administrator of the U.S. Environmental Protection Agency under the provisions of the Clean Water Act, being 33 U.S.C. § 1317, or included in the Critical Materials Register promulgated by the MDEQ, or by other federal or state laws, rules or regulations.

**“Upset”** means an exceptional incident in which there is unintentional and temporary noncompliance with limits imposed under these Rules or with national categorical pretreatment standards due to factors beyond the reasonable control of the Industrial User but does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

**“Users”** means Industrial Users and Minor Users.

**“United States Environmental Protection Agency”** or **“USEPA”** means the Environmental Protection Agency of the United States Government and its designated agents.

**“Wastewater Treatment Facilities”** means any method, construction, device, arrangement or appliance appurtenant thereto, installed for the purpose of treating, neutralizing, stabilizing, disinfecting, or disposing of sewage, industrial wastes or other wastes, or for the recovery of by-products from such sewage, industrial waste or other wastes and includes sewers, pipes and other conveyances if they convey wastewater to a POTW.

## GLWA Rules (As Approved by Board)

**“Waters”** means all accumulations of water, surface and underground, natural or artificial, public or private or parts thereof, which are wholly or partially under the jurisdiction of the GLWA or which flow through the territory of the GLWA.

**“Wastewater”** or **“Sewage”** means the liquid and water-carried wastes of dwellings, commercial buildings, industrial facilities, and institutions, whether treated or untreated, which are contributed to or permitted to enter the POTW including infiltration and inflow water, storm water and cooling water.

**“Wastewater Discharge Permits”** mean a control mechanism issued by the Control Authority in accordance with these Rules specifying the Pretreatment Standards and Requirements, pollutant discharge limitations, reporting and monitoring requirements, and other conditions under which an Industrial User may discharge to the sewerage system.

**“Wholesale Sewer Contract Customer”** means any county, township, city or village that has contracted for sewerage services with the Great Lakes Water Authority.

For purposes of these Rules, the following acronyms shall have the meanings designated by this section:

| Term | Full Term Description           | Term  | Full Term Description                                                   |
|------|---------------------------------|-------|-------------------------------------------------------------------------|
| ALJ  | Administrative Law Judge        | MDEQ  | Michigan Department of Environmental Quality                            |
| BMP  | Best Management Practice Plan   |       |                                                                         |
| BMR  | Baseline monitoring report      | mg/l  | milligrams per liter                                                    |
| BOD  | Biochemical Oxygen Demand       | NPDES | National Pollutant Discharge Elimination System                         |
| CIU  | Categorical Industrial User     |       |                                                                         |
| CFR  | Code of Federal Regulations     | POTW  | Publicly Owned Treatment Works                                          |
| EPA  | Environmental Protection Agency | RCRA  | Resource Conservation and Recovery Act, being 42 U.S.C. § 6901 et seq.) |
| FOG  | Fats, Oils and Grease           | SDP   | Special Discharge Permit                                                |
| GLWA | Great Lakes Water Authority     | SIU   | Significant Industrial User                                             |
| HIW  | Hauled-in Waste                 | SNC   | Significant Noncompliance                                               |
| IWC  | Industrial Waste Control        | SWDA  | Solid Waste Disposal Act, being 42 U.S.C. § 6901 et seq.                |
| IU   | Industrial User                 | TSS   | Total suspended solids                                                  |
|      |                                 | ug/l  | Micrograms per liter                                                    |

**CHAPTER II – RULES GOVERNING IMPLEMENTATION,  
ADMINISTRATION AND ENFORCEMENT OF INDUSTRIAL  
PRETREATMENT PROGRAM REQUIREMENTS**

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The GLWA has adopted an Industrial Pretreatment Program and received approval from the State of Michigan as a Control Authority to implement, administer and enforce the program within the GLWA Service Area. The following rules have been adopted to describe a uniform means of carrying out the duties and obligations placed upon the GLWA as a Control Authority.

**Article I        CONTROL AUTHORITY RESPONSIBILITIES**

The Board of the GLWA assigns and authorizes the Industrial Waste Control Operations Manager as the person responsible for carrying out the administration, duties, and enforcement responsibilities as the Control Authority, consistent with the intent of these rules.

**Article II        GENERAL SEWER USE REQUIREMENTS**

Section II-201. Unlawful Discharges

It shall be unlawful for any person to discharge commercial waste and industrial waste or wastewater from non-domestic sources, directly or indirectly, into the sewerage system, without authorization from the GLWA; or to discharge any wastewater in violation of the terms and conditions contained in these rules or contrary to any discharge authorization granted by the GLWA.

Section II-202. Lawful Discharges

It is the duty of every person seeking to lawfully discharge sewage, industrial wastes, or other wastes or wastewater of any kind directly or indirectly, into the sewerage system to conform to the criteria or effluent quality standards established and/or adopted hereunder, and to seek authorization from the GLWA in accordance with these rules; to comply with these rules, as amended from time to time; and to provide notice to the GLWA of any substantial changes in the volume, quality, or character of their discharge.

- a) Users who were previously authorized, whether by permit or a letter of authorization, by the Detroit Water and Sewerage Department in its role as Control Authority, and have and are complying with such authorization, shall be deemed authorized by the GLWA until (i) a subsequent survey application, permit application or Baseline Monitoring report is filed with or requested by, the GLWA; and (ii) a subsequent permit or a letter of authorization is issued by GLWA.

Section II-203. General Pollutant Prohibitions

No User shall discharge or cause to be discharged into the POTW, directly or indirectly, any pollutant or wastewater which will cause interference or pass through. These general discharge prohibitions shall apply to all Users of the POTW whether or not the User is subject to national categorical pretreatment standards or to any other federal, state, or local pretreatment standards or requirements. In addition, it shall be

unlawful for any User to discharge into the POTW:

- a) Any liquid, solid or gas, which by reason of its nature or quantity, is sufficient either alone or by interaction with other substances to create a fire or explosion hazard or to be injurious in any other way to persons, to the POTW, or to the operations of the POTW. Pollutants, which create a fire or explosion hazard in a POTW, include, but are not limited to, wastestreams with a closed cup flash point of less than 140°F or 60°C using the test methods specified in 40 CFR 261.21; or
- b) Any solid or viscous substance in concentrations or quantities, which are sufficient to cause obstruction to the flow in a sewer or other encumbrances to the operation of the POTW, including, but not limited to, grease, animal guts or tissues, bones, hair, hides or fleshing, entrails, whole blood, feathers, ashes, cinders, sand, cement, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, strings, fibers, spent grains, spent hops, wastepaper, wood, plastics, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud or glass grinding or polishing wastes, or tumbling and deburring stones; or
- c) Any wastewater having a pH of less than 5.0 units or greater than 11.5 units; or
- d) Any wastewater containing petroleum oil, non-biodegradable cutting oil, products of mineral oil origin, or toxic pollutants in sufficient concentration or quantity either singly or by interaction with other pollutants to cause interference, or pass through, or constitute a hazard to humans or animals; or
- e) Any liquid, gas, solid or form of energy, which either singly or by interaction with other waste is sufficient to create toxic gas, vapor, or fumes within the POTW in quantities that may cause acute worker health and safety problems, or may cause a public nuisance or hazard to life, or are sufficient to prevent entry into the sewers for their maintenance and repair; or
- f) Any noxious or malodorous liquids, gases, solids, or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or a hazard to life, or to prevent entry into the sewers for maintenance or repair; or
- g) Any substance which is sufficient to cause the POTW's effluent or any other product of the POTW, such as residue, sludge, or scum to be unsuitable for reclamation processing where the POTW is pursuing a reuse and reclamation program. In no case shall a substance discharged into the POTW cause the POTW to be in noncompliance with sludge use or disposal criteria guidelines or regulations developed under 33 U.S.C. 1345, with any criteria, guidelines, or developed and promulgated regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Federal Clean Air Act, the Federal Toxic Substances Control Act, or with state criteria applicable to the sludge management method being used; or
- h) Any trucked or hauled pollutants, except at discharge points designated by the POTW and authorized by the Control Authority (see Chapter IV); or
- i) Any substance which will cause the POTW to violate the National Pollutant Discharge Elimination



System permit; or

- j) Any discharge having a color uncharacteristic of the wastewater being discharged; or
- k) Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into a public sewer which exceeds 150°F or which will cause the influent at the wastewater treatment plant to rise above 104°F (40°C); or
- l) Any pollutant discharge which constitutes a slug; or
- m) Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established in compliance with applicable federal or state regulations; or
- n) Any floating fats, oil or grease which are sufficient to create an obstruction in the collection system, cause interference with the collection system or pass through the POTW; or
- o) Any solid materials having a specific gravity greater than 1.2 or a cross section dimension of one-half (½) inch or greater which are sufficient to cause interference with the POTW; or
- p) Wastewater causing a reading on an explosion hazard meter at the point of discharge into the POTW, or at any point in the POTW, of more than 20 percent (20%) of the Lower Explosive Limit of the meter; or
- q) Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a Discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.

Section II-204. Specific Pollutant Discharge Limitations

- a) National Categorical Pretreatment Standards. All Industrial Users shall comply with the applicable National Categorical Pretreatment Standards and requirements promulgated pursuant to the Act as set forth in 40 CFR Subchapter N, Effluent Guidelines and Standards, which are hereby incorporated by reference and with all other applicable standards and requirements. Affected dischargers shall comply with applicable reporting requirements under 40 CFR Part 403 and as established by the Control Authority. The National Categorical Pretreatment Standards that have been promulgated as of the effective date of this section are delineated in Appendix A.
- b) Local Pollutant Discharge Limitations. The GLWA has developed specific Local Pollutant Discharge Limitations to protect the sewage disposal system from (pollutant) interference, inhibition or pass-through, and worker health & safety in accordance with 40 CFR 403.5(c); which are to be deemed as Pretreatment Standards pursuant to section 307(d) of the Act. The following specific Local Pollutant Discharge Limitations are adopted, and shall be enforced by the Control Authority:

**GLWA Rules (As Approved by Board)**

**1) Compatible Pollutants:**

| Pollutant Name & Symbol         | Daily Maximum Limitation (mg/l) |
|---------------------------------|---------------------------------|
| Biochemical Oxygen Demand (BOD) | 10,000                          |
| Total Suspended Solids (TSS)    | 10,000                          |
| Fats, Oils, and Grease (FOG)    | 1,500                           |
| Total Phosphorus (P)            | 150                             |

**2) Metals**

| Pollutant Name & Symbol | Daily Maximum Limitation (mg/l) |
|-------------------------|---------------------------------|
| Arsenic (As)            | 1.0                             |
| Cadmium (Cd)            | 3.0                             |
| Chromium (Cr)           | 25.0                            |
| Copper (Cu)             | 7.0                             |
| Cyanide, Total (CNT)    | 4.0                             |
| Lead (Pb)               | 1.0                             |
| Mercury (Hg)            | 0.01                            |
| Nickel (Ni)             | 5.0                             |
| Silver (Ag)             | 1.0                             |
| Zinc (Zn)               | 12.0                            |

**3) Organic Pollutants**

| Pollutant Name & Symbol | Daily Maximum Limitation (mg/l) |
|-------------------------|---------------------------------|
| PCB, Total              | Non-Detect                      |

**4) Phenolic Compounds**

- i) The limitation for Total Phenolic Compounds shall be 1 mg/l using the 4AAP method.
- ii) A Significant Industrial User may elect, in lieu of the limit for Total Phenolic Compounds specified in sub-paragraph i above, to substitute the specific limitations for the individual eight (8) phenolic compounds identified in the following table:

| Pollutant Name & Symbol              | Daily Maximum Limitation (mg/l) |
|--------------------------------------|---------------------------------|
| 2-Chlorophenol                       | 8.0                             |
| 4-Chlorophenol                       | 8.0                             |
| 4-Chloro-3-methylphenol              | 10.0                            |
| 2,4-Dichlorophenol                   | 15.0                            |
| 2,4-Dinitrophenol                    | 30                              |
| 3-Methylphenol and/or 4-Methylphenol | 40.0                            |
| Phenol                               | 86                              |

## GLWA Rules (As Approved by Board)

Upon written election, the wastewater discharge permit shall be modified to incorporate these substituted parameters and a Significant Industrial User shall be responsible for monitoring and reporting compliance with these parameters.

- c) **Non-Detectable Limitations.** For any pollutant parameter which has a Local Pollutant Discharge Limitation of “Non-detect”, a User will be in violation of the limitation when the measurement result exceeds by any magnitude the method detection level of the pollutant, using analytical methods authorized under 40 CFR 136, unless a higher level is appropriate because of demonstrated sample interference.

- 1) Total PCB shall not be discharged at detectable levels, based upon US EPA Method 608, and the quantification level shall not exceed 0.2 ugms/l, unless a higher level is appropriate because of demonstrated sample interference.

An Industrial User may develop and implement a Best Management Practice Plan in accordance with Section II-1006 to demonstrate compliance with a Non-Detect local pollutant discharge limitation

- d) **Applicability of most stringent limitation.** Where a National Categorical Pretreatment Standard includes a pollutant parameter that also has a Local Pollutant Discharge Limitation, the GLWA shall apply the most stringent Daily Maximum limitation for that pollutant parameter in a permit issued to the discharger. Where a 4-day, monthly or 30-day limitation contained in a National Categorical Pretreatment Standard is greater than the Local Pollutant Discharge Limitation Daily Maximum limitation, the GLWA shall apply the more stringent value as the applicable average.
- e) **Development of Pollutant Discharge Limitations.** The GLWA may periodically review and re-evaluate new or existing wastewater pollutant discharge limitations in accordance with 40 CFR 403.5(c). The GLWA reserves the right to establish additional or more stringent limitations or requirements on discharges to the POTW; which shall be adopted by the Board in accordance with Act 233.
- f) **Development of Pollutant Concentration and Mass limits.** When limits in a categorical pretreatment standard are expressed only in terms of mass of pollutants per unit of production, the Control Authority may convert the limits to equivalent limitations expressed either as mass of pollutant discharged per day or effluent concentration for purposes of calculating effluent limitations applicable to individual Industrial Users. Equivalent limitations shall be calculated in accordance with Sections 40 CFR 403.6(c)(3) and/or 40 CFR 6(c)(4) and shall be deemed pretreatment standards for the purposes of 33 U.S.C. 1317(d) and of these rules. Industrial Users will be required to comply with the equivalent limitations in lieu of the promulgated categorical standards from which the equivalent limitations were derived.

### Section II-205. Net/Gross Determinations

An Industrial User, subject to a Categorical Pretreatment Standard may obtain a net/gross adjustment to a Categorical Pretreatment Standard in accordance with the following paragraphs of this Section.

- a) Categorical Pretreatment Standards may be adjusted to reflect the presence of pollutants in the

## GLWA Rules (As Approved by Board)

Industrial User's intake water. Any Industrial User wishing to obtain credit for intake pollutants must make application to the Control Authority. Upon request of the Industrial User, the applicable Standard will be calculated on a "net" basis (i.e., adjusted to reflect credit for pollutants in the intake water) if the requirements of paragraph (2) of this Section are met.

b) Criteria.

- 1) Either (i) the applicable Categorical Pretreatment Standards contained in 40 CFR subchapter N specifically provide that they shall be applied on a net basis; or (ii) the Industrial User demonstrates that the control system it proposes or uses to meet applicable categorical Pretreatment Standards would, if properly installed and operated, meet the Standards in the absence of pollutants in the intake waters.
- 2) Credit for generic pollutants such as biochemical oxygen demand (BOD), total suspended solids (TSS), and oil and grease should not be granted unless the Industrial User demonstrates that the constituents of the generic measure in the Industrial User's effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere.
- 3) Credit shall be granted only to the extent necessary to meet the applicable Categorical Pretreatment Standard(s), up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine eligibility for credits and compliance with Standard(s) adjusted under this Section.
- 4) Credit shall be granted only if the Industrial User demonstrates that the intake water is drawn from the same body of water as that into which the POTW discharges. The Control Authority may waive this requirement if it finds that no environmental degradation will result.

### Section II-206. Prohibition of Dilution

Except where expressly authorized to do so by an applicable Pretreatment Standard or Requirement, a User cannot increase the use of process water, or in any other way attempt to dilute prior to discharge as a partial or complete substitute for adequate pretreatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable Pretreatment Standard or requirement. The Control Authority may impose mass limitations on Industrial Users who are using dilution to meet applicable Pretreatment Standards or Requirements, or in other cases when the imposition of mass limitations is appropriate.

## **Article III     PRETREATMENT OF WASTEWATER**

### Section II-301. Pretreatment Facilities

- a) Industrial Users shall provide wastewater treatment facilities as necessary to comply with these rules and shall achieve compliance with all Categorical Pretreatment Standards, Local Pollutant Discharge Limitations, and other requirements of these rules within the time limitations specified by EPA, the State, or these rules. Any facilities necessary for compliance shall be provided, operated, and

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maintained at the Industrial User's expense. Detailed plans describing such facilities and operating procedures shall be submitted to the Control Authority for review, before such facilities are constructed. The Industrial User shall obtain any plan approvals required from any GLWA member community or Wholesale Sewer Contract Customer prior to submitting them to the Control Authority for review. The review of such plans and operating procedures shall in no way relieve the Industrial User from the responsibility of modifying such facilities as necessary to produce a discharge that will meet any wastewater discharge permit, or necessary to comply with these rules.

- b) Additional Pretreatment Measures - Whenever deemed necessary, the Control Authority may require Industrial Users through written notice, to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage wastestreams from industrial wastestreams, and such other conditions as may be necessary to protect the POTW and/or to determine the Industrial User's compliance with the requirements of these rules. This written notice shall state the reasons for the restriction and be incorporated into an individual wastewater discharge permit, or equivalent control mechanism.
- c) The Chief Executive Officer, upon recommendation from the Control Authority, may require any person discharging into the POTW to install and maintain, on their property and at their expense, a suitable storage and flow-control facility to ensure equalization of flow. Before such action is taken, a written notice stating the reasons for the requirements shall be given to the User and incorporated into an individual wastewater discharge permit or equivalent control mechanism. An individual wastewater discharge permit, or equivalent control mechanism, may be issued solely for flow equalization.

### Section II-302. Pretreatment Protection Requirements

- a) Protection from Flammable and Combustible Substances - All Users who discharge wastewater containing a flammable and combustible substance shall install, operate and maintain a combustible gas monitoring system acceptable to the Control Authority which provides a method of early detection and recording of any discharge of a flammable or combustible substance so that preventive measures can be taken to avoid loss of life, damage to the sewerage system, and/or damage to public and/or private property.
  - 1) Flammable and combustible substances include, but are not limited to, gasoline, benzene, naptha, solvents, fuel oil; or any other liquid, solid, or gas that would cause or tend to cause flammable or explosive conditions to result in the sewerage system.
  - 2) Applicability: Petroleum refineries, gasoline storage and transfer facilities, and chemical manufacturing plants having a discharge of 25,000 gallons or more per day of process wastewater per day shall be required to submit a plan and schedule to install and implement a combustible gas monitoring system, within ninety (90) days, and complete implementation of the plan and schedule within 6 months of these rules adoption or upon commencement of discharge,
  - 3) The Control Authority may issue written notice to any User requiring the installation of a

combustible gas monitoring system upon a finding of 15% or greater of the Lower Explosive Level (LEL) from the User's discharge to the POTW.

- 4) Specific requirements for a combustible gas monitoring system shall be included by the Control Authority in a Significant Industrial Users's Wastewater Discharge Permit, and include the following basic requirements:
  - i. The system shall be continuous and fixed (permanent rather than portable) and shall be installed near the company's approved monitoring location (where applicable).
  - ii. The system shall have an indicator as well as an automatic continuous recorder capable of maintaining a permanent record of readings (i.e., chart recorder).
  - iii. The system shall be equipped with a two-stage alarm system that is adjustable. The upper alarm level must be set at 20% LEL (Lower Explosive Limit).
  - iv. The system shall be calibrated for methane detection.
  - v. The control unit for the combustible gas detection meter should be located where the alarm will be heard and acted upon promptly (i.e., control room)
- b) pH Monitoring Plan and Monitoring Requirement. All Significant Industrial Users, as specified below, who process acidic and/or caustic wastes and wastewaters; or whose pH is adjusted on-site, whether done for operational or treatment purposes; shall (i) develop an approvable pH Monitoring plan, and (ii) install appropriate pH monitoring and recording devices.
  - 1) pH Monitoring Plan – In accordance with sub-paragraph 2) below, a pH monitoring Plan shall be provided within 90 days and complete implementation of the plan and schedule within 6 months of the adoption of these rules or included with a new permit application or Baseline Monitoring Report, which shall include the following:
    - i. A description of the location of the pH monitor(s)
    - ii. Equipment specifications identifying the manufacturer & model of the (a) pH meter; (b) pH probe; (c) pH transmitter (if applicable); and (d) the pH Recorder (chart, electronic, other)
    - iii. Maintenance procedures to be used for cleaning the pH monitoring system used; including the frequency of cleaning. A step by step description of the calibration procedure used shall be maintained by the SIU
    - iv. Calibration procedure information including (a) whether the probe can or cannot be removed for calibration; (b) whether the direct or indirect method is used for calibration; (c) whether the pH meter is capable of temperature compensation; (d) the pH buffers (reagents) used; and (e) the frequency of meter calibration, with weekly (as a minimum)
    - v. All records shall be retained for a minimum of three years, and shall be made available to the Control Authority's representative upon request. A Summary of records shall be

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provided with the Six Month Report to demonstrate compliance during the period. This may be submitted as a hard-copy or in electronic form.

- 2) pH Monitoring - shall be provided by all Significant Industrial Users as follows:
  - i. The following Significant Industrial Users will provide a pH Monitoring Plan addressing continuous monitoring for pH consistent with US EPA method 150.2 using appropriate pH monitoring and recording devices:
    - a. All SIUs classified as a Centralized Waste Treatment facilities in accordance with 40 CFR 437;
    - b. All SIUs who discharge 25,000 gpd or more of wastewater and who process acidic and/or caustic wastes and wastewaters; or whose pH is adjusted on-site, whether done for operational or treatment purposes.
  - ii. Significant Industrial Users who discharge less than 25,000 gpd of wastewater will provide a pH Monitoring Plan and monitor for pH using appropriate pH monitoring and recording devices, which are representative of the period of discharge.
  - iii. The Control Authority may require any User to install pH monitoring upon finding pH levels may be below 5.0 or greater than 11.5, and by serving written notice to the User.
- 3) The pH monitoring Plan shall be acknowledged within the wastewater discharge permit for the SIU. The following criteria shall also be included in the permit:
  - i. No individual excursion from the range of pH values shall exceed 15 minutes.
  - ii. Where continuous pH monitoring is used, the maximum and minimum pH readings will be reported. Regardless of the number of pH measurements recorded for each day, only one violation per day shall be determined.
  - iii. A Summary of pH monitoring records shall be provided with the Six Month Report to demonstrate compliance during the period. This may be submitted as a hard-copy or in electronic form.

### Section II-303. Protection from Accidental Discharges

- a) All Users shall provide protection from accidental discharge, spill or slug discharge of materials prohibited by these rules, contained in any raw materials, chemicals and/or wastes kept on the premises.
- b) Users shall develop detailed plans against accidental discharge and/or spill discharge, and construct facilities, develop and implement measures reasonably necessary to avoid loss of life, damage to the sewerage system, and/or damage to public and/or private property. These shall be implemented, provided, and maintained at the owner's or User's cost or expense.
- c) At a minimum, plans against accidental discharge and/or spill discharge will be required when prohibited materials or substances are kept on the premises in a form which could readily be carried into the POTW; constitute a concentration of five (5%) percent or greater in the raw material, chemical

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solution or waste material; or are stored in volumes of more than fifty-five (55) gallons. Such plans shall include the following information:

- 1) Description of facilities and operating procedures to be implemented to provide protection against such accidental discharge, spill or slug discharge. Such facilities and measures to prevent and abate these discharges shall be implemented, provided, and maintained at the owner's or User's cost or expense.
  - 2) Provide the approximate average and maximum quantities of such prohibited materials or substances kept on the premises in the form of raw materials; chemicals and/or waste therefrom and the containment capacity for each.
  - 3) Identify facility contacts responsible for implementation and keeping the plan current.
  - 4) Include notification procedures and post such requirements advising employees whom to contact in the event of any accidental, spill or slug discharge.
  - 5) Include information on the secondary containment capacity available and the capacity available for containing rainfall or freeboard. Supporting calculations shall be maintained by the User and made available to the Control Authority upon request.
  - 6) Include a certification statement signed by the facility's authorized representative.
- d) Significant Industrial Users shall develop plans to control slug discharges, as defined by 40 CFR § 403.8(f)(2)(v). The Control Authority shall evaluate whether any Significant Industrial User is required to develop, modify or revise a slug discharge plan at a frequency of at least once every two (2) years.
- e) Existing Users who are required to develop any plan under sub-section b and/or c shall complete and submit such a plan within sixty (60) days of the effective date of these rules. Users who have previously filed such plans are not required to resubmit these plans unless the information has been revised or changed. New Users shall submit plans under sub-section b and/or c prior to the time they commence discharging.
- f) The User shall promptly notify the Control Authority of changes or modifications to the plan including, but not limited to, a change in the contact person(s), or substance inventory.
- g) The Control Authority shall include as a requirement in a Wastewater Discharge Permit issued under these rules, the development, revision and submittal of these plans described in sub-section b and/or c.

## **Article IV CLASSIFICATION OF WASTEWATER SOURCES**

### Section II-401. Specific Wastewater Source Classifications

- a) The Board shall recognize the following Specific Wastewater Source Classifications for purposes of these rules:
- 1) Septage and Waste Haulers;
  - 2) Groundwater Sources and Occasional or Special Waste Sources;
  - 3) Grease, Oil and Solid Sources; and



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- 4) Utility Wastes and Wastewater.
- b) The Control Authority may establish additional Industrial User Classifications where necessary to efficiently carry out the intent of these rules, or to administer the requirements of these rules on a defined Industrial User group.

### Section II-402. Septage and Waste Haulers

- a) The GLWA has developed a program for the regulation of Septage and Hauled wastes that are authorized for treatment from non-point sources. The regulatory requirements for this program are more fully described in Chapter V of these rules.
- b) Domestic wastes and wastewater from recreational vehicles, individual portable toilets, and vessels and ships shall also be authorized in accordance with Chapter V of these rules.
- c) The GLWA Wastewater Treatment Plant shall not accept any waste or wastewater at its facility on 9300 West Jefferson delivered by truck, rail or dedicated pipeline, other than septage waste and the contents of domestic waste septic tanks, cesspools, seepage pits, sewage lift stations and portable toilets may be discharged to the sewerage system by haulers authorized to unload such materials and subject to the requirements of the Chapter V rules.
- d) Hauled-in industrial wastes, other than described in paragraph b, shall not be discharged into the sewage system either directly or indirectly because of the risk potential to the well-being of the system and the receiving waters. Such wastes are to be disposed of in commercial facilities specializing in the reclamation, rendering, disposal, destruction or burial of non-hazardous, hazardous or potentially hazardous wastes.

### Section II-403. Special Discharge Environmental Remediation, Groundwater Sources and Occasional or Special Waste Sources may not be discharged unless authorization has been granted by the Control Authority.

- a) The GLWA has developed a program for the regulation of Environmental Remediation, Groundwater Sources and Occasional or Special Waste Sources that are authorized for treatment from non-point sources. The regulatory requirements for this program are described in Chapter V of these rules.
- b) Special wastes and wastewaters not described by subparagraph (a) above, may be authorized for discharge if they do not pose harm or risk of harm to the sewerage system as determined by the Control Authority in its reasonable discretion. Such wastes include, but are not limited to, spoiled beer, wine, milk or other beverages, non-hazardous waste materials, and water and wastewater from tanks or vessels, ships, freighters or barges.

### Section II-404. Grease, Oil and Solids Interceptors

The contributions of fats, oils and grease and the discharge of solid or viscous pollutants can cause or contribute to obstructions in the POTW and collection system. The installation and maintenance of grease, oil, and solids interceptors can minimize these occurrences. The GLWA will work with GLWA Member

Communities and/or Wholesale Sewer Contract Customers to correct improper handling from sources found to cause or contribute to obstructions in the POTW and collection system.

- a) Grease, oil, and solids interceptors shall be provided when, in the opinion of the Control Authority, they are necessary for the proper handling of wastewater containing excessive amounts of grease and oil, or solids; except that such interceptors shall not be required for Domestic Sources. All interception units shall be of a type and capacity acceptable to the User's GLWA Member Communities and/or Wholesale Sewer Contract Customers and the Control Authority.
- b) The Control Authority may require Users to provide records or other information concerning the inspection, cleaning and maintenance practices of the User.
- c) The Control Authority may require any User to install and/or repair, maintain and operate grease, oil, and solids interceptors when, in the opinion of the Control Authority, they are found to cause or contribute to obstructions in the POTW and collection system. The Control Authority shall notify the User of Grease, Oil and Solids Sources in writing of such requirement(s).
- d) All interception units shall be of a type and capacity acceptable to the local Health Department, community agency or GLWA Member Community, and the Control Authority. Such interceptors shall be regularly inspected, cleaned, and repaired by the User at their expense.

Section II-405. General Permits.

- a) The Control Authority may authorize the discharge of Utility wastes and wastewater resulting from maintenance and related activities of telephone, gas, steam, or electrical utilities, whether public or private, through the use of general permits. Subject to appropriate reporting requirements, the general permit shall authorize discharge in accordance with the terms of the permit.
- b) General Permits may be used by the Control Authority to carry out these rules, for Users other than Significant Industrial Users, to authorize the discharge from User's activities. General Permits shall authorize discharge in accordance with the terms of the permit, and include appropriate reporting requirements.

**Article V      REPORTING AND NOTIFICATION REQUIREMENTS**

The Control Authority may require any User to provide any of the reports or notifications described within this section whenever there is a reasonable potential or actual finding.

Section II-501. General Notification Requirements

- a) Notification requirements. Within one (1) hour of becoming aware of a discharge into the POTW which has the potential to cause, or does cause, the User to implement any accidental discharge, spill or slug discharge, or to report the occurrence of an unanticipated by-pass or upset event, the User shall telephone the Control Authority at its System Control Center (313-267-6000), and notify the Control Authority of the discharge event.

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- 1) The notification shall include the name of the caller, the location and time of discharge, the type of wastewater, the estimated concentration of excessive or prohibited pollutants and estimated volume, and the measures taken, or being taken, to abate the discharge into the POTW.
- 2) Within five (5) calendar days after the discharge, the User shall submit a detailed written report to the Control Authority describing the cause of the discharge and the measures to be taken by the User to prevent similar future occurrences and, when required by the Control Authority, the User's wastewater discharge permit may be modified to include additional measures to prevent such future occurrences.
- b) Such notification shall not relieve the User of any expense, cost of treatment, loss damages or other liability which may be incurred as a result of, among other things, damage to the POTW, fish kills, or any other environmental impairment or any other damage to persons or property.
- c) Recovery of costs. Any User discharging in violation of any of the provisions of these rules, which produces a deposit or obstruction or causes damages to or impairs the POTW, or causes the GLWA to violate its NPDES permit, shall be liable for any expense, loss, damage, penalty or fine incurred because of said violation or discharge. Prior to assessing such costs, the Control Authority shall notify the User of its determination that the User's discharge was the proximate cause of such damage, obstruction, impairment, or violation of the NPDES permit and the intent to assess such costs to the User. Any such notice shall include written documentation which substantiates the determination of proximate cause and a breakdown of cost estimates. Failure to pay the assessed costs shall constitute a violation of these rules. Such charge shall be in addition to, and not in lieu of, any penalties or remedies provided under these rules, or this Code, or other statutes and regulations, or at law or in equity.

### Section II-502. Specific Notification Requirements

- a) All Users, whether required to have a Wastewater Discharge Permit, Authorization or not, shall notify the Control Authority at its System control center (313-267-6000) of any discharge or release that is contrary to the requirements of these rules.
- b) The Control Authority may identify additional requirements for notice through a Wastewater Discharge Permit or Authorization to discharge.

### Section II-503. Hazardous Waste Notification

- a) All Industrial Users, who discharge into the sewer system, shall notify the Control Authority and the GLWA Member Community in writing of any discharge of a substance which, if otherwise disposed of, would be a hazardous waste as set forth in 40 CFR 261. Such notification must comply with the requirements of 40 CFR 403.12(p).
- b) At a minimum, any Significant Industrial User regulated under a Wastewater Discharge Permit issued by the Control Authority shall review their previous notification(s) and report any additions or other changes to the hazardous wastes discharged, in accordance with 40 CFR 403.12(j), to the POTW and provide the current information specified in paragraph (a) above at the time of seeking a Permit

Renewal.

- c) This provision does not create a right to discharge any substance not otherwise permitted to be discharged by these rules, or any permit issued thereunder, or any applicable Federal or State law.

Section II-504. Authorized Representative.

The Authorized Representative of an Industrial User, or a duly-authorized representative if applicable, shall sign and certify any survey, permit application or re-application, Baseline Monitoring Report, 90-day report, or periodic report or a request for reconsideration or appeal hearing. Other documents, responses or reports may be signed by any other agent as long as the agents name, role and any limitations of the agency, are made known to the Control Authority in writing.

Section II-505. Best Management Practice Plans and Pollution Prevention Plans

The GLWA shall allow Users to develop and to implement Best Management Practice plans and pollution prevention plan initiatives as a partial response to non-compliance, and incorporate such plans as an enforceable part of a Wastewater Discharge Permit. Upon demonstration of compliance, the User may request to be relieved of the Best Management Practice plans and pollution prevention implementation requirement.

Section II-506. Centralized Waste Treatment Facility Requirements

Centralized Waste Treatment Facilities receive hazardous and non-hazardous materials for treatment and disposal through the local POTW and collection system.

- a) Any new or existing Industrial User who operates a Centralized Waste Treatment Facility as described by 40 CFR 437, Subpart D (Multiple Wastestream Subcategory), shall provide an Equivalent Treatment that satisfies the requirements of 40 CFR 437.2(h), and applicable certification statement to the Control Authority when applying for a new Wastewater Discharge Permit, when submitting its Baseline Monitoring Report, or when re-applying for a Wastewater Discharge Permit. The statement shall be certified by a professional engineer registered in the State of Michigan. The statement must be provided with the Baseline Monitoring report, or Wastewater Discharge Permit application or reapplication form.
- b) Any new or existing Industrial User who operates a Centralized Waste Treatment Facility as described by 40 CFR 437, Subpart A, B or C shall provide a statement that the facility has treatment processes capable of treating the wastewater received or collected by the facility, and necessary to meet the applicable discharge limitations. The statement shall be certified by a professional engineer registered in the State of Michigan. The statement must be provided with the Baseline Monitoring report, or Wastewater Discharge Permit application or reapplication form.
- c) All Centralized Waste Treatment facilities granted a permit under this section shall provide supplemental information with the periodic reports required under section II-705, that includes the volume (in gallons) of Subpart A (metal bearing wastes), Subpart B (oily wastes), and Subpart C (organic bearing wastes) received each month, held in inventory or removed off-site each month, and

discharged to the sewer system each month.

- d) All Centralized Waste Treatment Facilities granted a permit under this section shall maintain records which, at a minimum, identify the source, volume, character, and constituents of the wastewater accepted for treatment and disposal. These records may be reviewed at any time by the Control Authority.

## **Article VI INSPECTION & MONITORING REQUIREMENTS**

### **Section II-601. Right of Entry: Inspection and Monitoring.**

- a) The Control Authority shall have the right to enter the premises of any User to determine through inspection and monitoring, whether that User is complying with all requirements of these rules; and any wastewater discharge permit issued hereunder. Such rights shall also permit the Control Authority to collect independent samples at the facility, and install and retrieve monitoring equipment and instrumentation. The Control Authority shall perform these activities at reasonable times, and in a reasonable manner.
- b) Users shall allow the Control Authority, or the Control Authority's representative, ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying, and the performance of any additional duties authorized by these rules. The Control Authority may access any easement, street or other public location without notice.
- c) Upon arrival at the User's premises, the Control authority representative shall inform the User, or the User's employees, of their purpose. Duly authorized employees or representatives of the Control Authority shall bear proper credentials and identification, and at the User's option may be accompanied by a representative authorized by the User.
- d) Where a User has security measures in force, the User shall make prompt and necessary arrangements with the security personnel so that, upon presentation of appropriate credentials, personnel from the Control Authority will be permitted to enter for the purposes of performing their specific responsibilities. The Control Authority shall neither refrain from, nor be prevented or delayed from, carrying-out its inspection or sampling duties due to the unavailability of the authorized representative of the facility.
- e) While performing work on private property, the Control Authority shall observe all reasonable safety, security and other reasonable rules applicable to the premises as established by the User.
- f) Should the Control Authority require photographs of the User's facilities, the User shall be notified, provided a consent form, and provided with electronic or printed copies of any such photographs within 48 hours. If requested by the User, these may be transmitted electronically.
- g) Upon the request of the Control Authority, Users shall furnish access to information and records relating to discharges into the POTW. The User shall be notified, provided a consent form, and the Control Authority shall be permitted to photograph or copy such records.

- h) Noncompliance with this subsection shall be addressed in accordance with the Enforcement authority available through Article X of these rules.

Section II-602. Inspection, sampling and record-keeping.

- a) Significant Industrial Users shall sample and analyze their discharge in accordance with the provisions of their permit. The Control Authority may require such samples to be split for the Control Authority's independent analysis.
- b) Significant Industrial Users shall maintain records of all information from monitoring activities required by these rules, or by 40 CFR 403.12(o), for no less than three (3) years. This period of record retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Industrial User, or the operation of the GLWA's Industrial Waste Program, or when requested by the Control Authority, by the State, or by the EPA.
- c) In the event the Control Authority obtains samples, and analyses are made of such samples, a copy of the results of such analyses shall be promptly furnished upon written request by the Industrial User's authorized representative.
- d) When requested by the Industrial User, the Control Authority's representative shall leave with the Industrial User, a portion of any sample of the Industrial User's discharge taken from any sampling point on or adjacent to the premises for the Industrial User's independent analysis. Users must provide their own containers for receipt of such samples. Where the sampling protocol, e.g. grab-sampling, would affect the integrity of the sample, the User may be provided with a contemporaneously collected sample.
- e) In cases of disputes arising over shared samples, the portion taken and analyzed by the Control Authority shall be controlling unless proven invalid.

Section II-603. Sampling Plans

- a) All Significant Industrial Users shall provide a sampling plan describing the manner and form intended for representative wastewater self-monitoring. At a minimum, the plan shall include:
  - i. A description of the sample collection method(s) based on grab, flow-proportional composite or time-proportional composite methods;
  - ii. Designate applicable requirements for batch and/or continuous discharges, including the release time;
  - iii. If applicable, the sampler settings, such as pulse, time, sample volume; and
  - iv. If applicable, the flow-measurement equipment.
- b) The sampling plan shall be submitted to the Control Authority, and shall be implemented by the Significant Industrial User.

Section II-604. Sample Collection Methods

- a) Users shall collect representative samples of the waste and wastewater discharges using sampling procedures described by 40 CFR 403, Appendix E.

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Except for samples for oil and grease, temperature, pH, cyanide, total phenols, sulfides, and volatile organic compounds, wastewater samples must be collected using 24-hour flow-proportional composite sampling techniques, unless time-proportional composite sampling or grab sampling is authorized by the Control Authority. A Significant Industrial User may request the use of time-proportional composite sampling or grab sampling rather than flow-proportional composite sampling by demonstrating that the use of time-proportional composite sampling or grab sampling will provide samples representative of the SIU's discharge. The User shall provide supporting documentation including any statistical analysis submitted in support of the request.

- i. The Control Authority may authorize the use of alternative sampling methods, where such methods are representative of the Significant Industrial User's Discharge and shall document its decision in the SIU file.
- ii. If granted by the Control Authority, the authorization shall be limited to the duration of the Wastewater Discharge Permit. A Significant Industrial Users shall request re-authorization of a waiver request with any permit re-application form filed with the Control Authority. The Control Authority shall review any such request *de novo*.

### Section II-605. Sampling & Monitoring Facilities

- a) All Significant Industrial Users, and any other Industrial User who discharge under an effective Wastewater Discharge Permit or other Control mechanism, shall provide, operate, and maintain at their own expense a sampling and monitoring facility to enable the Control Authority to conduct such other monitoring and sampling as required for determining compliance. The sampling and monitoring facility includes, but is not limited to, a manhole or special structure to facilitate monitoring, inspection, sampling, and flow measurement of the facility's discharge, if applicable.
- b) Consistent with Section II-603(a), the Industrial User shall provide the following technical information to the Control Authority:
  - 1) A drawing or sketch showing all sewer connections and sampling manholes by the size, location, elevation, and points or places of discharges into the POTW; and
  - 2) A flow schematic showing (i) the connections receiving each national categorical process wastestreams, (ii) connections receiving other process wastestreams, storm water, sanitary water or cooling water, and (iii) any conveying a combined wastestream; and
  - 3) A sampling plan in accordance with section II-603 above;
  - 4) Where Flow-Proportional composite sampling is performed on-site, information describing the Industrial User's flow monitoring instruments, including make and model number; recording devices used, including make and model number; and must include a non-resettable flow totalizer; and
  - 5) Where Flow-Proportional composite sampling is performed on-site, the specific criteria for Sampling is described in Chapter VI of these rules shall also be followed.

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- c) In the event the Control Authority determines that the monitoring facility identified in the permit application is inadequate, or fails to include wastewater regulated under these rules, a new monitoring facility must be identified, or provided by the Industrial User, which shall allow for collection of a representative sample of the wastewater discharged from the facility, by serving written notice to the Industrial User.
- d) The Sampling and monitoring facility should be situated on the Industrial User's premises in a location readily accessible to the Control Authority. There shall be ample room in or near such sampling or monitoring manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility and any permanently installed sampling and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the Industrial User.
- e) When such a location would be impractical or cause undue hardship to the Industrial User, the Industrial User may seek approval for the facility to construct the sampling manhole in the public streets, or sidewalk area when there is room and the location will not be obstructed by landscaping or parked vehicles. It shall be the responsibility of the Industrial User to obtain any necessary approvals which may be required from other government entities for the location and construction of monitoring facilities. Whether constructed upon public or private property, the sampling and monitoring facilities shall be provided in accordance with all applicable local construction standards and specifications.
- d) The sampling and monitoring facility shall be properly operated, kept clean, and maintained in good working order at all times. The failure of an Industrial User to keep its monitoring facility in good working order shall be grounds for the Control Authority to issue a written finding that sample results are unrepresentative of the Industrial User's discharge.

**Article VII     WASTEWATER DISCHARGE PERMITS & OTHER CONTROL MECHANISMS**

**Section II-701. Survey, Permit Applications and Baseline Monitoring Reports**

- a) Duty to apply. No User may discharge wastewater, other than domestic waste, without receiving authorization from the Control Authority. Any new or existing User who has not obtained authorization for discharge shall comply with the following:
  - 1) Any new or existing User, who does not have an effective Wastewater Discharge Permit but meets the definition of a Significant Industrial User after the effective date of these rules, is required to submit a complete Permit Application in accordance with Section II-703, to the Control Authority and obtain a wastewater discharge permit for its discharge. The permit application must be provided by a new User at least ninety (90) days prior to the commencement of any discharge; or for an existing User(as of the effective date of these rules), within thirty (30) days of the effective date of these rules. A failure to apply is a violation of these rules.
  - 2) Any new or existing Industrial User who performs an operation covered by a National Categorical Pretreatment Standard shall file a Baseline Monitoring Report in accordance with Section II-702 to



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the Control Authority and obtain authorization for its discharge.

- 3) All other new or existing Users discharging wastewater other than domestic waste and cooling water, must file a survey application and receive authorization from the Control Authority for its discharge.
  - 4) Users who have previously filed a survey, permit application, or Baseline Monitoring Report with the Detroit Water & Sewerage Department or GLWA prior to the effective date of these rules and have received an effective Wastewater Discharge Permit or Letter of Authorization, are not required to resubmit their survey, permit application, or Baseline Monitoring Report.
- b) The Control Authority may require any User to complete a survey, or permit application to determine whether the User is a Significant Industrial User, or is subject to other regulatory requirements (described in Chapter III, IV, or VII). Users shall comply within thirty (30) days of receiving written notice. Failure of the Control Authority to so notify a User, shall not relieve the User of its duty to obtain a wastewater discharge permit as required by these rules.
- c) Upon receipt of any survey, permit application, or Baseline Monitoring Report, the Control Authority shall notify the User that:
- 1) The User is not authorized to discharge. The notice will be in writing and shall indicate what additional information, pretreatment facilities, monitoring facilities or other requirements are necessary for authorization;
  - 2) The User is a Significant Industrial User and is authorized to discharge, conditioned upon issuance of a Wastewater Discharge Permit or other Control Mechanism;
  - 3) The User meets the definition of a Non-significant Categorical Industrial User and the applicable conditions and requirements under a Wastewater Authorization letter; or
  - 4) The User is not a Significant Industrial User and is authorized to discharge as a Minor User under a Wastewater Authorization letter.

### Section II-702. Baseline Monitoring Report Requirements

- a) Within one hundred eighty (180) days after the effective date of a categorical pretreatment standard, or one hundred eighty (180) days after the final administrative decision made upon a category determination submission under Section 40 CFR 403.6(a)(4), whichever is later, existing Industrial Users subject to such categorical pretreatment standards and currently discharging into or scheduled to discharge into the POTW, shall submit to the Control Authority, a report containing the information listed in 40 CFR 403.12(b)(1-7).
- b) At least ninety (90) days before commencement of any discharge, each new source and any existing sources that become Industrial Users after the promulgation of an applicable categorical pretreatment standard, shall submit to the Control Authority, a report which contains the information listed in 40 CFR 403.12(b)(1-5). In such report, new sources shall include information concerning the method of pretreatment that the source intends to use to meet applicable pretreatment standards. New sources shall

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provide estimates of the information requested in 40 CFR 403.12(b)(4) and (5).

- c) The US EPA has established regulations at 40 CFR 405 through 471, National Categorical Pretreatment Standards applicable to specific Industrial activities. The GLWA adopts these by reference, as listed in Appendix A, of these rules.
- 1) Any Industrial User subject to a National Categorical Pretreatment Standard, or any Industrial User who becomes subject to a new or revised National Categorical Pretreatment Standard, shall apply for a wastewater discharge permit within ninety (90) days after the promulgation of the applicable National Categorical Pretreatment Standard, unless an earlier date is specified or required by 40 CFR 403.12(b).
  - 2) The Control Authority may require any Industrial User to complete a Baseline Monitoring Report to determine whether the Industrial User performs an operation described by a National Categorical Pretreatment Standard. The Industrial User shall provide information demonstrating that they do not perform an operation described by a National Categorical Pretreatment Standard, or provide a Baseline Monitoring report within thirty (30) days of being so notified.
  - 3) New sources. Industrial Users who meet the new sources criteria shall install, maintain in operating condition, and "startup" all pollution control equipment required to meet applicable pretreatment standards and requirements before beginning to discharge. Within the shortest feasible time and not to exceed ninety (90) days, new sources must meet all applicable pretreatment standards.

### Section II-703. Contents of Survey or Permit Application

- a) In support of a survey, permit application or re-application, the User shall submit, in units and terms appropriate for evaluation, the following information:
- 1) Corporate or individual name, any assumed name(s), address, and location of the discharging facility;
  - 2) Name and title of the authorized representative of the User who shall have the authority to bind the User financially and legally. Where the authorized representative is represented by an agent, the authorized representative shall also identify the agent and any applicable limitations or restrictions of their agency;
  - 3) The Standard Industrial Classification Codes of all processes at this location according to the Standard Industrial Classification manual, issued by the Executive Office of the President, Office of Management and Budget, 1987, or the equivalent based upon the North American Industrial Classification System (NAICS), as amended;
  - 4) Actual or proposed wastewater constituents and characteristics for each parameter listed in the permit application form. At a minimum, such parameters shall include the applicable Pretreatment Standards and Requirements from any applicable National Categorical Pretreatment Standard or any pollutant parameter for which there is a Local Pollution Discharge Limitation; and any other toxic pollutants known or suspected to be present in the discharge, regulated in the previous permit,

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or specifically requested by the Control Authority. For each parameter, the expected or experienced maximum and average concentrations during a one (1) year period shall be provided;

- 5) For industries subject to national categorical pretreatment standards or requirements, the data requested herein shall be separately shown for each categorical process wastestream. Combined wastestreams proposed to be regulated by the combined wastestream formula shall also be identified. Sampling and analysis shall be performed in accordance with procedures established by the EPA pursuant to 33 U.S.C. 1314(g) and contained in 40 CFR 136, as amended. Where 40 CFR 136 does not include sampling or analytical techniques for the pollutants in question, sampling and analysis shall be performed using validated analytical methods approved by the administrator;
- 6) A listing and description of activities, facilities and plant processes on the premises, and the pollutants associated with each process. Those processes, which are subject to national categorical pretreatment standards or requirements, shall be so designated;
- 7) A listing of raw materials and chemicals which are either used in the manufacturing process or could yield pollutants requiring pretreatment prior to discharge to the sewer system. Any User claiming immunity from having to provide such information for reasons of national security shall furnish acceptable proof of such immunity;
- 8) A description of typical daily and weekly operating cycles for each process in terms of starting and ending times for each of the seven (7) days of the week;
- 9) Information on the average and maximum twenty-four (24) hour wastewater flow rate based on actual measurements, or estimated and the means of estimation, of (i) each process wastestream subject to a national categorical pretreatment standard, (ii) each process wastestream not subject to a national categorical pretreatment standard, (iii) non-process wastestreams including but not limited to cooling water, sanitary water, or any other wastewater. This information shall include any applicable daily, monthly or seasonal variations for each wastestream;
- 10) Each combined wastestream, specifying the flow rate of regulated, unregulated and diluting wastestreams;
- 11) A drawing showing all sewer connections and sampling manholes by the size, location, elevation and points or places of discharges into the POTW; also a flow schematic showing which connections receive each national categorical process wastestream and which connections receive storm water, sanitary water or cooling water; also show which lines handle each combined wastestream;
- 12) The rate of production as pertains to processes subject to production based limits under the national categorical pretreatment standards or requirements;
- 13) A statement regarding whether or not the requirements of these rules and of the national categorical pretreatment standards and requirements are being met on a consistent basis and, if not, what additional operation and maintenance work and/or additional construction is required for the

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Industrial User to meet the applicable standards and requirements. This statement shall be reviewed and signed by the authorized representative and, as appropriate, certified by a qualified professional;

- 14) Basic information on the program for the prevention of accidental discharges;
- 15) Proposed or actual hours of operation of each pretreatment system for each production process;
- 16) A schematic and description of each pretreatment facility which identifies whether each pretreatment facility is of the batch type or continuous process type;
- 17) The source of any intake water if other than through the GLWA and the basis for measurement;
- 18) The volume of any discharge water other than potable water obtained through any source and the basis of measurement;
- 19) If additional construction and/or operation and maintenance procedures will be required to meet the requirements of these rules and the national categorical pretreatment standards, the shortest schedule by which the Industrial User will provide such additional construction and/or implement the required operation and maintenance procedures;
- 20) Identify whether the Industrial User has conducted a waste minimization assessment or audit of its operations in order to identify all feasible source reduction and recycling practices that may be employed to reduce or eliminate the generation of pollutants and other wastes at the facility; and
- 21) Any other information as may reasonably be required to prepare and process a wastewater discharge permit.

### Section II-704. Permit Issuance

Upon receipt of any survey, permit application, or Baseline Monitoring Report, the Control Authority shall review the information and advise the User of:

- a) The User does not meet the definition of a Significant Industrial User and is authorized to discharge as a Minor User under a Wastewater Authorization letter; or
- b) The User meets the definition of a Significant Industrial User and is authorized to discharge under a Wastewater Discharge Permit or other Control Mechanism; or
- c) The User meets the definition of a Non-significant Categorical Industrial User or Dental Industrial User; and is authorized to discharge under a Wastewater Discharge Permit or other Control Mechanism; or
- d) The User meets the definition of a Significant Industrial User and is conditionally authorized to discharge under an Administrative Order including schedules for additional information, pretreatment facilities, monitoring facilities or other requirements are necessary for processing a Wastewater Discharge Permit; or
- e) The User is not authorized to discharge. The Control Authority may withhold issuance of a permit to a significant Industrial User, which has not submitted an adequate or timely report, or permit application, to the control authority in accordance with the reporting requirements of 40 CFR 403.12, or whose

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discharge is in violation of these rules. The failure of the Industrial User to cease discharging following notification shall be considered a violation of these rules.

- f) Procedure for Permit Issuance. Only one (1) facility location shall be included in each permit. If the Control Authority determines that the User meets the definition of a Significant Industrial User, is required to have a wastewater discharge permit, and has evaluated and accepted the data furnished, the Significant Industrial User will be notified by U.S. mail, using Certified Mail.
  - 1) Draft Wastewater Discharge Permit. The notification shall contain a copy of the draft permit, so marked, for review. A Significant Industrial User has thirty (30) days from the date of mailing to file comments and/or a response to the draft permit. The Control Authority will evaluate the comments and response to the draft permit and consider them for inclusion in a final Wastewater discharge permit.
  - 2) Final Wastewater Discharge Permit. Following expiration of the thirty (30) day comment period, or consideration of any comments or responses made, the Control Authority shall prepare a Final Wastewater Discharge Permit. The Final Wastewater Discharge Permit will be transmitted by U.S. Mail. The Significant Industrial User has twenty (20) days from the date of mailing to file a request for reconsideration and/or appeal hearing in accordance with Chapter VIII. During the appeal process, the SIU will comply with all uncontested terms or conditions which shall be in full force and effect. Upon disposition of any contested terms or conditions, the permit shall be issued as final.

### Section II-705. Types and Contents of Wastewater Discharge Permits

- a) The Control Authority shall develop Wastewater Discharge Permits formats meeting the needs of Significant Industrial Users as well as the special wastewater sources discharging to the sewer system. Such formats include, but are not limited to, General Permits for multiple location facilities, Special Discharge Permits, and Unloading Permits for hauled-in wastes and wastewater.
- b) Every Wastewater Discharge Permit shall contain all requirements of 40 CFR 403.8(f)(1)(iii) and shall be deemed to incorporate all provisions of these rules, other applicable laws, rules, regulations, and charges and fees established by the GLWA without repetition therein.
- c) A Wastewater Discharge Permit may also contain the following:
  - 1) The Wastewater Discharge Permit shall specify the wastes and wastewaters which the Control Authority authorizes an Industrial User to discharge to the GLWA's sewer system; and identify any wastes or wastewater for which the request to discharge is denied; and the wastes and wastewater requiring imposition of special conditions in order to comply with the permit.
  - 2) Limits on the average and maximum wastewater constituents or characteristics which are equivalent, more restrictive than, or supplemental to the numeric limits enumerated in these rules, or the applicable national categorical pretreatment standards;
    - i. Limits on average, and/or maximum rate and time of discharge or requirements for flow

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regulation and equalization;

- ii. Limits on the average volume, and/or maximum volume of wastewater that is authorized for discharge. The ratio of average to maximum volume shall not exceed three (3), except where seasonal variations of the average and/or maximum volume are noted in the permit;
- iii. Requirements for installation, operation, and maintenance of discharge sampling manholes and monitoring facilities by the Significant Industrial User;
- iv. Restrictions on which of the Significant Industrial User's discharge wastestreams are to be allowed to be discharged at each point of connection to the POTW;
- v. Specifications for Significant Industrial User monitoring programs which may include sampling locations, frequency and type of sampling, number, types and standards for tests and reporting schedules;
- vi. Requirements for the prevention of accidental discharges and the containment of spills or slug discharges;
- vii. Restrictions based on the information furnished in the application;
- viii. Additional reporting requirements:
  - a. All permittees shall submit a report on the form prescribed by the Control Authority, or on an alternative form approved by the Control Authority, indicating the status of compliance with all conditions enumerated or referred to in the wastewater discharge permit, or made applicable to the permit by these rules. Unless required more frequently, the reports shall be submitted on a periodic basis (generally six months), on a schedule to be established by the Control Authority. Analytical data generated by the Control Authority shall not be submitted in lieu of the facility's own self-monitoring data as required by the wastewater discharge permit.
  - b. The report shall show the concentration of each substance for which there is a specific limitation in the permit. The report will include all calculations necessary to demonstrate compliance with any 4-day, 30-day or monthly average, or mass limitation that may be included in the permit.
  - c. Permittees subject to national categorical pretreatment standards or requirements shall submit compliance reports at the times and intervals specified by federal regulations and by the Control Authority. A compliance report shall be submitted to the Control Authority no later than ninety (90) days following the final compliance date for a standard, or in the case of a new source, no later than ninety (90) days, following commencement of the introduction of wastewater into the POTW, and in accordance with 40 CFR 403.12(d).  
  
A ninety (90) day report shall also be provided where the facility's treatment system(s) are upgraded, modified or replaced so as to demonstrate compliance with

applicable limitations.

- d. A report on continued compliance shall be submitted at six-month intervals thereafter on the schedule established by the Control Authority and incorporated into the Significant Industrial User's discharge permit. The reports shall be either on a form prescribed by the Control Authority or on an alternative form approved by the Control Authority, and shall indicate the nature and concentration of all pollutants in the discharge from each regulated process which are limited by national categorical pretreatment standards, or which there is a specific limitation in the permit, or which may be identified by the Control Authority. The report shall include a record of measured or estimated average and maximum daily flows for the reporting period for the discharges regulated by the permit. The combined wastestream formula may be used for reporting purposes after the initial information has been furnished to the Control Authority, provided there have been no changes to the elements composing the combined wastestream.
- e. Reports shall contain the results of representative sampling performed during the period covered by the report and of the discharge and analysis of pollutants contained therein, and, for Significant Industrial Users subject to production based standards, shall be cross-referenced to the related flow or production and mass as required to determine compliance with the applicable pretreatment standards. The frequency of monitoring shall be as prescribed in the applicable general pretreatment regulations, being 40 CFR 403, or by the Control Authority, but no less than is necessary to assess and assure compliance by the Significant Industrial User with the most stringent applicable pretreatment standards and requirements. All sampling and analysis shall be performed in accordance with applicable regulations contained in 40 CFR 136 and amendments thereto. Where 40 CFR 136 does not include sampling or analytical techniques for the pollutants in question, sampling and analysis shall be performed using validated analytical methods approved by the administrator.
- f. If any Significant Industrial User monitors any pollutant more frequently than required by the Control Authority, collects the sample(s) at monitoring locations specified in the wastewater discharge permit, and analyzes such samples using approved analytical procedures, the results of this monitoring shall be included in such report.
- g. The report shall state whether the applicable pretreatment standards are being met on a consistent basis and, if not, what additional operation and maintenance practices and/or pretreatment system improvements or changes are necessary to

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bring the Significant Industrial User into compliance with the applicable pretreatment standards.

- h. All Significant Industrial Users shall include the following certification statement with the periodic (six-month) report: *"I certify under penalty of law that this document and all attachments were prepared under my direction, or supervision, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and/or imprisonment for knowing violations."* Said certification shall be signed by the facility's authorized representative. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of the authorized representative must be submitted to the Control Authority prior to, or together with, any reports to be signed by an authorized representative.
  - i. If sampling performed by a permittee indicates a violation, the Significant Industrial User shall notify the Control Authority within twenty-four (24) hours of the time said Significant Industrial User knows, or should have known, of the violation. In addition, the Significant Industrial User shall repeat the sampling and analysis, and submit the results of the repeat analysis to the Control Authority within thirty (30) days after said Industrial User becomes, or should have become, aware of the violation in accordance with their wastewater discharge permit.
- d) In the event the Control Authority determines that any Significant Industrial User is discharging substances in quality, quantity or at locations which may cause problems to the POTW, or the receiving stream, the Control Authority has the authority to develop and enforce effluent limits applicable to the Significant Industrial User. To the extent the Control Authority seeks to impose restrictions in a permit which are more restrictive than established in these rules, the Control Authority shall provide written documentation to explain its rational basis for the greater restriction, or protection against pass through, interference, or violation of the NPDES permit, to the Significant Industrial User;
- e) Requirement for pollution prevention plan initiatives or Best Management Practice plans; and
- f) Other requirements reasonably necessary to ensure compliance with these rules.

### Section II-706. Permit Duration, Notification of Changed Conditions, Modification and Transfer

- a) Permit duration. Any permit issued by the Control Authority shall be issued for a specified time period,



but in no case shall a permit have a term greater than five (5) years. The effective date and the expiration date shall be included in every permit issued by the Control Authority.

- b) Notification of Changed Conditions. It is the duty of each Significant Industrial User to promptly notify the Control Authority of (i) material or substantial changes to its facility or operation, (ii) substantial change in the volume of wastewater discharged, or (iii) changes in the characteristics of its effluent, including the listed or characteristic hazardous wastes for which initial notification under 40 CFR 403.12(p) has been made. The Significant Industrial User shall notify the Control Authority by filing a completed permit application form at least thirty (30) calendar days prior to the change identifying the changes and including supporting documentation. The Control Authority will evaluate the permit application in accordance with sub-paragraph (d) below. The failure of the Significant Industrial User to so apply shall be considered a violation of these rules.
- c) Finding of Changed Conditions. Where the Control Authority finds or discovers (i) material or substantial changes to a Significant Industrial User's facility or operation, (ii) substantial change in the volume of wastewater discharged, or (iii) changes in the characteristics of its effluent, including the listed or characteristic hazardous wastes for which initial notification under 40 CFR 403.12(p), it shall require the Significant Industrial User to provide a permit application and supporting documentation within 30 days. The Control Authority will evaluate the permit application in accordance with sub-paragraph (d) below. The failure of the Significant Industrial User to so apply shall be considered a violation of these rules.
- d) Permit modification. The terms and conditions of the permit may be subject to modification and amendment by the Control Authority during the term of the permit. The modification may be based upon information provided by the Significant Industrial User or discovered by the Control Authority, which includes:
  - 1) A permit application provided in accordance with Section II-706. Sub-paragraph b or c;
  - 2) Changes in the monitoring location or method of sampling;
  - 3) Typographical errors or omissions discovered in permits;
  - 4) Amendments or changes to the limitations or pretreatment standards and requirements identified in Section II-204;
  - 5) Material or substantial changes to a Significant Industrial User's facility or operation, or changes in the characteristics of its effluent.
  - 6) A Significant Industrial User's noncompliance with portions of an existing permit;
  - 7) A finding of interference or pass through attributable to the Significant Industrial User;
  - 8) A change of conditions within the POTW;
  - 9) Embodiment of the provisions of a legal settlement or of a court order;
  - 10) Change(s) in the Control Authority's NPDES permit;
  - 11) Any changes necessary to fulfill the Control Authority's role as control authority;

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- 12) Amendments to, or promulgation of, national categorical pretreatment standards or requirements including 40 CFR 403 and those delineated in Appendix A of these rules.
- e) Permit modification Procedure. The Control Authority shall inform the Significant Industrial User of any proposed change in its permit. The Control Authority will issue a draft permit using Certified Mail, and provide the Significant Industrial User thirty (30) days to file a response to the draft modified permit. Thereafter, the Control Authority will issue a final permit and, unless appealed, the permit will become effective twenty (20) days after issuance.
- f) Permit custody and transfer. Wastewater discharge permits are issued to a specific person as defined herein for a specific discharge. A wastewater discharge permit shall not be reassigned or transferred or sold to a different person, new owner, new Significant Industrial User, different premises, or a new or changed operation without notice to and written approval of the Control Authority and providing a copy of the existing permit to the new owner or operator. It shall be the permit holder's duty to notify the Control Authority of any such change at least thirty (30) days before the date of the change. Wastewater discharge permits, which do not receive the written approval of the Control Authority prior to the change, shall be null and void regardless of reassignment, or transfer, or sale. If it determines that an unreported change has occurred, the Control Authority may revoke a permit. If a change takes place, the Control Authority may require the application for a new or modified permit. Any succeeding person shall comply with the terms and conditions of any existing permit which the Control Authority allows to be retained.

### Section II-707. Permit Re-application.

A Significant Industrial Users whose Wastewater Discharge Permit is expiring apply for reissuance of the permit by submitting a complete permit re-application form a minimum of ninety (90) days prior to the expiration date of its existing permit. The permit re-application form shall include all information specified in Section II-703, which includes, but is not limited to, updates and re-certification of the Spill or Slug Control plans, updates to the 40 CFR 403.12(p) hazardous waste notifications, and for Centralized Waste Treatment Facilities, the current Equivalent Treatment Study or treatment statement in accordance with Section II-506. The evaluation and review of a permit re-application by the Control Authority will be *de novo*, and in accordance with Section II-705.

- a) Where a Significant Industrial Users has submitted a complete and timely re-application form, the existing permit shall be automatically extended until a permit is issued as final by the Control Authority.
- b) Where a Significant Industrial Users has not submitted a complete or timely re-application form, the Control Authority may issue an Administrative Order authorizing the discharge for a period not to exceed six (6) months.
- c) Where a Significant Industrial Users fails to submit a permit re-application, or submits the re-application after the permit expiration date, the Wastewater Discharge Permit will be expired as of the date specified in the permit. The failure of the Significant Industrial Users to so apply shall be

considered a violation of these rules.

## **Article VIII    SIGNIFICANT INDUSTRIAL USER REQUESTS**

### **Section II-801. Waiver of Sampling Requirements**

- a) Significant Industrial Users may request a waiver from the Control Authority to forego sampling, or the frequency for sampling, of a pollutant included in a Wastewater Discharge Permit. The Control Authority shall approve and authorize the request if the Significant Industrial Users has demonstrated through sampling, and other technical factors, that the pollutant is neither present nor expected to be present in the Discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the Significant Industrial Users. Where the pollutant(s) are based upon a categorical Pretreatment Standard(s), the Significant Industrial Users shall comply with all requirements of 40 CFR 403.12(e)(2), in addition to those established by the Control Authority.
- b) Any authorization of a sampling waiver request shall not be effective until the Wastewater Discharge Permit has been modified, revised or reissued. Such authorization is subject to the following conditions:
  - 1) The waiver may be authorized where a pollutant is determined to be present solely due to sanitary wastewater discharged from the facility provided that the sanitary wastewater is not regulated by an applicable categorical standard and otherwise includes no process wastewater.
  - 2) Monitoring waivers are only valid for the term of the individual wastewater discharge permit, but in no case longer than five (5) years. The Significant Industrial User must submit a new request for the waiver before the waiver can be granted for each subsequent individual wastewater discharge permit.
  - 3) In making a demonstration that a pollutant is not present, the Significant Industrial Users must provide data from at least one sampling of the facility's process wastewater prior to any treatment present at the facility and that is representative of all wastewater from all processes.
  - 4) The request for a monitoring waiver must be signed by the Authorized Representative, and include the certification statement in 40 CFR 403.6(a)(2)(ii).
  - 5) Non-detectable sample results may be used only as a demonstration that a pollutant is not present if the EPA approved method from 40 CFR 136 with the lowest minimum detection level for that pollutant was used in the analysis.
  - 6) Any grant of the monitoring waiver by the Control Authority must be included as a condition in the Significant Industrial User's permit. The reasons supporting the waiver and any information submitted by the Significant Industrial User in its request for the waiver must be maintained by the Control Authority for three (3) years after expiration of the waiver.
  - 7) Upon approval of the monitoring waiver and revision of the permit by the Control Authority, the Significant Industrial User must certify on each periodic report, that there has been no increase in the pollutant in its wastestream due to activities of the Significant Industrial User.

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- 8) In the event that the Control Authority finds a waived pollutant is present or is expected to be present because of changes that occur in the Significant Industrial User's operations, the Significant Industrial User shall be notified in writing and comply with the monitoring requirements, including increase in monitoring frequency imposed by the Control Authority.
- 9) This provision does not supersede certification processes and requirements established in Categorical Pretreatment Standards, except as otherwise specified in the Categorical Pretreatment Standard.

Section II-802: Periodic Compliance Reporting Frequency

- a) Significant Industrial Users may request modification of the Periodic Compliance Report to no less frequently than once a year, under the following conditions:
  - 1) The total wastewater discharge from the Significant Industrial User does not exceed five thousand (5,000) gallons per day;
  - 2) The contribution of all wastewater pollutants is less than 0.01 times the maximum allowable headworks loading for the GLWA wastewater treatment plant.
  - 3) The Significant Industrial User has not been in Significant Noncompliance in the last two (2) years.
- b) Significant Industrial Users may request modification and an offset of the time period included in their Periodic Compliance Report. Example, where a Significant Industrial User is required to submit data on the discharge for a six-month period of January through June, or July through December, the Significant Industrial User may request an offset period of December through May and June through November.
- c) The Control Authority may authorize the modifications requested by the Significant Industrial User as long as it does not violate any federal or state requirement, or court order. When authorized, the Wastewater Discharge Permit or Permit addendum shall be issued by the Control Authority.

Section II-803. Electronic Reporting

The Control Authority may choose to receive electronic documents and notices described in these rules, upon satisfaction of the electronic reporting requirements of 40 CFR 3. The Control Authority will notify Users if electronic (digital) documents can be accepted in accordance with 40 CFR 3, and the specific requirements for submission of such documents. Users that send electronic (digital) documents must satisfy the specific requirements of the Control Authority.

**Article IX. PUBLIC INFORMATION AND CONFIDENTIAL INFORMATION**

Section II-901. Public information

- a) All information and data on any User obtained from a User or created by the Control Authority, from any written reports, questionnaires, permit applications, permits and monitoring programs, and from inspections, or any other sources shall be available to the public or other governmental agencies without restriction unless the User specifically requests and is able to demonstrate that the release of such

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information would divulge information, processes, or methods of production entitled to protection as Confidential Information under State law.

- b) Any person may request the above information in accordance with the written procedures and guidelines of the GLWA found at [www.glwater.org](http://www.glwater.org).

### Section II-902. Confidential information

- a) A User claiming a submission contains Confidential Information must assert such claim at the time of submission of the information or data; and demonstrate that such information should be held confidential or disclosure would pose a risk to trade secrets or secret processes and mark the information and documentation accordingly. The GLWA's Office of General Counsel shall determine whether the information requested is to be treated as confidential information, and provide their decision in writing.
- b) Where the User has demonstrated that Confidential Information is present in the submission, those portions of the report shall not be made available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the NPDES program or pretreatment program, and in enforcement proceedings involving the person furnishing the report.
- c) Wastewater constituents and characteristics and other effluent data, as defined at 40 CFR 2.302, shall not be recognized as confidential information and shall be available to the public without restriction.
- d) A User may appeal the decision of the GLWA's Office of General Counsel in accordance with Section 8 of the Freedom of Information Act Policy adopted by the Board.

## **Article X      ENFORCEMENT**

### Section II-1001. Enforcement Response Guide

The GLWA has developed an Enforcement Response Guide to include a range of enforcement responses available to the GLWA to effectively enforce the terms and conditions of its rules. The Control Authority shall implement the Industrial Pretreatment Program and enforce these rules in accordance with the Enforcement Response Guide approved by the MDEQ.

The Control Authority, using information provided by a User or independently collected by authorized personnel of the GLWA, shall identify any User violating these rules and initiate the remedies enumerated in the Enforcement Response Guide to abate the violation and/or restore the User to a compliant condition through administrative and judicial enforcement remedies authorized by these rules.

### Section II-1002. Test of Good Faith Effort

The Control Authority may consider the Good Faith of a User as a factor in determining the enforcement response(s) to invoke to an incident of noncompliance. The Good Faith of a User may be established by considering the cooperation and efforts made by a User in achieving and maintaining compliance with these rules; and in the promptness with which a User responds to resolution of an incident of noncompliance. If the User appears to be acting in good faith to comply with the rules, the Control Authority may choose an

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enforcement action on a more conciliatory level than if the User does not appear to be acting in good faith to comply with the rules.

### Section II-1003. Violations

a) Violations shall include any act or conduct by a User that includes:

- 1) The failure of a User to provide a Permit Application, Baseline Monitoring Report or other application form for any discharge of wastewater to the sewer system prior to the commencement of discharge, whether from a new or existing source;
- 2) The failure of a User to completely and/or accurately report the wastewater constituents and/or characteristics of the User's discharge;
- 3) The failure to report significant changes in the User's operations or wastewater constituents and/or characteristics within the time frames provided in Section II-706 (b) of these rules;
- 4) The failure or refusal to grant reasonable access to the User's premises, waste discharge, or sample location for the purpose of inspection or monitoring;
- 5) Restricting, locking out or preventing, directly or indirectly, access to any monitoring facilities constructed on public or private property. The locking or securing of the monitoring facility shall not constitute a violation pursuant to this subsection, provided, that upon request, reasonable access to the facility is promptly provided to the Control Authority representatives;
- 6) Restricting, interfering, tampering with, or rendering inaccurate any of the Control Authority's monitoring devices including, but not limited to, samplers;
- 7) Failing to obtain a wastewater discharge permit prior to discharging wastewater to the POTW;
- 8) Failing to comply with any condition or requirement of the User's wastewater discharge permit, or other control mechanism;
- 9) Failing to provide notification of any self-monitoring violation, accidental release, or other notice required under these rules;
- 10) Failing to comply with any limitation, prohibition, or requirement of these rules, or order issued hereunder. Users acting in full compliance with wastewater discharge permits issued prior to the effective date of these rules shall be deemed to be in compliance with the requirements of these rules, and such permits shall remain in effect and be enforceable under these rules until a superseding permit is effective.
- 11) Users shall comply with applicable National Categorical Pretreatment Standards and requirements on the date specified in the Federal Regulations regardless of compliance schedules.

### Section II-1004. Administrative Enforcement Actions

The Control Authority shall initiate the appropriate administrative enforcement action, except in the case of an emergency or a flagrant violation, in order to compel the User to eliminate or to remedy such violation as soon as possible. These administrative enforcement actions include:

a) Notice of Violation - The Control Authority shall take care to enforce these rules and use reasonable

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efforts of on-site inspections, records review and independent authority monitoring, to identify violations of the rules. Except in the case of an actual or threatened discharge as specified in subparagraph (g) of this section, whenever the control authority has reason to believe that any User has violated or is violating these rules, whether as an individual event or pattern, the Control Authority shall serve a written notice upon such User, stating the nature of the violation including its date, time and place, and the action and/or response required from the User.

- b) Issuance of Citation of Violation – The Control Authority is authorized to enforce these rules and issue a citation ticket to any person or User who is reasonably believed to have violated these rules. The following fines are authorized for inclusion with the citation:

| Violation Type         | Criteria                                                                  | Event           | Within a Calendar Year<br>(per violation) |                      |
|------------------------|---------------------------------------------------------------------------|-----------------|-------------------------------------------|----------------------|
|                        |                                                                           |                 | First Violation                           | Succeeding Violation |
| Reporting Violation    | >45 days after specified due date                                         | Any occurrence  | \$ 250.00                                 | \$ 500.00            |
| Notification Violation | >24 hrs beyond specified time                                             | Any occurrence  | \$ 100.00                                 | \$ 250.00            |
| Effluent Violation     | Pollutant parameter exceeds applicable TRC (See Article XII)              | Daily Maximum   | \$ 100.00                                 | \$ 250.00            |
| Effluent Violation     | Pollutant parameter exceeds applicable TRC (See Article XII)              | Monthly Average | \$ 250.00                                 | \$ 500.00            |
| Effluent Violation     | Pollutant parameter exceeds applicable chronic criteria (See Article XII) | Daily Maximum   | \$ 250.00                                 | \$ 500.00            |
| Effluent Violation     | Pollutant parameter exceeds applicable chronic criteria (See Article XII) | Monthly Average | \$ 500.00                                 | \$ 1,000.00          |
| Effluent Violation     | Stipulated penalty as part of administrative enforcement                  | Daily Maximum   | \$ 250.00                                 | \$ 500.00            |
| Effluent Violation     | Stipulated penalty as part of administrative enforcement                  | Monthly Average | \$ 500.00                                 | \$ 1,000.00          |

The Citation shall be in writing and shall specify the date, time and violation alleged, signed by the Control Authority and be served on the Authorized Representative in person or by certified mail. The User may appeal any written citation under the reconsideration and appeal procedures of these rules.

- c) Conferences - The Control Authority may order any person, who violates these rules, to attend a conference wherein the Control Authority may endeavor to establish a program wherein the User agrees

to eliminate or remedy the violation pursuant to an enforceable compliance schedule. Any notice of violation ordering attendance to a conference, shall be served at least ten (10) days before the scheduled conference and shall set forth the date, time, and place thereof. The conference shall be conducted by the Control Authority or their designated representative. The User may present a plan and schedule for achieving compliance with these rules. Nothing contained herein shall require the Control Authority to accept or agree to any proposed plan or schedule, or to prevent the Control Authority from proceeding with a show cause hearing as set forth in subsection (4) of this section. If the attendees agree upon a compliance schedule, the User and the Control Authority may enter, by consent, into a compliance agreement or an administrative order setting forth the terms of such agreement. A User must exhibit good faith and expeditious efforts to comply with these rules and any procedures, requirements, and agreements hereunder.

- d) Compliance schedules - The User and the Control Authority may agree upon a schedule which sets forth the terms and conditions, and time periods or schedules for completion of actions to remedy or to eliminate the causes of violation. These schedules may be developed as part of a conference compliance agreement, or administrative consent order. Schedules developed under this subsection shall adhere to the following conditions:
  - 1) The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of upgraded or additional pretreatment facilities, or to the implementation of additional operation and maintenance procedures required for the User to meet the applicable pretreatment requirements and standards including, but not limited to, hiring an engineer, completing preliminary plans, completing final plans, executing contracts for major components, commencing construction, and completing construction;
  - 2) No single increment referred to in subsection (1) of this section shall exceed nine (9) months;
  - 3) Not later than fourteen (14) days following each date in the schedule and the final date for compliance, the User shall submit a progress report to the Control Authority including, at a minimum, whether it has complied with the increment of progress to be met on such date and, if not, the date which it expects to comply with this increment of progress, the reason(s) for delay, and the steps being taken by the User to return to the established schedule; and
  - 4) Any deviation from the compliance schedule may result in the User being found in violation of these rules, or being recommended for an escalated enforcement action.
- e) Administrative orders - The Control Authority may order any User, who violates or continues to violate these rules or duly issued permit, to install and to properly operate devices, treatment facilities, or other related appurtenances. In addition, orders may contain such other requirements as might reasonably be necessary and appropriate to address the violation including the installation of pretreatment technology, additional self-monitoring and management practices, implementation of a waste minimization



assessment to identify and implement feasible source reduction, and recycling practices to reduce the generation or release of pollutants at the facility. An order may be either an administrative consent order, which is the result of an agreement, or a unilateral administrative order.

- f) Show cause hearing - Where a Conference, Compliance Agreement or Administrative Order has not been effective in remedying the violation(s), or are deemed an inadequate response to an actual or threatened discharge to the POTW, the Control Authority may order any User who violates these rules or allows such violation to occur, to show cause why a proposed enforcement action should not be taken.

A notice shall be served upon the User specifying the time and place of a hearing regarding the violation, and the reason(s) why the show cause action and proposed enforcement action is being taken. The notice of the hearing shall be served personally, or by, registered or certified mail with return receipt requested, at least ten (10) days before the hearing. Service shall be made upon the authorized representative, or to its agent.

- 1) Hearing proceeding. The hearing shall be conducted by the Chief Compliance Officer or their designee, who shall serve as hearing officer and conduct the show cause hearing and take the evidence, and may:
  - i) Issue notices of hearing requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in such hearing.
  - ii) Prepare a report of the evidence and hearing, including transcripts and other evidence.
  - iii) Transcript. At any show cause hearing held pursuant to these rules, testimony shall be recorded by a court reporter.
- 2) Actions. After a show cause hearing has been conducted, the hearings officer shall issue an order directing any of the following actions:
  - i) A finding that the User has demonstrated by a preponderance of the evidence that the violation(s) contained within the Show Cause notice did not occur;
  - ii) A finding that the User has failed to demonstrate by a preponderance of the evidence that the violation(s) contained within the Show Cause notice did not occur, and that the following additional actions are required;
  - iii) Immediate compliance with the User's wastewater discharge permit and/or control mechanism; or with any applicable limitation, condition, restriction or requirement of these rules, or applicable local, state or federal law or regulation;
  - iv) Pretreatment of wastes and wastewater by installation of adequate treatment equipment, monitoring facilities, or proper operation and maintenance of existing treatment equipment be accomplished within a specified time period;
  - v) Submission of periodic reports on effluent quality and quantity determined by self-monitoring analysis throughout the final period set by a compliance date;

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- vi) Control of discharge quantities or volumes;
  - vii) Payment of costs for reasonable and necessary inspection, monitoring, and administration of the User's activities by the Control Authority during compliance efforts; and/or
  - viii) Any such other orders as are appropriate including, but not limited to, immediate termination of sewer or wastewater treatment services, revocation of a wastewater discharge permit, or orders directing that following a specified time period sewer or wastewater treatment service will be discontinued unless adequate treatment facilities, devices, or operation and maintenance practices have been employed;
  - ix) The User may appeal the decision of the hearing officer in accordance with Chapter VIII.
- g) Emergency suspensions and orders - The Control Authority may order suspension of the sewer or wastewater treatment service and/or a wastewater discharge permit where, in its opinion, such suspension is necessary to stop any actual or threatened discharge which presents or may present an imminent or significant hazard to the health or welfare of persons or to the environment, interferes or may interfere with the POTW, or causes or may cause the GLWA to violate any condition of its NPDES permit. Any person notified of a suspension of the sewer or wastewater treatment service and/or the wastewater discharge permit shall immediately stop or eliminate the contribution.
- 1) In the event the Control Authority provides verbal notification under this section, written confirmation providing a detailed written statement from the Control Authority and the basis of its findings in support of its order to suspend contributions by the User, within twenty-four (24) hours of such action, and include the specific recourse available to the User. In any event, the written confirmation order shall provide the User with an opportunity for a hearing before the Control Authority, or their designated representative, within ten (10) days of such action. The User shall submit a detailed written statement at the hearing describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, or, if the hearing has been waived, a report describing the causes of the harmful contribution and the measures taken to prevent any future occurrence shall be provided to the Control Authority within fifteen (15) days of the written confirmation order. Upon proof of elimination of the noncomplying discharge, the Control Authority shall reinstate the wastewater discharge permit and/or the sewer or wastewater treatment service.
  - 2) In the event of a failure of the person to comply voluntarily with any suspension or revocation order, the Control Authority shall take such judicial enforcement actions as deemed necessary, including immediate severance of the sewer connection or services, to prevent or minimize damage to the POTW system or danger to any individual or the environment.
  - 3) Where the Control Authority has issued a Show Cause Order, or hearing decision in paragraph (g)(1) above, calling for the suspension of the sewer or wastewater treatment service and/or a wastewater discharge permit, and where the Control Authority has not reinstated the

wastewater discharge permit and/or the sewer or wastewater treatment service, the User may exercise the appeal provision in Chapter VIII. The Show Cause order and the hearing transcript and report shall substitute for the Reconsideration statement requirement of Chapter VIII of these rules.

Section II-1005. Judicial Enforcement Actions

Where administrative enforcement actions have been unable to eliminate or to remedy the violation(s) or where in the case of emergency or flagrant violation, the Control Authority determines that the enforcement action should be escalated to compel the User to eliminate or to remedy such violation as soon as possible, the following judicial enforcement actions are authorized:

- a) Civil action: Whenever the Control Authority has reasonable grounds to believe that a User is violating, or has violated, a provision of its wastewater discharge permit, a pretreatment standard or requirement or any requirement of these rules, including the failure to pay any fee, fine, charge or surcharge imposed hereby, the Control Authority may commence a civil action to compel compliance in a court of competent jurisdiction to enjoin the User from discharging, and/or to obtain appropriate legal and/or equitable relief to remedy the violations and impose the fees, fines, charges and surcharges requested. The commencement of suit neither constitutes an exclusive election of remedies nor prohibits the Control Authority from commencing action in federal court for discharges believed to be in violation of these rules, state and federal requirements contained in the Clean Water Act, the NPDES permit, or other applicable laws or requirements. In addition, the Control Authority may recover the reasonable attorney fees, court costs, court reporters' fees, and other unusual expenses related to enforcement activities or litigation against the person found to have violated these rules, or the orders, rules, regulations and permits issued hereunder.
- b) Criminal action:
  - 1) Any User, who knowingly make any false statement, representation of certification, is guilty of a misdemeanor, punishable by imprisonment for not more than ninety (90) days, or a fine of not more than \$500.00, or both. Each violation constitutes a separate and distinct offense.
  - 2) Any User, who knowingly tampers with or alters a monitoring device or process, causing inaccurate readings or results, is guilty of a misdemeanor, punishable by imprisonment for not more than ninety (90) days, or a fine of not more than \$500.00, or both. Each violation constitutes a separate and distinct offense.
  - 3) For all other violations of a rule or regulation adopted and promulgated herein, a User shall be punished by a civil fine not to exceed one thousand dollars (\$1,000.00) for each violation per day.
  - 4) The Control Authority is hereby authorized, through it general counsel, to seek prosecution of criminal charges against any person violating any provision of these rules.
- c) Any fines, costs, and penalties which are imposed by any court of competent jurisdiction shall be

payable to the GLWA.

Section II-1006. Supplemental Enforcement Actions

- a) Pollution Prevention Plans and Best Management Practice Plans. The GLWA may require a User to develop and implement pollution prevention plans or Best Management Practice plans, designed to eliminate or reduce pollutant contributions beyond the levels required by these rules. Where required, the plans shall be incorporated into a modified or revised Wastewater Discharge Permit; and include a schedule for periodically reporting implementation progress and results for the plan(s).
- b) Local Pollutant Discharge Limitations for Total PCB. In the event where one (1) or more of the measurements taken for Total PCB during a six (6) month period exceeds by any magnitude the method detection level of 0.2 ugms/l, the Control Authority may require a User to develop and implement pollution prevention plan initiatives or a BMP, as part of its response to the exceedance. Upon acceptance of the pollution prevention plan initiatives or BMP, the Control Authority will recognize continued performance under the pollution prevention initiative or BMP as continued compliance. Upon approval of the Control Authority, these pollution prevention plan initiatives or BMPs, shall be made an enforceable part of the wastewater discharge permit.
- c) Local Pollutant Discharge Limitations for Mercury (Hg). In the event where one (1) or more of the measurements taken for Hg during a six (6) month period exceeds by any magnitude the limitation of 10 ugms/l, the Control Authority may require a User to develop and implement pollution prevention initiatives or a BMP, as part of its response to the exceedance. Upon acceptance of the pollution prevention plan initiatives or BMP, the Control Authority will recognize continued performance under the pollution prevention plan initiatives or BMP as continued compliance. Upon approval of the Control Authority, these pollution prevention plan initiatives or BMPs, shall be made an enforceable part of the wastewater discharge permit.
- d) The Control Authority may require any User to implement pollution prevention plan initiatives, or BMP, as part of an enforcement response, or as necessary to comply with its NPDES permit.
- e) A User may seek to terminate a BMP when it has demonstrated compliance for a twelve (12) month period supported by a minimum of four (4) analytical test results and a report describing the management and operating procedures used to support the compliance status. Upon acceptance of this demonstration of compliance, the User shall be relieved of this implementation requirement.

Section II-1007. Remedies Nonexclusive

The remedies provided for in these rules are not exclusive. Enforcement of pretreatment violations will generally be in accordance with the GLWA's enforcement response plan. However, the Control Authority may take other action against any User when the circumstances warrant. Further, the Control Authority is empowered to take more than one enforcement action against any noncompliant User.

**Article XI AFFIRMATIVE DEFENSES TO DISCHARGE VIOLATIONS**

**Section II-1101. Upsets.**

An upset shall constitute an affirmative defense to an action brought for noncompliance with national categorical pretreatment standards and/or Local Pollutant Discharge Limitations where the requirements of subsection (a) of this section are met.

- a) An Industrial User who wishes to establish an upset as an applicable affirmative defense shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:
  - 1) An upset occurred and the Industrial User can identify the cause(s) of the upset;
    - i. At the time, the facility was being operated in a prudent and workmanlike manner and in compliance with applicable operation and maintenance procedures;
    - ii. The Industrial User has submitted the following information to the Control Authority, orally or in writing, within twenty-four (24) hours of becoming aware of the upset and, where this information is provided orally, a written submission must then be provided within five (5) days:
      - (a) A description of the discharge and cause of noncompliance;
      - (b) The period of noncompliance including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
      - (c) Steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.
  - 2) In any enforcement proceeding, the Industrial User seeking to establish the occurrence of an upset shall have the burden of proof;
  - 3) The Industrial User shall control production of all discharges to the extent necessary to maintain compliance with these rules upon reduction, loss, or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

**Section II-1102. Bypass.**

A bypass includes any intentional diversion of a wastestream from any portion of an Industrial User's treatment facility. A bypass shall constitute an affirmative defense to an action brought for noncompliance with national categorical pretreatment standards and/or Local Pollutant Discharge Limitations where the requirements of subsection (a) of this section are met.

- a) The affirmative defense of bypass may be claimed where:
  - 1) The bypass is for essential maintenance to ensure efficient operation of the treatment system and does not cause a violation of pretreatment standards or requirements;
  - 2) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

- 3) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
  - 4) The Industrial User properly notified the Control Authority as described in subsection (2) of this section.
- b) Notice of Bypass Event. An Industrial User shall have properly notified the Control Authority as follows:
- 1) Anticipated bypass. Any Industrial User anticipating a bypass shall submit notice to the Control Authority at least ten (10) days in advance of the anticipated date.
  - 2) Unanticipated bypass. The Industrial User shall submit oral notice of an unanticipated bypass that exceeds applicable pretreatment standards within twenty-four (24) hours from the time the Industrial User becomes, or should have become, aware of the bypass.
  - 3) For any bypass event, a written submission shall be provided to the Control Authority within five (5) days of the time the Industrial User becomes, or in the case of an unanticipated bypass, should have become aware of the bypass. The written submission shall contain a description of the bypass including exact dates and times, and if the bypass has not been corrected or the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate and prevent reoccurrence of the bypass.
- c) Bypass approval. Where it meets all conditions in subsections (1) and (2) of this section, the Control Authority shall recognize the affirmative defense. However, the Industrial User may still be held liable for costs and fees incurred by the Control Authority as a result of the bypass, including treatment costs, charges and surcharges.

## **Article XII PUBLICATION OF INDUSTRIAL USERS IN SIGNIFICANT NONCOMPLIANCE**

### **Section II-1201. Public notification of significant noncompliance.**

The Control Authority shall publish in the largest daily newspaper published in the jurisdictional limits of the GLWA, a list of all Users which, at any time during the previous twelve (12) months, were in significant noncompliance with applicable pretreatment standards and requirements.

### **Section II-1202. Significant Noncompliance Criteria.**

A User is in significant noncompliance when one (1) or more of the following criteria are met:

- a) Chronic violations of wastewater discharge limits, defined as those in which sixty-six (66%) percent or more of all of the measurements taken during a six (6) month period exceed by any magnitude the daily maximum limit or the average limit for the same parameter;

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- b) Technical review criteria (TRC) violations, defined as those in which thirty-three (33%) percent or more of all of the measurements for each pollutant parameter taken during a six (6) month period equal to or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, FOG (fats, oil, and grease), and 1.2 for all other pollutants except pH).
  - 1) The pH TRC criteria shall be based upon thirty-three (33%) percent or more of the measurements being either <4.6 pH units or exceeding 11.9 pH units
- c) Any other violation of a pretreatment effluent limit (daily maximum or longer term average) that the Control Authority determines has caused, alone or in combination with other discharges, interference or pass through including endangering the health of POTW personnel or the general public;
- d) Any discharge of a pollutant that has caused imminent endangerment to human health or welfare, or to the environment, or has resulted in the POTW's exercise of its emergency authority;
- e) Failure to meet a compliance schedule milestone contained in a local control mechanism, or enforcement order for starting construction, completing construction, or attaining final compliance within ninety (90) days after the scheduled date;
- f) Failure to provide required reports such as baseline monitoring reports, ninety (90) day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules within forty-five (45) days after the due date;
- g) Failure to accurately report noncompliance; or
- h) Any other violation or group of violations which the Control Authority determines will adversely affect the operation or implementation of the local pretreatment program.

### Section II-1203. Publication Process.

Any User who is identified for publication as being in significant noncompliance shall be notified in writing at least thirty (30) days before the proposed publication; provided with a copy of the proposed notice to be published; the proposed time frame for the publication; and allowed an opportunity to comment. The Control Authority shall incorporate any comments with the proposed publication, or incorporate any comments with a revised publication, but may exercise its discretion to summarize any comments where space or word count is deemed excessive. In addition, the GLWA may place this information on its web page at [www.glwater.org](http://www.glwater.org).

## **Article XIII FEES AND CHARGES**

Fees and charges may be established by the Board to meet the costs of the operation, maintenance, improvement or replacement of the system and regulatory programs, or as provided by law or by board action. The specific fees and charges are discussed more fully in Chapter V of these rules.

## **Article XIV APPEAL PROCEDURES**

The Decisions and Actions taken by the Industrial Waste Control Group and the Control Authority affecting

the administration, implementation, and enforcement of the Industrial Pretreatment Program Requirements are subject to review through a two-step appeal process. Although the majority of disputes are resolved through open communication, there may be a point where a User seeks to formalize their objection(s) and seek administrative review. The Appeal procedures recognized under these rules are described in Chapter VIII.

#### **Article XV     STATUTES, LAWS AND REGULATIONS**

Section II-1501. Unless otherwise provided, any reference in these rules to a code, standard, rule, regulation, or law enacted, adopted, established, or promulgated by any government or private organization, or by any element or organization of government other than the GLWA shall be construed to apply to such code, standard, rule, regulation, or law in effect or as amended or promulgated, from the date of enactment of these rules.

Section II-1502. The National Categorical Pretreatment Standards defined in 40 CFR Chapter I, Subchapter N, Parts 405-471, shall be and are incorporated by reference herein and made a part hereof.

Section II-1503. The Board may amend these rules or adopt additional rules necessary and proper for carrying out the conditions and intent of these rules.

Section II-1504. Nothing in these rules shall be deemed to limit the GLWA, Board, or Control Authority from developing explanatory policies, guidance, or opinions to carry out the terms of the Industrial Pretreatment Program which is not in conflict or otherwise prohibited by these rules.



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**Appendix A – National Categorical Pretreatment Standards (NCPS) Categories**

| NCPS Category                                    | CFR Reference   | NCPS Category                                     | CFR Reference           |
|--------------------------------------------------|-----------------|---------------------------------------------------|-------------------------|
| Aluminum Forming                                 | 40 CFR Part 467 | Meat Products                                     | 40 CFR Part 432         |
| Asbestos Manufacturing                           | 40 CFR Part 427 | Metal Finishing                                   | 40 CFR Part 433         |
| Battery Manufacturing                            | 40 CFR Part 461 | Metal Molding and Casting                         | 40 CFR Part 464         |
| Builder's Paper and Board Mills                  | 40 CFR Part 431 | Metal Products and Machinery                      | 40 CFR Part 438         |
| Canned and Preserved Fruits and Vegetables       | 40 CFR Part 407 | Mineral Mining and Processing                     | 40 CFR Part 436         |
| Canned and Preserved Seafood Processing          | 40 CFR Part 408 | Nonferrous Metals Forming                         | 40 CFR Part 471         |
| Carbon Black Manufacturing                       | 40 CFR Part 458 | Nonferrous Metals Manufacturing I                 | 40 CFR Part 421         |
| Cement Manufacturing                             | 40 CFR Part 411 | Nonferrous Metals Manufacturing II                | 40 CFR Part 421         |
| Centralized Waste Treatment                      | 40 CFR Part 437 | Ore Mining and Dressing                           | 40 CFR Part 440         |
| Coal Mining                                      | 40 CFR Part 434 | Organic Chemicals, Plastics, and Synthetic Fibers | 40 CFR Part 414         |
| Coil Coating                                     | 40 CFR Part 465 | Paint Formulating                                 | 40 CFR Part 446         |
| Copper Forming                                   | 40 CFR Part 468 | Paving and Roofing Materials                      | 40 CFR Part 443         |
| Dairy Products Processing                        | 40 CFR Part 405 | Pesticide Chemicals                               | 40 CFR Part 455         |
| Dental Office (Mercury Amalgam)                  | 40 CFR Part 441 | Petroleum Refining                                | 40 CFR Part 419         |
| Electrical and Electronic Components I & and; II | 40 CFR Part 469 | Pharmaceutical                                    | 40 CFR Part 439         |
| Electroplating                                   | 40 CFR Part 413 | Phosphate Manufacturing                           | 40 CFR Part 422         |
| Explosives Manufacturing                         | 40 CFR Part 457 | Photographic                                      | 40 CFR Part 459         |
| Feed Lots                                        | 40 CFR Part 412 | Plastics Molding and Forming                      | 40 CFR Part 463         |
| Ferroalloy Manufacturing                         | 40 CFR Part 424 | Porcelain Enameling                               | 40 CFR Part 466         |
| Fertilizer Manufacturing                         | 40 CFR Part 418 | Pulp, Paper, and Paperboard                       | 40 CFR Part 430 and 431 |
| Glass Manufacturing                              | 40 CFR Part 426 | Rubber Manufacturing                              | 40 CFR Part 428         |
| Grain Mills                                      | 40 CFR Part 406 | Soap and Detergent Manufacturing                  | 40 CFR Part 417         |
| Gum and Wood Chemicals Manufacturing             | 40 CFR Part 454 | Steam Electric                                    | 40 CFR Part 423         |
| Hospital                                         | 40 CFR Part 460 | Sugar Processing                                  | 40 CFR Part 409         |
| Ink Formulating                                  | 40 CFR Part 447 | Textile Mills                                     | 40 CFR Part 410         |
| Inorganic Chemicals Manufacture (I & and II)     | 40 CFR Part 415 | Timber products                                   | 40 CFR Part 429         |
| Iron and Steel                                   | 40 CFR Part 420 | Transportation Equipment Cleaning                 | 40 CFR Part 442         |
| Landfills                                        | 40 CFR Part 445 | Waste Combusters                                  | 40 CFR Part 444         |
| Leather Tanning & finishing                      | 40 CFR Part 425 |                                                   |                         |

### CHAPTER III: SURCHARGE PROGRAM FOR HIGH-STRENGTH WASTEWATER DISCHARGES

The GLWA Wastewater Treatment Plant receives wastewater from residential, commercial and industrial sources for treatment and discharge under its NPDES Permit MI0022802. The Sewer Charge rate charged to GLWA Member Communities is based upon the Domestic Strength of sewage. A Surcharge Program for High Strength Wastewater Discharges has been established to capture the additional treatment and operations costs incurred for wastewater conveying additional pollutants to the GLWA Wastewater Treatment Plant for specific Users.

The purpose of these rules are to establish an orderly and fair system whereby the operations, maintenance, and replacement costs incurred by the GLWA in treating and disposing of the sewage, industrial wastes, and other wastes generated by each User is charged to that User for his or her use of the sewage collection and treatment facilities of the GLWA, as required by The Federal Water Pollution Control Act Amendments of 1972 and the Clean Water Act of 1977 (33 U.S.C. 1251-1387) and the rules of the United States Environmental Protection Agency, promulgated pursuant thereto.

These rules are promulgated pursuant to the statutory authority contained in Act No. 233, Public Acts of Michigan, 1955, as amended (“Act 233”).

#### **Article I        Domestic Strength of Sewage**

The GLWA Board has established the following Domestic Strength Levels for wastewater discharged to the GLWA system.

| Domestic Strength Levels        |          |
|---------------------------------|----------|
| Biochemical Oxygen Demand (BOD) | 275 mg/l |
| Fats, Oils & Grease             | 100 mg/l |
| Phosphorus (P)                  | 12 mg/l  |
| Total Suspended Solids (TSS)    | 350 mg/l |

#### **Article II:        High Strength Wastewater Sources**

##### Section III-201. Applicability: Domestic Sources

Domestic Sources shall not be subject to a surcharge for High Strength Wastewater where a property is used for the exclusive purpose of a residential dwelling, including but not limited to single or multi-family units or apartments.

##### Section III-202. Applicability: Industrial Users

Industrial Users and any source who does not qualify as a Domestic Source under section III-201 of these rules, are subject to the Surcharge Program for High Strength Wastewater Sources, as follows:

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- a) Industrial Users, who as of the date of adoption of these rules have been previously assigned Pollutant Strength levels (or “Surcharge Basis”) by the Detroit Water and Sewerage Department, or the GLWA, shall retain these Pollutant Strength levels, until changed under Article IV;
- b) All other Industrial Users will be assigned the Pollutant Strength basis equivalent to the Domestic Strength Levels of Article I, until changed under Article IV.

### **Article III. Surcharge and Surcharge Formula**

#### Section III-301. Domestic Strength Levels.

As part of the annual rate-making process, a surcharge fee will be established for each pollutant included in the Article I Domestic Strength Level, which reflects the actual cost of treating the pollutant by the GLWA Wastewater Treatment Plant. The Board shall approve the Surcharge Rates as part of its annual Rate-making process.

#### Section III-302. Surcharge Fee Calculation.

The Surcharge fee will be calculated for each Industrial User in accordance with the following formula:

Total Surcharge Fee =

$$0.0624 \times \text{Volume} \times [a (\text{BOD-275}) + b (\text{TSS-350}) + c (\text{P} - 12) + d (\text{FOG}-100)]$$

Where the terms constituting the total surcharge fee shall have the following meaning:

| TERM    | Description                                          | Units of Measurement      |
|---------|------------------------------------------------------|---------------------------|
| 0.0624  | Conversion factor                                    |                           |
| Volume  | Volume of Wastewater Discharged for a billing period | Thousand Cubic Feet (Mcf) |
| BOD     | BOD Strength Level                                   | Miligrams/liter (mg/l)    |
| TSS     | TSS Strength Level                                   | Miligrams/liter (mg/l)    |
| P       | Phosphorus Strength Level                            | Miligrams/liter (mg/l)    |
| FOG     | The Fats, Oils & Grease Strength Level               | Miligrams/liter (mg/l)    |
| a,b,c,d | The Surcharge Rate                                   | \$ per pound              |

Note: Where the difference between the pollutant strength level and domestic strength level is less than zero (0), the difference shall be deemed zero (0).

### **Article IV Determination of Pollutant Strength Levels of High Strength Wastewater**

Following the adoption of these rules, the Pollutant Strength Levels of High Strength Wastewater may be established or revised in accordance with any of the following methods. The Control Authority or Industrial User shall not seek to revise the Pollutant Strength Levels of High Strength Wastewater more frequently than every 12-months.

Section III-401. Pollutant Strength Levels from Historical Data Records

An Industrial User, or the GLWA, may use historical data to establish or revise its Pollutant Strength Levels. The Pollutant Strength Level will be determined using a numerical average of the self-monitoring and Control Authority monitoring data for the surcharge pollutant parameters that have been collected in a 12 month period.

a) Industrial User Initiated use of Historical Data

- 1) Where the Industrial User performs this calculation, it shall complete a Waste Strength Determination Form and provide it to the Control Authority, with all supporting data and calculations.
- 2) No data shall be excluded from the above calculation unless the Industrial User or GLWA can demonstrate that the data is non-representative of the facility's discharge and actual operations.
- 3) Within fifteen (15) days of receiving the report, the Control Authority will review all data and the Industrial User's detailed report and accept or reject the report. If rejected, the Control Authority will provide the reasons for rejection in writing. If not rejected, the new values shall be applied to the next billing cycle following receipt of the Industrial User information.

b) GLWA use of Historical Data

- 1) Where the GLWA performs this calculation, it shall notify the Industrial User in writing of the calculated Pollutant Strength Levels. The Industrial User has thirty (30) days to file a Waste Strength Determination Form and propose a Sample Test (see Section III-402), and unless rejected, the results shall be used for billing purposes.

Section III-402. Pollutant Strength Levels from Sample Test Period Data

a) An Industrial User may, on its own initiative, or upon receipt of written notice under section II-401(2) above, file a Waste Strength Determination Form and propose a Sample Test and sampling plan. The sampling plan shall be based upon a 5-day, 6-day or 7-day operating week for all surcharge pollutant parameters.

- 1) The sampling plan must be provided in writing to the Control Authority no less than fourteen (14) calendar days prior to commencement of the sampling program;
- 2) The sampling plan must include the following:
  - i) Locations of sampling
  - ii) Method(s) of sampling at each location
  - iii) Date(s) of sampling
  - iv) Measurement or determination of volume of wastewater discharged during the testing period
  - v) Sample collection for all Surcharge Pollutants (BOD, FOG, P, and TSS).

b) The sampling plan shall be submitted to the Industrial Waste Control Group by one of the following methods:

- 1) U.S. mail addressed to the Industrial Waste Control Group;

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- 2) Facsimile transmission sent to 313-297-5860; or
- 3) PDF sent via electronic mail to IWC@GLWATER.org.
- c) These submittals shall be considered “not received” if deficient or incomplete, including for any of the following reasons:
  - 1) The sampling plan has not been signed and dated by the Industrial User.
  - 2) The Industrial User has failed to enclose all supporting documents necessary to aid in the Control Authority’s review of the sampling plan.
- d) The Industrial User shall be authorized to implement the Sampling Plan unless it receives a written notice from the Control Authority specifying whether the sampling plan is deficient or incomplete.
- e) The Control Authority shall have the right to observe the Industrial User's sampling techniques, sample preservation, flow measurements, and other sampling protocols during the sampling program.
- f) Within sixty (60) calendar days of completion of the sampling plan, the Industrial User shall forward the findings and supporting documentation to the Control Authority; including field sample collection logs/notes, chain of custody reports, certified laboratory reports, daily incoming meter readings, daily direct discharge meter readings, and any other supporting documentation.
  - 1) If the Industrial User fails to notify the Control Authority prior to the sampling or fails to submit the report within the sixty (60) day period the use of the Industrial User's data for purposes of Industrial User charge calculation will be rejected, and the findings will not be allowed.
  - 2) The Industrial User shall provide a calculation of the numerical average for each Surcharge Pollutant which shall be applied as the Pollutant Strength Level for purposes of billing.
  - 3) If an Industrial User considers any self-monitoring data inappropriate for inclusion in calculating its Industrial User charges, the Industrial User must submit such data with its Report, together with a written report detailing the basis for the Industrial User’s assessment that such data were not representative for purposes of inclusion when calculating its Industrial User charges. The Control Authority will accept or reject the inclusion or exclusion of the data.
  - 4) Within fifteen (15) days of receiving the report, the Control Authority will review all data and the Industrial User’s detailed report and accept or reject the report. If rejected, the Control Authority will provide the reasons for rejection in writing. If not rejected, the new values shall be applied to the next billing cycle following receipt of the Industrial User information.

### Section III-403. Pollutant Strength Levels Using Table Values.

The GLWA has adopted Table A to assign average Pollutant Strength Levels for Commercial or Industrial groups performing operations known to produce High Strength Wastewater.

- a) A Industrial User who performs a Commercial or Industrial activity identified in Table A based upon (i) the Standard Industrial Classification Code (SIC); and/or (ii) North American Industrial Classification System (NAICS); or (iii) consistent with the Description of an SIC or NAICS code shall be subject to the applicable Surcharge for the High Strength Wastewater.

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- b) The Control Authority will notify the Industrial User in writing of their classification, and the assignment of the average Pollutant Strength levels as described in Table A. The new values shall be applied to the next billing cycle unless the Industrial User files a Waste Strength Determination Form and performs the Sample Test in accordance with Section III-402 within thirty (30) days of receiving the written notice.
- c) Where the Industrial User files a Waste Strength Determination Form under Section III-403, the Control Authority will evaluate and process it in accordance with Section III-402.
  - 1) If the Waste Strength Determination Form is accepted, the new values shall be applied to the next billing cycle following receipt of the Industrial User information.
  - 2) If the Waste Strength Determination Form is rejected, the Table A values shall be applied to the Industrial User until an acceptable Pollutant Strength Test is performed.
- d) An Industrial User who does not have an existing monitoring location and discharges less than 25,000 gallons of wastewater per day may elect to use the values specified in Table A in lieu of performing self-monitoring. The election shall be in writing.

#### Section III-404. GLWA Test Data

- a) The GLWA may, on its own initiative, conduct sampling at an Industrial User location, to establish the actual Pollutant Strength level of an Industrial User's Wastewater. Where this action is taken, the sampling shall be based upon a 5-day, 6-day or 7-day operating week, applicable to the Industrial User, for all surcharge pollutant parameters. The Control Authority shall review the results of the sampling program and determine whether a revision of the Pollutant Strength levels is required. Upon such determination, the Control Authority will notify the Industrial User in writing.
- b) The new values shall be applied to the next billing cycle unless the Industrial User files a Waste Strength Determination Form and performs the Sample Test in accordance with Section II-402 within thirty (30) days of receiving the written notice.
- c) Where the Industrial User files a Waste Strength Determination Form under Section III-404, the Control Authority will evaluate and process it in accordance with Section III-402.
  - 1) If the Waste Strength Determination Form is accepted, the new values shall be applied to the next billing cycle following receipt of the Industrial User information.
  - 2) If the Waste Strength Determination Form is rejected, the Control Authority's findings will be applied to the Industrial User until an acceptable Pollutant Strength Test is performed.

#### Section III-405. Periodic Review of Industrial User and GLWA Sampling Data

The Control Authority shall periodically review the Industrial User's self-monitoring data and its own sampling data, to assess whether a change or revision in the Pollutant Strength Levels is warranted. The GLWA shall provide written notice to the Industrial User where these findings determine a revision of the Pollutant Strength Levels is warranted.

Section III-406. Sampling and Analytical Methods

The measurement and determination of the Pollutant Strength Levels shall be in accordance with 40 CFR 136 and the latest edition of Standard Methods for the Examination of Water and Wastewater, published jointly by The American Public Health Association, The American Water Works Association, and the Water Environment Federation.

**Article V. Appeal**

Section III-501. The decisions and actions taken by the Industrial Waste Control Group and the Control Authority affecting the administration, implementation, and enforcement of the Surcharge of High Strength Wastewater Program are subject to review through a two-step appeal process. Although the majority of disputes are resolved through open communication, there may be a point where an Industrial User seeks to formalize their objection(s) and seek administrative review. The Appeal procedures recognized under these rules are described in Chapter VIII.

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| SIC Number | SIC Description                                                                     | NAICS Number | NAICS Description                                                    | BOD                                 | TSS | P(hosphorus) | FOG |
|------------|-------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------|-------------------------------------|-----|--------------|-----|
|            |                                                                                     |              |                                                                      |                                     |     |              |     |
| 2011       | Meat Packing Plants                                                                 | 311611       | Animal (except Poultry) Slaughtering                                 | 1200                                | 800 | *            | 400 |
| 2013       | Sausages & Other Prepared Meat Products                                             | 311612       | Meat Processed from Carcasses                                        | 800                                 | 700 | *            | 150 |
|            |                                                                                     | 311613       | Rendering and Meat Byproduct Processing                              |                                     |     |              |     |
|            |                                                                                     |              |                                                                      |                                     |     |              |     |
| 2022       | Natural, Processed, and Imitation Cheese                                            | 311513       | Cheese Manufacturing                                                 | 2000                                | 500 | 50           | *   |
| 2023       | Dry, Condensed, and Evaporated Dairy Products                                       | 311511       | Fluid Milk Manufacturing                                             | 1000                                | 500 | 20           | *   |
|            |                                                                                     | 311514       | Dry, Condensed, and Evaporated Dairy Product Manufacturing           |                                     |     |              |     |
| 2024       | Ice Cream and frozen Desserts                                                       | 311520       | Ice Cream and Frozen Dessert Manufacturing                           | *                                   | *   | 25           | *   |
| 2026       | Fluid Milk                                                                          | 311511       | Fluid Milk Manufacturing                                             | 1100                                | 500 | *            | 500 |
|            |                                                                                     | 311514       | Dry, Condensed, and Evaporated Dairy Product Manufacturing           |                                     |     |              |     |
|            |                                                                                     |              |                                                                      |                                     |     |              |     |
| 2035       | Pickled Fruits and Vegetables, Vegetable Sauces and Seasonings, and Salad Dressings | 311421       | Fruit and Vegetable Canning                                          | 1000                                | 500 | *            | *   |
|            |                                                                                     | 311941       | Mayonnaise, Dressing and Other Prepared Sauce Manufacturing          |                                     |     |              |     |
| 2037       | Frozen Fruits, Fruit Juices, and Vegetables                                         | 311411       | Frozen Fruit, Juice, and Vegetable Manufacturing                     | 1000                                | 500 | *            | *   |
| 2038       | Frozen Specialties, Not Elsewhere Classified                                        | 311412       | Frozen Specialty Food Manufacturing                                  | 1000                                | 500 | *            | *   |
|            |                                                                                     |              |                                                                      |                                     |     |              |     |
| 2041       | Flour and other Grain Mill Products                                                 | 311211       | Flour Milling                                                        | 1600                                | *   | *            | *   |
| 2043       | Cereal Breakfast Foods                                                              | 311230       | Breakfast Cereal Manufacturing                                       | 1600                                | *   | *            | *   |
|            |                                                                                     | 311920       | Coffee and Tea Manufacturing                                         |                                     |     |              |     |
| 2044       | Rice Milling                                                                        | 311212       | Rice Milling                                                         | 1600                                | *   | *            | *   |
|            |                                                                                     |              |                                                                      | * Signifies Domestic Strength Level |     |              |     |
| 2045       | Prepared Flour Mixes and Doughs                                                     | 311824       | Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour | 1600                                | *   | *            | *   |
| 2046       | Wet Corn Milling                                                                    | 311221       | Wet Corn Milling                                                     | 1600                                | *   | *            | *   |
|            |                                                                                     | 311225       | Fats and Oils Refining and Blending                                  | 1600                                | *   | *            | *   |



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| SIC Number | SIC Description                                                                             | NAICS Number | NAICS Description                                    | BOD                                 | TSS  | P(hosphorus) | FOG |
|------------|---------------------------------------------------------------------------------------------|--------------|------------------------------------------------------|-------------------------------------|------|--------------|-----|
|            |                                                                                             |              |                                                      |                                     |      |              |     |
| 2047       | Dog and Cat Food                                                                            | 311111       | Dog and Cat Food Manufacturing                       | 1600                                | *    | *            | *   |
| 2048       | Prepared Feed and Feed Ingredients for Animals and Fowl, except Dogs & Cats                 | 311119       | Other Animal Food Manufacturing                      | 1600                                | *    | *            | *   |
|            |                                                                                             |              |                                                      |                                     |      |              |     |
| 2051       | Bread and other Bakery products, except Cookies and Crackers                                | 311822       | Commercial Bakeries                                  | 3800                                | 1100 | *            | 260 |
| 2052       | Cookies and Crackers                                                                        | 311822       | Commercial Bakeries                                  | 800                                 | *    | *            | *   |
|            |                                                                                             | 311821       | Cookie and Cracker Manufacturing                     |                                     |      |              |     |
|            |                                                                                             | 311919       | Other Snack Food Manufacturing                       |                                     |      |              |     |
| 2053       | Frozen Bakery Products, except Bread                                                        | 311813       | Frozen Cakes, Pies, and Other Pastries Manufacturing | 800                                 | *    | *            | *   |
|            |                                                                                             |              |                                                      |                                     |      |              |     |
| 2076       | Vegetable Oil Mills, except Corn, Cottonseed, and Soybean                                   | 311224       | Soybean and other Oilseed Products                   | 650                                 | 2000 | *            | 500 |
|            |                                                                                             | 311225       | Fats and Oils Refining and Blending                  |                                     |      |              |     |
| 2077       | Animal and Marine Fats and Oils                                                             | 311613       | Rendering and Meat Byproduct Processing              |                                     |      |              |     |
|            |                                                                                             | 311710       | Seafood Product Preparation and Packaging            |                                     |      |              |     |
| 2079       | Shortening, Table Oils, Margarine, and Other Edible Fats and Oils, Not elsewhere classified | 311224       | Soybean and other Oilseed Products                   | 1000                                | *    | *            | 200 |
|            |                                                                                             | 311225       | Fats and Oils Refining and Blending                  |                                     |      |              |     |
|            |                                                                                             |              |                                                      | * Signifies Domestic Strength Level |      |              |     |
| 2082       | Malt Beverages                                                                              | 312120       | Breweries                                            | 1400                                | 600  | *            | *   |
|            |                                                                                             |              |                                                      |                                     |      |              |     |
| 2086       | Soft Drinks                                                                                 | 312111       | Soft Drink Manufacturing                             | 600                                 | *    | *            | *   |
|            |                                                                                             | 312112       | Bottled Water Manufacturing                          |                                     |      |              |     |
|            |                                                                                             |              |                                                      |                                     |      |              |     |

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| SIC Number | SIC Description                              | NAICS Number | NAICS Description                                                    | BOD                                 | TSS  | P(hosphorus) | FOG |
|------------|----------------------------------------------|--------------|----------------------------------------------------------------------|-------------------------------------|------|--------------|-----|
|            |                                              |              |                                                                      |                                     |      |              |     |
| 2090       | Miscellaneous Food Products                  |              |                                                                      | 1000                                | 500  |              | 150 |
| 2091       | Canned and Cured Fish and Seafoods           | 311710       | Seafood Products Preparation and Packaging                           |                                     |      |              |     |
| 2092       | Prepared Fresh or Frozen Fish and Seafoods   | 311710       | Seafood Products Preparation and Packaging                           |                                     |      |              |     |
| 2095       | Roasted Coffee                               | 311920       | Coffee and Tea Manufacturing                                         |                                     |      |              |     |
| 2096       | Potato Chips, Corn Chips, and Similar Snacks | 311919       | Other Snack Food Manufacturing                                       |                                     |      |              |     |
| 2097       | Manufactured Ice                             | 312113       | Ice Manufacturing                                                    |                                     |      |              |     |
| 2098       | Macaroni, Spaghetti, Vermicelli and Noodles  | 311824       | Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour |                                     |      |              |     |
| 2099       | Food Preparations, Not Elsewhere Classified  | 111998       | All Other Miscellaneous Crop Farming                                 |                                     |      |              |     |
|            |                                              | 311212       | Rice Milling                                                         |                                     |      |              |     |
|            |                                              | 311340       | Non-chocolate Confectionery Manufacturing                            |                                     |      |              |     |
|            |                                              | 311423       | Dried and Dehydrated Food Manufacturing                              |                                     |      |              |     |
|            |                                              | 311824       | Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour |                                     |      |              |     |
|            |                                              | 311830       | Tortilla Manufacturing                                               |                                     |      |              |     |
|            |                                              | 311911       | Roasted Nuts and Peanut Butter Manufacturing                         |                                     |      |              |     |
|            |                                              | 311920       | Coffee and Tea Manufacturing                                         |                                     |      |              |     |
|            |                                              | 311941       | Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing         |                                     |      |              |     |
|            |                                              | 311942       | Spice and Extract Manufacturing                                      | *Signifies Domestic Strength levels |      |              |     |
|            |                                              | 311991       | Perishable Prepared Food Manufacturing                               |                                     |      |              |     |
|            |                                              | 311999       | All other Misc. Food Manufacturing                                   |                                     |      |              |     |
| 2620       | Paper Mills                                  | 322121       | Paper (except Newsprint) Mills                                       | *                                   | 480  | *            | *   |
|            |                                              | 322122       | Newsprint Mills                                                      |                                     |      |              |     |
| 2640       | Converted Paper Products                     |              |                                                                      | 300                                 | 1500 | *            | *   |
|            |                                              |              |                                                                      |                                     |      |              |     |

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| SIC Number | SIC Description                                                          | NAICS Number | NAICS Description                                                      | BOD                                 | TSS      | P(hosphorus) | FOG |
|------------|--------------------------------------------------------------------------|--------------|------------------------------------------------------------------------|-------------------------------------|----------|--------------|-----|
|            |                                                                          |              |                                                                        |                                     |          |              |     |
| 2810       | Industrial Inorganic Chemicals                                           |              |                                                                        |                                     |          |              |     |
| 2812       | Alkalies and Chlorine                                                    | 325180       | Other Basic Inorganic Chemical Manufacturing                           | *                                   | 200<br>0 | *            | *   |
| 2813       | Industrial Gases                                                         | 325120       | Industrial Gas Manufacturing                                           |                                     |          |              |     |
| 2816       | Inorganic Pigments                                                       | 325130       | Synthetic Dye and Pigment Manufacturing                                |                                     |          |              |     |
|            |                                                                          | 325180       | Other basic Inorganic Chemical Manufacturing                           |                                     |          |              |     |
| 2819       | Industrial Inorganic Chemicals, Not elsewhere classified                 | 211112       | Natural Gas Liquid Extraction                                          |                                     |          |              |     |
|            |                                                                          | 325130       | Synthetic Dye and Pigment Manufacturing                                |                                     |          |              |     |
|            |                                                                          | 325180       | Other basic Inorganic Chemical Manufacturing                           |                                     |          |              |     |
|            |                                                                          | 325998       | All Other Miscellaneous Chemical Product and Preparation Manufacturing |                                     |          |              |     |
|            |                                                                          | 331311       | Alumina Refining                                                       |                                     |          |              |     |
|            |                                                                          |              |                                                                        |                                     |          |              |     |
| 2830       | Drugs                                                                    |              |                                                                        |                                     |          |              |     |
| 2833       | Medicinal Chemicals and Botanical Products                               | 325411       | Medicinal and Botanical Manufacturing                                  | 500                                 | 500      | *            | *   |
| 2834       | Pharmaceutical Preparation Manufacturing                                 | 325412       | Pharmaceutical Preparation Manufacturing                               |                                     |          |              |     |
|            | In Vitro and In Vivo Diagnostic Substances                               | 325412       | Pharmaceutical Preparation Manufacturing                               |                                     |          |              |     |
|            |                                                                          | 325413       | In-Vitro Diagnostic Substance Manufacturing                            |                                     |          |              |     |
| 2835       |                                                                          |              |                                                                        |                                     |          |              |     |
| 2836       | Biological Products, except Diagnostic Substances                        | 325414       | Biological Product (except Diagnostic) Manufacturing                   | *Signifies Domestic Strength levels |          |              |     |
| 2840       | Soaps & Detergents                                                       |              |                                                                        |                                     |          |              |     |
| 2841       | Soap and Other Detergents, except Specialty Cleaners                     | 325611       | Soap and Other Detergent Manufacturing                                 | 600                                 | *        | *            | 200 |
| 2842       | Specialty Cleaning, Polishing, and Sanitation Preparations               | 325612       | Polish and Other Sanitation Good Manufacturing                         |                                     |          |              |     |
| 2843       | Surface Active Agents, Finishing Agents, Sulfonated Oils, and Assistants | 325613       | Surface Active Agent Manufacturing                                     |                                     |          |              |     |

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| SIC Number | SIC Description                                                        | NAICS Number | NAICS Description                                                      | BOD                                 | TSS | P(hosphorus) | FOG |
|------------|------------------------------------------------------------------------|--------------|------------------------------------------------------------------------|-------------------------------------|-----|--------------|-----|
|            |                                                                        |              |                                                                        |                                     |     |              |     |
| 2844       | Perfumes, Cosmetics, and other Toilet Preparations                     | 325620       | Toilet Preparation Manufacturing                                       |                                     |     |              |     |
|            |                                                                        |              |                                                                        |                                     |     |              |     |
| 2850       | Paints & Allied Products                                               |              |                                                                        |                                     |     |              |     |
| 2851       | Paints, Varnishes, Lacquers, Enamels, and Allied Products              | 325510       | Paint and Coating Manufacturing                                        | *                                   | *   | 15           | 200 |
|            |                                                                        |              |                                                                        |                                     |     |              |     |
| 2860       | Industrial Organic Chemicals                                           |              |                                                                        |                                     |     |              |     |
| 2861       | Gum and Wood Chemicals                                                 | 325194       | Cyclic Crude, Intermediate and Gum and Wood Manufacturing              | 500                                 | 500 | 20           | 150 |
| 2865       | Cyclic Organic Crudes and Intermediates, and Organic Dyes and Pigments | 325110       | Petrochemical Manufacturing                                            |                                     |     |              |     |
|            |                                                                        | 325130       | Synthetic Dye and Pigment Manufacturing                                |                                     |     |              |     |
| 2869       | Industrial Organic Chemicals, not elsewhere classified                 | 325120       | Industrial Gas Manufacturing                                           |                                     |     |              |     |
|            |                                                                        | 325180       | Other Basic Inorganic Chemical Manufacturing                           |                                     |     |              |     |
|            |                                                                        | 325193       | Ethyl Alcohol Manufacturing                                            |                                     |     |              |     |
|            |                                                                        | 325199       | All Other Basic Organic Chemical Manufacturing                         |                                     |     |              |     |
|            |                                                                        | 325998       | All Other Miscellaneous Chemical Product and Preparation Manufacturing |                                     |     |              |     |
|            |                                                                        |              |                                                                        | *Signifies Domestic Strength levels |     |              |     |
| 2890       | Miscellaneous Chemical Products                                        |              |                                                                        |                                     |     |              |     |
| 2891       | Adhesives and Sealants                                                 | 325520       | Adhesive Manufacturing                                                 | 400                                 | *   | *            | *   |
| 2892       | Explosives Manufacturing                                               | 325920       | Explosives Manufacturing                                               |                                     |     |              |     |
| 2893       | Printing Ink                                                           | 325910       | Printing Ink Manufacturing                                             |                                     |     |              |     |
| 2895       | Carbon Black                                                           | 325180       | Other Basic Inorganic Chemical Manufacturing                           |                                     |     |              |     |
| 2899       | Chemicals and Chemical Preparations, Not Elsewhere Classified          | 325199       | All Other Basic Organic Chemical Manufacturing                         |                                     |     |              |     |
|            |                                                                        | 325510       | Paint and Coating Manufacturing                                        |                                     |     |              |     |
|            |                                                                        | 325998       | All Other Miscellaneous Chemical Product and Preparation Manufacturing |                                     |     |              |     |

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| SIC Number | SIC Description                                         | NAICS Number | NAICS Description                                                 | BOD                                 | TSS | P(hosphorus) | FOG |
|------------|---------------------------------------------------------|--------------|-------------------------------------------------------------------|-------------------------------------|-----|--------------|-----|
|            |                                                         |              |                                                                   |                                     |     |              |     |
|            |                                                         |              |                                                                   |                                     |     |              |     |
| 3010/1     | Tire & Inner Tubes                                      | 326211       | Tire Manufacturing (except Retreading)                            | *                                   | 500 | *            | *   |
|            |                                                         |              |                                                                   |                                     |     |              |     |
| 3060       | <b>Fabricated Rubber Products</b>                       |              |                                                                   |                                     |     |              |     |
| 3061       | Molded, Extruded, and Lathe cut Mechanical Rubber Goods | 326291       | Rubber Product Manufacturing for Mechanical Use                   | *                                   | 500 | *            | *   |
| 3069       | Fabricated Rubber Products, Not Elsewhere Classified    | 313320       | Fabric Coating Mills                                              |                                     |     |              |     |
|            |                                                         | 314910       | Textile Bag Mills                                                 |                                     |     |              |     |
|            |                                                         | 315280       | Other Cut and Sew Apparel Manufacturing                           |                                     |     |              |     |
|            |                                                         | 315990       | Apparel Accessories and Other Apparel Manufacturing               |                                     |     |              |     |
|            |                                                         | 326199       | All other Plastics Products Manufacturing                         |                                     |     |              |     |
|            |                                                         | 326299       | All other Rubber Products Manufacturing                           |                                     |     |              |     |
|            |                                                         | 339113       | Surgical Appliance and Supplies Manufacturing                     |                                     |     |              |     |
|            |                                                         | 339920       | Sporting and Athletic Goods Manufacturing                         | *                                   | 500 | *            | *   |
|            |                                                         | 339930       | Doll, Toy and Game Manufacturing                                  |                                     |     |              |     |
|            |                                                         |              |                                                                   |                                     |     |              |     |
| 5085       | Drums & Barrels - Reconditioning                        |              |                                                                   | *Signifies Domestic Strength levels |     |              |     |
|            |                                                         |              |                                                                   |                                     |     |              |     |
| 5090       | <b>Miscellaneous Durable Goods</b>                      |              |                                                                   |                                     |     |              |     |
| 5091       | Sporting and Recreational Goods and Supplies            | 423910       | Sporting and Recreational Goods and Supplies Merchant Wholesalers | 400                                 | 500 | *            | 150 |
|            |                                                         | 425110       | Business to Business Electronic Markets                           |                                     |     |              |     |
|            |                                                         | 425120       | Wholesale Trade Agents and Brokers                                |                                     |     |              |     |
|            |                                                         | 451110       | Sporting Goods Stores                                             |                                     |     |              |     |
| 5092       | Toys and Hobby Goods and Supplies                       | 423920       | Toy and Hobby Goods and Supplies Merchant Wholesalers             |                                     |     |              |     |
|            |                                                         | 425110       | Business to Business Electronic Markets                           |                                     |     |              |     |
|            |                                                         | 425120       | Wholesale Trade Agents and Brokers                                |                                     |     |              |     |
|            |                                                         | 451120       | Hobby, Toy, and Game Stores                                       |                                     |     |              |     |
|            |                                                         |              |                                                                   |                                     |     |              |     |
| 5093       | Scrap and Waste Materials                               | 423930       | Recyclable Material Merchant Wholesalers                          | 400                                 | 500 |              | 150 |

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| SIC Number | SIC Description                                        | NAICS Number | NAICS Description                                                       | BOD                                 | TSS | P(hosphorus) | FOG |
|------------|--------------------------------------------------------|--------------|-------------------------------------------------------------------------|-------------------------------------|-----|--------------|-----|
|            |                                                        |              |                                                                         |                                     |     |              |     |
|            |                                                        | 425110       | Business to Business Electronic Markets                                 |                                     |     | *            |     |
|            |                                                        | 425120       | Wholesale Trade Agents and Brokers                                      |                                     |     |              |     |
| 5094       | Jewelry, Watches, Precious Stones, and Precious Metals | 423940       | Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers |                                     |     |              |     |
|            |                                                        | 425110       | Business to Business Electronic Markets                                 |                                     |     |              |     |
|            |                                                        | 425120       | Wholesale Trade Agents and Brokers                                      |                                     |     |              |     |
|            |                                                        | 448310       | Jewelry Stores                                                          |                                     |     |              |     |
| 5099       | Durable Goods, not elsewhere classified                | 423990       | Other Miscellaneous Durable Goods Merchant Wholesalers                  | *Signifies Domestic Strength levels |     |              |     |
|            |                                                        | 425110       | Business to Business Electronic Markets                                 |                                     |     |              |     |
|            |                                                        | 425120       | Wholesale Trade Agents and Brokers                                      |                                     |     |              |     |
|            |                                                        | 444190       | Other Building Material Dealers                                         |                                     |     |              |     |
|            |                                                        | 451110       | Sporting Goods Stores                                                   |                                     |     |              |     |
|            |                                                        | 451120       | Hobby, Toy, and Game Stores                                             |                                     |     |              |     |
|            |                                                        |              |                                                                         |                                     |     |              |     |
| 7213       | Linen Service                                          | 812331       | Linen Supply                                                            | 500                                 | *   | *            | 200 |
| 7218       | Industrial laundries                                   | 812332       | Industrial Launderers                                                   | 600                                 | 600 | *            | 400 |
|            |                                                        |              |                                                                         | *Signifies Domestic Strength Levels |     |              |     |

## CHAPTER IV: SEPTAGE AND HAULED WASTES

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The majority of wastes and wastewater treated at the GLWA Treatment Plant are discharged to and conveyed by the sewer system through point-source connections from Domestic and Industrial User sources. However, additional wastes may be conveyed to designated locations via rail, truck, ship or vessel or other equivalent means; hauled to the GLWA System from locations within and outside of the Service Region of the GLWA. These rules address these sources of *Hauled Wastes*.

### **Article I      General Provisions**

Section IV-101. It shall be unlawful for any person to discharge any waste or wastewater, directly or indirectly, by rail, truck, ship or other similar means, without authorization from the GLWA; or to discharge any wastewater in violation of the terms and conditions contained in these rules or contrary to any discharge authorization granted by the GLWA.

### **Article II      Authorized Unloading Locations**

Section IV-201. The GLWA Wastewater Treatment Plant shall not receive or accept any wastes or wastewater that are directly transported via rail, truck, dedicated pipeline, ship or vessel, or other similar means, at the Wastewater Treatment Plant located at 9300 West Jefferson, Detroit Michigan 48209, except those identified in Section IV-202.

Section IV-202. The GLWA Wastewater Treatment Plant shall accept wastes or wastewater that are directly transported via truck from Septage Waste Hauler vehicles, and Recreation Vehicles and Individual Portable Toilets.

Section IV-203. The GLWA will only accept wastes and wastewater transported to Authorized Unloading Locations specified in these rules or that may be added upon authorization by the GLWA-IWC.

Section IV-204. The usage of any Authorized Unloading Location shall be restricted to authorized Industrial Users who possess a Hauled in Waste permit issued by the GLWA, in accordance with the terms and conditions of the permit.

### **Article III      Categories of Authorized and Unauthorized Hauled Wastes**

#### Section IV-301. Authorized Wastes

The following groups of waste and wastewater may be authorized by the Industrial Waste Control Group.

- Septage Waste and Wastewater
- Recreational Vehicle and Individual Portable Toilets
- Sanitary Wastewater from Vessels and Ships

The procedures for obtaining authorization are enumerated in Article IV below.

Section IV-302. Unauthorized Waste Sources

The following sources of waste and wastewater are not authorized by the Board and will not be accepted unless there is an exigent condition or public health concern for which the Board shall authorize disposal.

- Grease Trap Wastes
- Industrial and Commercial Wastes
- Municipal Sludge
- Collection System Solids and Cleanings

**Article IV      Procedures for Authorization – Septage Waste Hauler**

Section IV-401. A Septage Waste Hauler seeking authorization from the GLWA to discharge at the Wastewater Treatment Plant or other Authorized Unloading Location shall require the owner/operator of the vehicle to (i) possess a valid Septage Hauler license issued by the Michigan Department of Environmental Quality; and (ii) obtain a valid GLWA Septage Hauler permit.

Section IV-402. A Septage Waste Hauler seeking authorization from the GLWA to discharge at the Wastewater Treatment Plant or other Authorized Unloading Location shall complete an application for a GLWA HIW Permit. Information will be provided including the vehicles, tank capacities and applicable vehicle licenses for each vehicle; the general area being serviced and which authorized unloading sites the septage hauler is requesting access.

Section IV-403. The septage hauler shall letter the vehicles or affix the truck number shown on their HIW permit on each side and rear of the hauling vehicle covered by their permit in clearly visible locations in black numerals and letters six (6) inches high on a white background of at least eight (8) inches in height. The line width of each letter shall be three-fourths of an inch.

Section IV-404. Upon receipt of a Septage Hauler Application form, the Control Authority will process the application and accept or reject the application. Permits issued by the Control Authority shall contain information including, but not limited to, that specified in Section II-704. A Septage Waste Hauler seeking authorization from the GLWA to discharge at the Wastewater Treatment Plant or other authorized unloading location shall only discharge the contents from domestic waste septic tanks, cesspools, seepage pits, sewage lift stations and portable toilets; after receiving a GLWA permit.

Section IV-405. The GLWA shall have the unrestricted right to observe loading, hauling and unloading of septage hauling vehicles; to obtain representative samples of the vehicle's contents at the unloading site prior to or during the unloading activity; to examine the vehicle operator's MDEQ service seal and business license and the GLWA unloading permit. The vehicle operator shall cooperate with the request of any properly credentialed GLWA employee, and assist in providing a sample of the tank's contents.



**Article V      Procedures for Authorization – Recreational Vehicle and Individual Portable Toilets**

Section IV-501. Individuals may discharge the contents of recreational vehicle toilets and individual portable toilets having a contents of less than 125 gallons at approved locations without charge.

Section IV-502. Unloading under this provision is restricted to private persons.

**Article VI      Procedures for Authorization – Vessels and Ships**

Section IV-601. The GLWA may accept domestic wastewater from vessels and ships at authorized locations, or from firms servicing vessels and ships traversing the Great Lakes. Individuals or firms shall request authorization from the GLWA – Industrial Waste Control Group before discharging any wastewater, and discharge at an authorized unloading location.

**Article VII      Other Conditions**

Section IV-701. Any person authorized under these rules for Septage and Hauled waste or wastewater is subject to the requirements for permits, inspection, monitoring and enforcement, as enumerated in Chapter II.

Section IV-702. Any permit or authorization granted by the Control Authority shall also include the following conditions:

- a) Applicable terms and conditions, surcharges, fees or rates as established by the Board;
- b) The specific unloading facility location designated by the Control Authority for discharge;
- c) As necessary, additional specific limitations and requirements necessary to protect the wastewater treatment plant and collection system;
- d) Any applicable surcharge for High Strength Wastewater applicable to the specific contents being hauled under Authorization by the Control Authority; and
- e) Any charges or fees established by the Board.

**Article VIII.      Appeal**

The Decisions and Actions taken by the Industrial Waste Control Group and the Control Authority affecting the administration, implementation, and enforcement of the Septage and Hauled Waste Program are subject to review through a two-step appeal process. Although the majority of disputes are resolved through open communication, there may be a point where an Industrial User seeks to formalize their objection(s) and seek administrative review. The Appeal procedures recognized under these rules are described in Chapter VIII.

## **CHAPTER V: REVENUES TO SUPPORT REGULATORY PROGRAMS**

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The Authority has promulgated these rules for the protection of the environment, the public health and safety by abating and preventing pollution through the regulation and control of the quantity and quality of sewage, industrial wastes, and other wastes admitted to or discharged into the sewerage system. The GLWA seeks to provide for the recovery of the costs from Users of the wastewater collection and treatment system sufficient to administer regulatory activities and meet the costs of the operation, maintenance, improvement or replacement of the system.

Fees and charges may be established by the Board to meet the costs of the operation, maintenance, improvement or replacement of the system and regulatory programs, or as provided by law or by Board action.

- a) The Board shall adopt charges and fees which shall include, but not be limited to:
  - 1) Fees for reimbursement of costs of establishing, operating, maintaining, or improving the industrial waste control and pretreatment programs (See Article I below); and
  - 2) User fees (surcharges) based upon volume of waste and concentration or quantity of specific pollutants in the discharge, and treatment costs including sludge handling and disposal (See Article II); and
  - 3) Reasonable fees for reimbursement of costs for hearings including, but not limited to, expenses regarding hearings officers, court reporters, and transcriptions; and
  - 4) Other fees, which the Board may deem necessary, to carry out the requirements contained herein, or as may be required by law.

### **Article I Industrial Waste Control Charges**

Section V-101. The GLWA is required to implement and enforce an Industrial Pretreatment Program, and perform other related duties as required by the NPDES Permit MI 0022802 and the Clean Water Act. To accomplish these duties and requirements, the GLWA must have a revenue source which insures adequate funding. The GLWA hereby adopts the following method of funding these regulatory activities:

- a) An IWC Water Meter Charge shall be established by the Board to recover the costs incurred in administering, implementing and enforcing the regulatory activities and obligations under the NPDES Permit MI 0022802 and the Clean Water Act, and any rules adopted by the GLWA Board.
- b) The IWC Water Meter Charge shall be based on the size of the water meter on a proportional basis and assessed on any non-residential water meter with the following exceptions:
  - 1) The IWC Water Meter Charge shall not be assessed on any meter dedicated for Fire Protection purposes only;

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- 2) The IWC Water Meter Charge shall not be assessed on any meter dedicated for Irrigation purposes only;
  - 3) The IWC Water Meter Charge shall not be assessed on any meter from a multi-family residential dwelling; public and private elementary and secondary school which are part of a government school district; colleges, universities, professional schools, junior colleges and technical institutes; and local, state and federal government facilities.
- c) GLWA member communities shall periodically report the quantity, number and size of non-residential meters, and any exempt meters (as described in paragraph 2).
  - d) The GLWA shall prepare a bill to each GLWA Member Community using the information provided in paragraph 3 and forward the bill for payment either through the Wholesale Sewer Contract Customer (if applicable) and/or GLWA Member Community, indicating the terms and conditions of payment.
  - e) Each GLWA Member Community is responsible for assessing these fees on applicable Users and collection thereof in accordance with the delegation and service agreements; and for reporting changes in the number of meters reported in paragraph 3.
  - f) The GLWA reserves the right to collect any and all outstanding amounts in accordance with applicable law.

## **Article II      Pollutant Surcharges**

Section V-201. The GLWA has adopted rates necessary to recover the Cost of Service based upon the unit volume of wastewater discharged; and has adopted Pollutant Surcharges applicable to high-strength wastewater discharges from Industrial Users which will be assessed to these Industrial Users so that the proportional share of the Cost of Service may be recovered.

- a) The specific rules and procedures for establishing high strength levels, and administering a program thereof is included in Chapter II of these rules.
- b) GLWA member communities shall report the applicable water and/or sewage meter information to the GLWA who shall prepare a bill based upon the established High-Strength level of an Industrial User.
- c) The GLWA shall prepare a bill to each GLWA Member Community using the information provided in paragraph 2 and forward the bill for payment either through the Wholesale Sewer Contract Customer (if applicable) and/or GLWA Member Community, indicating the terms and conditions of payment.
- d) Each GLWA Member Community is responsible for assessing these fees on applicable Industrial Users and collection thereof in accordance with the delegation and service agreements;
- e) The GLWA reserves the right to collect any and all outstanding amounts in accordance with applicable law.

**Article III      Other Fees**

Section V-301. The Appeal Procedures described in Chapter VIII will incur costs for hearings officers, court reporters, and transcriptions. The cost of conducting these appeal procedures shall be equally shared between the GLWA and the Industrial User(s). A deposit may be requested by the GLWA to cover a portion of these expenses. Where an Industrial User fails to pay all fees incurred, the GLWA shall recover these fees through direct invoicing and using all means authorized by law.

Section V-302. Other fees, which the Board may deem necessary, to carry out the requirements contained herein, or as may be required by law.

## CHAPTER VI: FLOW-METERING

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The GLWA requires Users to employ accurate and valid methods for measuring and reporting the volume of water consumed and discharged from their properties to satisfy regulatory and monitoring requirements. Each GLWA Member Community may establish its own criteria for metering the wastewater discharged into the GLWA system which is not in conflict with these rules.

### **Article I      General Requirements**

The GLWA recognizes the role of the respective GLWA Member Community in prescribing the water and/or sewage meters installed at a User's property. The GLWA will recognize a User's use of these methods to represent the water usage and/or wastewater discharge as follows:

Section VI-101. Users obtaining all of their water supply from the GLWA shall, unless modified or changed by contract, base the volume of water consumed upon one or more Water Meters installed at the User's property. Any questions that the GLWA may have concerning the accuracy and validity of a water meter will be directed to the User and GLWA Member Community

Section VI-102. Users obtaining all, or any portion, of their water supply from sources other than the GLWA and who discharge water, wastes and wastewater inclusive of these foreign sources to the GLWA for conveyance and wastewater treatment, shall base the volume of wastewater discharged through gauging, metering or using any other equitable method of measuring, the volume of all wastewater discharged. Acceptance of the wastewater discharged shall be conditioned upon the acceptance of such methods by the GLWA Member Community. Any questions that the GLWA may have concerning the accuracy and validity of a water meter will be directed to the User and GLWA Member Community

Section VI-103. Users obtaining all, or any portion, of their water supply from the GLWA, but also receiving other wastes and wastewater via truck, rail, vessel or ship, dedicated pipeline, or any other means of transportation shall base the volume of wastewater discharged through gauging, metering or using any other equitable method of measuring the discharge volume. Acceptance of the wastewater discharged shall be conditioned upon the acceptance of such methods by the GLWA Member Community. Any questions that the GLWA may have concerning the accuracy and validity of a water meter will be directed to the User and GLWA Member Community

### **Article II      Sub-metering of Water or Sewage Volumes**

Section VI-201. Any owner of a premise or User of the system may install, at their own expense, a water sub-meter for determining the utility services used by certain areas or processes. Such meter will not be recognized for purposes of usage, addition or reduction, billing or other regulatory purpose, unless the meter complies with section VI-202.

Section VI-202. Where a GLWA Member Community has recognized and accepted a User's sub-meter(s) to gauge the volume of water, for determining the utility services used by certain areas or processes, ), the GLWA shall recognize the purpose and readings of the sub-meter for purposes of usage, addition or reduction, billing or other regulatory purpose described by these rules.

### **Article III Requirements for Water or Sewerage Metering**

Section VI-301. Where the GLWA, in conducting its regulatory responsibilities described by these rules, identifies an unmetered water or sewerage source, a non-functioning water or sewerage meter or sub-meter, or requires other gauging or metering to fulfill the requirements of its NPDES permit, it shall notify the User in writing of its findings and requirements as well as the GLWA Member Community.

Section VI-302. Any water or sewer meter installed by a User must be periodically calibrated by the User, and maintained by the User at its own expense. All records of calibration or maintenance shall be provided to the GLWA upon its request.

### **Article IV Sewage Metering Requirements for Flow-proportional Sampling**

Section VI-401. All Significant Industrial Users shall provide, operate, and maintain at their own expense a sampling and monitoring facility which complies with Section II-605.

Section VI-402. Significant Industrial Users required to collect wastewater samples using 24-hour flow-proportional composite sampling techniques, shall provide the Control Authority with a sampling plan in compliance with section II-603 and the following information about the flow-meter and other devices used:

- a) The specifications and information describing the flow monitoring instruments, including make and model number;
- b) The recording devices used, including make and model number; and
- c) Specifications indicating that the meter is equipped with a non-resettable flow totalizer.

Section VI-403. Significant Industrial Users required to collect wastewater samples using 24-hour flow-proportional composite sampling techniques, shall provide the appropriate interface hardware and cable sufficient to reach the sampler location from the flow metering system's contact point, as follows:

- a) Ensure that the flow metering system using an analog output signal, furnish the GLWA with a flow meter to sampler 4-20 mA input interface: ISCO Part # 60-5314-281, or equivalent.
- b) Ensure that the flow metering system using a pulse output signal, furnish the GLWA with a signal specification of 5 to 15 VDC pulse, with 25 millisecond isolated contact closure using a sampler connection interface cable ISCO Part # 60-1394-077, or equivalent.
- c) The Significant Industrial User shall provide an interface port for 6 pin military spec amphenol connector and a parallel or Y-connector for simultaneous sampling event.
- d) In the event that an equivalent or new technology is available which permit's the Control Authority to

collect a Flow-composite based sampling from the User's facility using equipment other than or different than that enumerated in sub-paragraphs a-c above, the Control Authority will permit such technology to be implemented and used at the User's site. User's must however, notify the Control Authority in writing.

#### **Article V      Appeal**

The decisions and actions taken by the Industrial Waste Control Group and the Control Authority affecting the administration, implementation, and enforcement of the Flow Metering Program are subject to review through a two-step appeal process. Although the majority of disputes are resolved through open communication, there may be a point where a User seeks to formalize their objection(s) and seek administrative review. The Appeal procedures recognized under these rules are described in Chapter VIII.

**CHAPTER VII: RULES GOVERNING THE WASTES AND WASTEWATER  
FROM ENVIRONMENTAL REMEDIATION, GROUNDWATER AND  
OCCASIONAL OR SPECIAL WASTES SOURCES**

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The purpose of these Rules is to regulate and control the quality and quantity of wastes and wastewater derived from Environmental Remediation, Groundwater and Occasional or Special Wastes Sources occurring within the Sewer Area under the jurisdiction of the Great Lakes Water Authority, hereinafter The Authority, to ensure that these sources are not discharged into the local environment without authorization and in quantity and/or concentrations as may cause or contribute to adverse impact upon the environment or the status of the Authority's Wastewater Treatment Plant and System with regard to environmental regulations impacting those facilities.

**Article I      General Requirement**

Section VII-101. The Control Authority may authorize the discharge of wastes and wastewater derived from Environmental Remediation, Groundwater and Occasional or Special Wastes Sources from facilities located in areas served by the GLWA sewer system.

Section VII-102. Environmental Remediation Wastewater, Groundwater and Occasional or Special Wastes Sources from facilities located in areas not served by the GLWA sewers will not be accepted except where a public health or similar exigent condition exists. In response to such public health or exigent condition, the Control Authority may accept and evaluate an application, and will notify the GLWA Board of its findings and determination prior to authorizing the discharge.

**Article II      Prohibitions**

Section VII-201. Unlawful Discharges

It shall be unlawful for any person to cause or allow the discharge of Environmental Remediation Wastewater, Groundwater and Occasional or Special Wastes Sources from combined sewer areas into any sewerage system under the jurisdiction of the GLWA, unless such person has been authorized by the GLWA Control Authority and is in possession of a current and valid permit authorizing the discharge of the Environmental Remediation Wastewater, Groundwater and Occasional or Special Wastes Sources.

Section VII-202. Pollutant Discharge Limits

The Control Authority shall apply or develop pollutant discharge limitations necessary to protect the GLWA Wastewater Treatment Plant and collection system, and at a minimum include:

- a) The General Pollutant Prohibitions (Chapter II, Article II) shall be applied to all permit authorizations;
- b) The Specific Pollutant Prohibitions (Chapter II, Article III) shall be applied to all permit authorizations;



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- c) For Underground Storage Tank and *Petroleum* clean-up projects, the additional discharge limitations shall be applied:

|              |         |
|--------------|---------|
| Benzene      | 20 ug/l |
| Toluene      | 20 ug/l |
| Ethylbenzene | 20 ug/l |
| Xylene       | 20 ug/l |

- d) As necessary, the Control Authority may develop special pollutant discharge limitations in concentration or mass necessary to carry out the intent of these rules. The determination of any such special pollutant discharge limitations shall be attached to any permit granted under these rules.

### **Article III Special Discharge Permits**

#### **Section VII-301. Special Discharge Permit Application**

Any person seeking permission to discharge Environmental Remediation Wastewater, Groundwater and Occasional or Special Wastes Sources wastewater shall complete and submit to the Control Authority (on forms supplied by the Control Authority) a Special Discharge Permit Application (SDP Application). At a minimum, the application shall include the following information:

- a) The address, or other description of the location, which is the source or origin of the proposed discharge;
- b) The name and address of the (i) officers or principal owners of the real property; (ii) name of the person who will be responsible for operation of the facilities; (iii) any agents for these parties; and; (iv) any other persons seeking the SD Permit.
- c) The applicant shall provide at least one sample analysis which includes the 126 Priority Pollutants. Additional samples may be tested for pollutants above detected levels or for which are present or expected to be present in the discharge.
- d) Analytical information concerning the pollutants the nature of operations conducted or previously conducted at the property. This analytical information shall be the Environmental Remediation Wastewater, Groundwater and Occasional or Special Wastes Sources wastewater.
- e) Any additional information or documentation necessary to support the application.
- f) The SDP Application shall be executed by an authorized representative of the person.
- g) Acceptance by GLWA Member Community. Applications shall be reviewed by the municipality or other unit of local government having jurisdiction over the geographical location for which the SDP is requested, and must be certified acceptable to such municipality or other unit of local government prior to submittal to the Control Authority. The certification shall be inclusive of any metering or payment requirements. This acceptance must be in writing.

Within 30 days of receipt of a completed SDP Application, the Control Authority shall notify, in writing, the person submitting the application of its approval or denial, and the reason(s) for denial. If approved, the SDP Permit shall be issued by the Control Authority to the owner of the real property from which the wastewater originates as permittee and to the agents of the owner as co-permittees who will be responsible for operation of the facilities.

Section VII-302. Special Discharge Permit

The Control Authority shall develop a Special Discharge Permit form that shall contain, at a minimum, the following conditions:

- a) Statement of duration, which for Special Discharge Permits shall not exceed one (1) year. The one (1) year term may be renewed upon receipt of an SDP Application petitioning renewal of the permit for an additional one (1) year term if submitted ninety (90) days prior to the expiration date of the existing SDP Permit.
- b) A provision against non-transferability of the SDP Permit;
- c) Effluent discharge limitations authorized under Section II-202 of these rules.
- d) Self-monitoring, sampling, reporting, notification and recordkeeping requirements, including identification of the pollutants to be monitored, sampling points, sampling frequency and sample type. Sample collection and analysis shall conform to the requirements specified by the Control Authority.
- e) Requirements for specific treatment, if applicable, including Best Available Technology. Justification for such treatment shall be made in writing and attached to the SDP Permit.
- f) Acknowledgement from GLWA Member Community.
- g) Other requirements including those specified in Section II-704.

Section VII-303. Monitoring of Environmental Remediation Wastewater, Groundwater and Occasional or Special Wastes Sources

- a) Each person subject to the terms of these rules shall install and maintain, at its own expense, a control manhole or sampling site, including sampling and flow measurement operations applicable to the discharge;
- b) All measurements, tests and analyses shall be conducted in accordance with USEPA approved methods or, in the absence thereof, the latest edition of Standard Methods.
- c) Any Flow Monitoring installation shall conform to the requirements and specifications of Chapter VI.

**Article IV. Other Provisions**

Section VII-401. Representatives of the Control Authority may enter upon the premises for which the SDP Permit has been issued, during reasonable hours, to perform gauging and sampling operations, for inspecting or examining facilities, premises, installations and processes, for inspection and copying of

records, and for reviewing pretreatment operating procedures and to determine compliance with the terms and conditions of the SDP Permit.

Section VII-402. Fees

- a) Persons subject to the provisions of these rules are responsible for payment of applicable sewer charges, including any applicable surcharges.
- b) Where the volume of wastewater discharged under a SDP Permit exceed 1,000,000 gallons per annum, the Industrial Waste Control Fee shall be assessed and paid prior to commencement of the discharge.

**Article V                      Enforcement**

The Control Authority shall enforce compliance with the SDP Permit in accordance with Chapter II, including a temporary suspension of the SDP Permit or revocation of the SDP Permit. Where the Control Authority has revoked the SDP Permit, the SDP Permit Persons may appeal the revocation order in accordance with Article VI of these rules.

**Article VI              Appeal**

The decisions and actions taken by the Industrial Waste Control Group and the Control Authority affecting the administration, implementation, and enforcement of the Environmental Remediation Wastewater, Groundwater and Occasional or Special Wastes Sources Wastewater Program are subject to review through a two-step appeal process. Although the majority of disputes are resolved through open communication, there may be a point where a User seeks to formalize their objection(s) and seek administrative review. The Appeal procedures recognized under these rules are described in Chapter VIII.

## **CHAPTER VIII: ADMINISTRATIVE APPEAL PROCEDURES**

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The following rules describe the Administrative Appeals Procedures developed and adopted by the GREAT LAKES WATER AUTHORITY to resolve disputes with the technical subject matter of these rules, or resolve disputes on the meaning of these rules.

### **Article I RECONSIDERATION AND APPEAL OF CONTROL AUTHORITY ACTION**

The Control Authority shall implement these rules in accordance with applicable laws, and consistent with the delegation of power as granted herein. The Control Authority shall be afforded the first opportunity to perform fact-finding; develop interpretations of disputed technical subject matter; and resolve disputes concerning the meaning of these rules, functions of which are within its “special competence”.

These administrative procedures for *Reconsideration and Appeal of Control Authority Actions*, are adopted to promote administrative autonomy and efficiency and facilitate any subsequent judicial review.

#### **Section VIII-101. Reconsideration of Administrative Decision or Action**

- a) A User adversely affected by an administrative decision, administrative enforcement action, or the construction or application of these rules may request the Control Authority to reconsider its action, by filing a written notice within twenty (20) days of the date of occurrence of the action.
- b) The written notice shall be submitted to the GLWA Chief Compliance Officer or his or her designee and the Industrial Waste Control Operations Manager that includes a statement of the specific issue(s) being requested for reconsideration, and the information, documents and other records in support of the request; and shall request a meeting where the issue being requested for reconsideration, and the information, documents and other records in support of the request will be discussed or a written decision without such meeting. The Industrial Waste Control Operations Manager shall provide a written response to the GLWA Chief Compliance Officer within five (5) days.
- c) The GLWA Chief Compliance Officer or his or her designee shall review the request and all supporting materials, and:
  - 1) If no meeting is requested, the GLWA Chief Compliance Officer or his or her designee shall provide a written response within ten (10) days of receipt of the request.
  - 2) If a meeting is requested, the GLWA Chief Compliance Officer or his or her designee shall schedule a meeting within seven (7) but no more than twenty (20) days of receipt of the request. A written response shall be made within ten (10) days after the meeting or after receipt of any requested documentation from the Industrial User or IWC.
- d) A User may rescind their request for reconsideration any time prior to the date a written response is due.
- e) The written response will be sent to the User by Certified Mail and a copy retained in the User’s file.

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These responses will also be used as a Decision of Record for application in like cases and matters.

- f) Except where it is necessary to prevent pass-through, interference or other harm to the POTW or the sewerage system, the public, or to waters of the State; the filing of a request for reconsideration shall stay the Authority action until a written decision has been issued and the time for filing a request for a Section VIII-102 Appeal Hearing has lapsed.

### Section VIII-102. Appeal Hearing

- a) A User may request an Appeal hearing before the GLWA Board of (i) a written reconsideration response from the Industrial Waste Control Operations Manager; and/or (ii) a unilateral Administrative Order or Show Cause Hearing Order; and/or (iii) any final decision or order to deny issuance of a Wastewater Discharge Permit or revoke a Wastewater Discharge Permit, or wastewater service based on Section 1104. The request shall be assigned to an Administrative Law Judge (ALJ) selected by the GLWA Board.
- b) An appeal hearing request must:
  - 1) Be submitted within twenty (20) days of the action(s) enumerated in subparagraph (a) to the General Offices of the GLWA;
  - 2) Include a filing fee (non-refundable) of \$ 100.00;
- c) The hearing shall be conducted before an ALJ using the Hearing rules set forth below as applicable (See below) in these rules.
- d) The costs of the ALJ hearing shall be equally shared by each party.
- e) Except where it is necessary to prevent pass-through, interference or other harm to the POTW, the public, or to waters of the State; the filing of a request for an Appeal Hearing shall stay the Control Authority action until a written decision has been issued.

## DEPARTMENT OF ENVIRONMENTAL QUALITY

### OFFICE OF ADMINISTRATIVE HEARINGS

### CONTESTED CASE AND DECLARATORY RULING PROCEDURES

Filed with the Secretary of State on January 21, 2003

These rules take effect 7 days after filing with the Secretary of State

(By authority conferred on the department of environmental quality by sections 33 and 63 of

Act No. 306 of the Public Acts of 1969, as amended, being SS24.233 and 24.263 of the

Michigan Compiled Laws)

## PART I. GENERAL PROVISIONS

### R 324.1 Definitions.

Rule 1. (1) As used in these rules:

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- (a) “Act” means 1969 PA 306, MCL 24.201 et. seq.
- (b) “Administrative law judge” means presiding officer as referred to in the act and the person designated by the director to conduct hearings under these rules.
- (c) “Department” means the Great Lakes Water Authority
- (d) “Director” means the CEO of the Great Lakes Water Authority, or their designee
- (e) “Final decision maker” means the director or any other person to whom the director has delegated final decision making authority in contested cases.
- (f) “Office” means the office of the CEO of the Great Lakes Water Authority
- (g) “Petition” means a petition for a contested case hearing.
- (h) “Petitioner” means a person who files a petition for a contested case hearing.
- (i) “Respondent” means a person against whom a contested case proceeding is commenced.
- (j) “Tribunal” means the adjudicative body retained by the department that conducts contested case hearings.

(2) Words defined in the act have the same meanings when used in these rules.

R 324.2 Construction of rules.

Rule 2. These procedural rules shall be construed to secure a fair, efficient, and impartial determination of the issues presented in contested cases consistent with due process and safeguarding the rights of the parties.

R 324.3 Scope of rules; statutory procedures; absence of procedures.

Rule 3. (1) These rules govern all contested case proceedings before the department and requests for declaratory rulings.

(2) If a contested case is brought pursuant to a statute that provides governing procedures, the portions of these rules that are inconsistent with the statutory provisions do not apply, but any portion of these rules that is consistent with the statutory provisions apply in addition to those procedures. However, these rules do not apply to proceedings under Parts 615 and 617 of 1994 PA 451, MCL 324.61501, et seq. and 324.61701, et. seq.

(3) If a rule does not address an issue of procedure, then chapter 4 of the act shall govern.

PART 2. COMMENCEMENT OF CONTESTED CASE PROCEEDING

R 324.21 Petition for contested case; required information; submission to the office; acknowledgment of receipt.

Rule 21. (1) A written petition for a contested case shall be on the form provided by the department or other document and shall include all of the following information:

- (a) Facts or conduct that warrant a contested case.
- (b) The identity of the persons involved and their relationship to the subject matter.
- (c) Specific sections of applicable statutes and rules, if known.
- (d) The specific remedies sought.

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(e) A copy of the department's decision being challenged, if made in writing.

(2) The petition shall be signed by the person requesting a contested case or the person's authorized representative. A petition shall be mailed or delivered to the department. The date of receipt by the department shall be the date a petition is filed. Unless otherwise stated in a statute, a petition shall be filed within twenty (20) days from the date of the department's decision to be considered timely. A person shall submit a petition on a form provided by the department or a document that complies with the requirements with subrule (1) of this rule.

R 324.22 Investigation of petition; determination of tribunal; failure to provide opportunity to show compliance; notice to petitioner.

Rule 22. (1) Within a reasonable time after receipt of a petition for a contested case, the office, in conformity with any applicable statute or that rule, shall take 1 of the following actions:

(a) Request that the petitioner submit an amended petition providing a more detailed and definite statement of issues.

(b) Place the petition on the docket of pending cases and acknowledge, in writing, its receipt and that a case is opened. The acknowledgement shall be sent to all parties, and the permit holder if applicable.

(c) Take any other appropriate action within its authority, including, but not limited to, the issuance of a sua sponte order of dismissal.

(2) If a petition raises questions relevant to a proper disposition of the petition, then the department may be requested to respond to the petition in writing. Following any action under this subrule, 1 of the actions under subrule (1) of this rule shall be taken.

(3) The petitioner shall be notified of any decision made under subrules (1) and (2) and shall be provided with a written explanation of the reasons for the decision.

(4) If it is determined the department has failed to provide the petitioner an opportunity to show compliance as required by §92 of the act, the matter shall be returned to the department for issuing a notice for an opportunity to show compliance or such other action as may be appropriate.

R 324.23 Contested case docket; docket numbers; notice to parties of docketing a case; commencement of contested case proceeding; no progress docket.

Rule 23. (1) The office shall maintain a docket of all pending petitions.

(2) A case docket number shall be assigned to all petitions. The number shall correspond, if possible, to the permit, application, or document number used by the department in the matter that is the subject of the petition. Parties shall include the docket number and petitioner's name on the first page of all pleadings or correspondence filed in a case.

(3) The office shall provide a copy of the petition to the respondent, and inform all parties of the docket number at the time of acknowledgment. The acknowledgment shall be considered notice of the commencement of the contested case proceeding.

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(4) A no progress docket shall be maintained by the office. Failure of a petitioner to respond in a timely manner to any directive of the office may result in placing the case on the no progress docket.

(5) A party whose case is placed on the no progress docket shall be given notice and time to show cause why the case should not be dismissed for undue delay. A party shall submit the requisite documents, or otherwise respond to unanswered requests, as part of that party's response to the notice. If a party fails to respond to the notice within 21 days of its date, the case shall be dismissed with prejudice.

R 324.24 Service of notice by office; service by party; service on attorney; manner of service; proof of service.

Rule 24. (1) The office shall serve documents by first-class mail, unless otherwise required by statute. A copy of all documents shall be included in the case file. No proof of service shall be required of the office.

(2) Service by a party shall be made in person or by mail as specified in subrules (3) and (4) of this rule. A party shall serve all documents and pleadings filed in a contested case on all other parties. Service of documents shall be made on a party's attorney who has filed an appearance, if any, and shall be effective as service on the party.

(3) Personal service may be used if service by mail is required or permitted, unless otherwise required by statute. Personal service shall be made on a person or party by leaving orders, notices, and other documents with the person or party or with a party's attorney of record.

(4) Service by mail shall be accomplished by complying with both of the following requirements, except as otherwise required by statute:

(a) Enclosing a copy of the document or pleading in a sealed envelope with postage fully prepaid and addressed to the person to be served at that person's last known address. The envelope shall list the return address of the sender.

(b) Depositing the envelope and its contents in the mail.

(5) A person or party who has served a document or pleading in a contested case shall file with the office a proof of service at the time of filing the original pleading or document with the office. Proof of service shall be made as follows:

(a) If service is made by mail, proof of service shall be made by filing a certification of service that shows compliance with subrule (4) of this rule by specifying all of the following:

(i) The method of service.

(ii) The identity of the server.

(iii) The date and place of mailing.

(iv) The address where the materials were mailed.

(b) If the service is made by personal service, proof of service shall be made by filing an affidavit of service certifying all of the following:

(i) The method of service.

(ii) The identity of the server.



(iii) The person served.

(iv) The date and place of service.

### PART 3. FINAL DECISION MAKER AND ADMINISTRATIVE LAW JUDGES

R 324.31 Final decision maker and administrative law judge; disqualification; motions; ruling on motions; review by office; oral motions; review by office.

Rule 31. (1) The final decision maker or an administrative law judge shall withdraw from a case if that person deems himself or herself personally biased, prejudiced, or otherwise disqualified to preside. Withdrawal shall be noted on the record and shall disclose the nature of the personal bias, prejudice, or disqualification. The director shall designate a replacement.

(2) A party may file a written motion to disqualify the final decision maker or an administrative law judge. A motion to disqualify shall be filed before the commencement of hearing or as soon as practicable after discovery of the alleged grounds for disqualification. A motion to disqualify shall be supported by an affidavit conforming to the standards of section 79 of the act and the Michigan court rules. An allegation that the administrative law judge is an employee of the department does not constitute a sufficient basis for disqualification.

(3) The administrative law judge presiding over the case shall rule on the motion to disqualify.

R 324.32 Administrative law judge; powers.

Rule 32. An administrative law judge may exercise the powers specified in section 80 of the act and any power described in these rules or delegated by the director pertaining to presiding officers.

R 324.33 Ex parte contact with final decision maker or administrative law judge.

Rule 33. Direct or indirect contact with the final decision maker or the administrative law judge who presides over the case by a party, a party's attorney, or any other person on behalf of a party concerning the merits of a case pending review is ex parte communication. Ex parte communication is prohibited and will subject a party or counsel to appropriate sanctions under

R 324.59(2) or disciplinary action.

### PART 4. PREHEARING CONFERENCES

R 324.41 Prehearing conference; purpose.

Rule 41. (1) The administrative law judge may direct the parties to appear at the time and date established by the office for 1 or more prehearing conferences in order to do any of the following:

- (a) Simplify and clarify factual and legal issues.
- (b) Consider amendments to pleadings.
- (c) Obtain admissions and stipulations of fact or authenticate evidence.
- (d) Expedite the discovery and presentation of evidence.
- (e) Produce all proposed exhibits in the possession of a party.
- (f) Identify witnesses and generally describe the issues on which they may testify.
- (g) Set a time for the exchange of any written testimony.

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- (h) Estimate the time required for the hearing.
- (i) Discuss settlement or other disposition of the case.
- (j) Set time limits for discovery, motions, and other matters.
- (k) Determine the parties to the case.
- (l) Set the time limit for the exchange of proposed exhibits and witness lists.
- (m) Set the date, time, and place for the hearing.
- (n) Consider other matters that may aid in the disposition of the proceedings.
- (2) The administrative law judge may conduct a prehearing conference by a telephone conference call.

R 324.42 Prehearing conference; failure to appear; binding nature of conference; memorandum on witnesses and exhibits.

Rule 42. (1) If a party fails to appear for a prehearing conference after proper service of notice, and if no adjournment is granted, the administrative law judge may proceed with the conference. A party who fails to attend the conference without good cause shall be subject to any procedural agreements reached and any procedural order or procedural ruling made with respect to matters addressed at the conference, and the case may be placed on the no progress docket.

(2) The administrative law judge may order each party to exchange a list of witnesses the party intends to call and offer testimony at the hearing. The witness list shall identify the witness and contain a brief recitation of each witness's anticipated testimony. The curriculum vitae of a witness, who will be offered as an expert, shall be provided with the witness list. A witness not identified by the date established shall not be allowed to testify at the hearing without showing good cause. A witness not identified as required may be allowed to testify for the purpose of rebutting the exhibits or testimony of another party.

(3) The administrative law judge may order each party to exchange, or if appropriate identify, all proposed exhibits intended to be introduced during the party's direct case. An exhibit not exchanged or identified by the date established may not be entered on the record unless good cause is shown. The parties may stipulate to a schedule for the exchange of such materials, subject to the approval of the administrative law judge.

R 324.43 Prehearing conference; record of rulings and orders; summary; copies and corrections.

Rule 43. After a prehearing conference, the administrative law judge shall issue a conference summary setting forth the date, time, and place of the hearing. The conference summary shall also describe the agreements of the parties regarding the date for the exchange of witness lists and proposed exhibits, dates for filing motions and responses, discovery, and any other attendant matters. The conference summary shall also set forth the factual stipulations of the parties. All of the terms and conditions in the conference summary shall become binding on the parties absent the filing of a written objection within the time prescribed in the conference summary.

## PART 5. PREHEARING MATTERS

R 324.51 Appearance by attorney.

Rule 51. An attorney who represents a party in a contested case shall promptly file an appearance with the office.

R 324.52 Pleadings and other documents; form; statements of facts; answer; certification; manner of filing; time limits.

Rule 52. (1) Pleadings and other documents, including all of the following, may be permitted by the administrative law judge:

- (a) An administrative complaint.
- (b) A petition for contested case proceeding.
- (c) Answers.
- (d) Memoranda.
- (e) Motions, briefs, and affidavits in support of, and responses to, a motion.

(2) Pleadings and other documents shall include the title and docket number of the case and be submitted on 8½ by 11-inch paper. The Michigan court rules may be used as to all matters of form.

(3) The paragraphs of an answer or response shall be numbered to correspond to the numbered paragraphs, if any, of the pleading to which they respond. If a pleading does not contain numbered paragraphs, the answer or response shall address the issues in the order presented.

(4) The original of each petition, pleading, or other documents shall be signed by the submitting party or by the party's authorized representative. The signature of an attorney constitutes a certification by the attorney that he or she has read the document; that to the best of the attorney's knowledge, information, and belief it is well grounded in fact and supported by law; and that it is not interposed for unwarranted delay, harassment, or any other improper purpose.

(5) Pleadings and other documents shall be filed by sending or delivering them to the office at its Lansing address, unless otherwise directed. The date of receipt or delivery at the office shall be used to determine whether a pleading or other document has been filed in a timely manner, unless the administrative law judge orders otherwise.

(6) If a pleading or other document is not filed in accordance with applicable time limits, then a party may move that it be stricken from the record. The motion shall be granted if the party making the late filing does not show good cause and the late filing will not prejudice the moving party.

R 324.53 Facsimile transmission of documents.

Rule 53. The office permits the use of facsimile communication equipment for the filing of documents. The following provisions govern the use of facsimile equipment for the filing of documents:

- (a) All filings shall be on 8½ by 11-inch paper and consist of not more than 20 pages at any one time.
- (b) A cover sheet that includes all of the following information shall accompany each transmission:
  - (i) Case name.
  - (ii) Case number.
  - (iii) Document title.

- (iv) Name.
- (v) Telephone number, and facsimile number of the sender.
- (c) Documents received in the office after 5 p.m. eastern time are considered filed on the following business day.
- (d) The original document shall be sent to the office by mail contemporaneous with the facsimile filing. Upon receipt of the original document, the office shall retain only the cover page of the facsimile filing in its file in order to verify the date of filing.
- (e) For purposes of R 324.52(4), a signature includes a signature transmitted by facsimile communication equipment.

R 324.54 Electronic filing of pleadings and documents.

Rule 54. The office may permit the filing and service of pleadings and documents by electronic mail in circumstances that further the purpose of R 324.2. The original document shall be sent to the office by mail contemporaneous with the electronic filing. R 324.53 shall be a guide in determining the filing date and retention of documents filed electronically.

R 324.55 Summary disposition.

Rule 55. A party may move for full or partial summary disposition on any of the following grounds:

- (a) The department lacks jurisdiction over the person or subject matter.
- (b) The opposing party has failed to state a claim upon which relief can be granted.
- (c) No genuine issue exists as to any material fact, and the moving party is, therefore, entitled to a favorable decision as a matter of law.
- (d) The party asserting the claim lacks standing.

R 324.56 Application for order in pending action.

Rule 56. An application for an order shall be made by motion. Unless made during a hearing, the motion shall be in compliance with all of the following provisions:

- (a) Be in writing.
- (b) State with particularity the grounds and authority upon which it is based.
- (c) State the relief or order sought.
- (d) Be signed by the party or attorney.

R 324.57 Response to motion; oral argument.

Rule 57. A party may file a written response to a written motion within 14 days or within a time specified by the administrative law judge. A party may request oral argument and the request may be granted at the discretion of the administrative law judge. The administrative law judge may order oral argument if he or she believes such argument will aid in the decision making process.

R 325.58 Motion to correct or strike pleadings; failure to obey if granted; time for submission if denied; striking material.

Rule 58. (1) An opposing party may move for a more definite statement of the issues on the ground that a pleading is so vague or ambiguous that it cannot be understood or answered.

The motion shall identify the defects or deficiencies.

(2) An order for a more definite statement shall be obeyed within 14 days after service of the order. If not obeyed, the administrative law judge may strike the pleading to which the motion was directed or enter any other order that is just.

(3) If a motion for a more definite statement is denied, the moving party shall file the responsive pleading that was delayed by the motion within 14 days after the date of the order.

(4) The administrative law judge, on motion by a party or on his or her own motion, may order either or both of the following stricken from any pleading:

(a) Redundant, irrelevant, immaterial, impertinent, scandalous, privileged, or indecent matter.

(b) All or any part of a pleading not drawn in conformity with these rules.

R 324.59 Depositions; discovery; failure to comply; order directing compliance; effect of refusal to obey order.

Rule 59. (1) The taking and use of depositions and other discovery shall be allowed only upon stipulation of the parties or by leave of the administrative law judge. A motion for discovery shall not be filed unless the discovery sought has been previously requested of a party and refused. The motion shall describe the nature of the discovery sought and the purpose of the discovery. A party against whom the discovery request is directed shall have 14 days to respond to the motion or within a time frame specified by the administrative law judge. If discovery is granted, it shall proceed in the same manner as in the circuit courts. A deposition or other discovery taken pursuant to this subrule, may be offered as evidence at the discretion of the administrative law judge.

(2) If a party refuses to obey an order issued under subrule (1) of this rule, then the administrative law judge, on the motion of a party or sua sponte, may enter such orders addressing the refusal as are just, including, but are not limited to, any of the following:

(a) Deem that the facts sought under the original order are established for the purposes of the proceeding in accordance with the claim of the party obtaining the order.

(b) Prohibit the disobedient party from admitting new evidence supporting or opposing designated claims or defenses.

(c) Ordering that pleadings or parts of pleadings are stricken, staying further proceedings until the order is obeyed, dismissing the proceeding or a part of the proceeding, or defaulting the disobedient party.

R 324.59a Adjournment of hearings; written motion; time for serving; exceptions.

Rule 59a. (1) A hearing may be adjourned only by order of the administrative law judge on motion by a party or sua sponte. The administrative law judge may order an adjournment on stipulation of the parties at the discretion of the administrative law judge, if it is determined an adjournment is not in conflict with R 324.2.

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(2) Before a hearing commences, a motion for adjournment shall be made in writing and state with particularity the reasons why an adjournment is necessary. A written motion served less than 5 days before the date set for hearing shall not be considered unless the administrative law judge finds that an exception should be made because of any of the following:

- (a) The motion could not be served within the time limit for reasons not within the control of the party making the motion.
- (b) The interests of justice require the exception.
- (c) The parties have reached a settlement agreement and the specific date as to when the settlement will be finalized is provided in the motion.

R 324.59b Motion for extension of time.

Rule 59b. Requests for extensions of any time limit established in these rules shall be made by written motion and filed with the office before the expiration of the period originally prescribed or previously extended, except as otherwise provided by law, or by stipulation of the parties. A motion under this rule shall be granted only for good cause or on the written stipulation of the parties, and only if the order for extension would not be in conflict with R 324.2.

R 324.59c Accompaniment of written motion by proposed order.

Rule 59c. A written motion may be accompanied by a proposed order.

R 324.59d Application for intervention; filing; service; answers; oral argument; rulings.

Rule 59d. (1) A person who has legal standing and who seeks to intervene as a party in a contested case shall file an application to intervene with the office setting forth the legal authority and facts supporting intervention. A person who files an application shall serve copies on all parties known to the person at the time of application and provide proof of service at the time of filing. The office shall advise an applicant for intervention of the names and addresses of parties not served by the applicant, who shall then serve those parties and file a proof of service consistent with R 324.24.

(2) An application under subrule (1) of this rule shall not be granted until all parties have had an opportunity to answer the application in writing, unless the applicant is the permit holder. An answer shall be filed within 14 days after the date of service of the application or within the period of time established by an order of the administrative law judge.

(3) The administrative law judge shall consider whether intervention would be in conflict with R 324.2 or prejudice the rights of the existing parties. To avoid prejudice, intervention by a person may be denied or limited.

(4) The applicable statute and rules shall govern the issue of standing in a contested case hearing and these rules shall not be construed to either expand or restrict the legal standing of any person to intervene as a party in a contested case.

R 324.59e Joint hearing; consolidation of proceedings; representative actions; notice of intent to issue order; filing of objections.

Rule 59e. (1) When contested cases involving a substantial and controlling common question of fact or law or where multiple petitions have been filed regarding the same project or application are pending on the docket, the office may, on motion of a party or sua sponte, take any of the following actions provided that the interests of the parties are not prejudiced by such actions:

- (a) Order a joint hearing on any or all of the matters at issue.
  - (b) Order the proceedings consolidated.
  - (c) Make other orders concerning the proceedings to avoid unnecessary costs or delays.
  - (d) Appoint a representative petitioner to fairly and adequately assert and protect the interests of all petitioners.
- (2) Before issuing an order sua sponte under subrule (1), the office shall serve on the parties a notice of intent to issue the order. The parties shall have 14 days from service of the notice to file objections.

#### PART 6. HEARINGS

R 324.61 Hearing; location.

Rule 61. A hearing shall be conducted in Lansing unless the administrative law judge orders a change of situs.

R 324.62 Hearing; record.

Rule 62. A hearing shall be conducted on the record. A certified court reporter or court recorder shall take a transcript of testimony. The record shall consist all of the following:

- (a) The sworn testimony.
- (b) Stipulations.
- (c) Exhibits admitted into evidence.
- (d) Offers of proof.
- (e) Pleadings and motions filed.
- (f) The rulings made.

The official record, excluding transcripts, shall be made available to the parties upon request. A request for a transcript shall be made to the court reporter and the cost shall be borne by the party making the request.

R 324.63 Hearing; opening statements; closing arguments.

Rule 63. A party may make, reserve, or waive an opening statement. A party may make a closing argument. The administrative law judge may order closing arguments to be submitted in writing and may require written proposed findings of fact and conclusions of law.

R 324.64 Hearings; burden of proof; order of presentation of evidence; regulation of order of presentation; cross-examination.

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Rule 64. (1) The party filing an administrative complaint or petition for a contested case hearing, a motion for summary disposition, or other motion as allowed by these rules, has the burden of proof and of moving forward unless otherwise required by law.

(2) All other parties shall present the evidence in an order determined by the administrative law judge. The administrative law judge may allow rebuttal testimony and may permit further testimony as deemed appropriate.

(3) The administrative law judge shall regulate the order of the hearing to promote the fair and efficient determination of the issues presented.

(4) Parties are entitled to cross-examine witnesses.

(5) Parties are entitled to offer evidence as to the facts at issue. Issues of law and policy are matters for argument and the administrative law judge may require they be addressed in writing.

(6) Admissibility of evidence shall be governed by section 75 of the act.

R 324.65 Witnesses; oath or affirmation; examination; written testimony; motion to strike testimony.

Rule 65. (1) Testimony of witnesses shall be taken only after an oath or affirmation is administered. A witness shall be examined orally.

(2) The administrative law judge may permit testimony to be submitted in written form or in the narrative. Testimony submitted in written form shall be filed with the office and served upon the parties not less than 14 days before a hearing scheduled in the matter unless otherwise ordered by the administrative law judge. A motion to strike written testimony shall be filed not less than 5 days in advance of the hearing unless otherwise permitted by the administrative law judge. A party submitting testimony in written form shall make the witness available for cross examination.

(3) The administrative law judge shall issue subpoenas if authorized by statute pursuant to section 73 of the act.

## PART 7. DECISION PROCESS

R 324.71 Proposal for decision; replacement of administrative law judge; exclusiveness of record, transcripts; briefs.

Rule 71. (1) The administrative law judge shall prepare a proposal for decision and serve it on the parties within a reasonable time after the hearing or the submission of written closing arguments. If the administrative law judge becomes unavailable, another administrative law judge may be assigned to read the record, including a transcription of the testimony, and to prepare a proposal for decision.

(2) A proposal for decision shall be based exclusively on the record made at the hearing.

The administrative law judge may rely on his or her expertise in evaluating the facts included in the record. Except as provided for under section 77 of the act, the administrative law judge shall not consider facts not on the record.

(3) The administrative law judge may require or permit the parties to submit written closing arguments at a time specified. A party submitting a brief containing references to a transcript shall include the page and



volume numbers of the transcript. A brief containing references to exhibits shall include the exhibit numbers and identify the page number of the exhibit cited.

R 324.72 Proposal for decision; exceptions; written arguments; responses; review on the director's own motion.

Rule 72. (1) A party may file and serve exceptions and written argument supporting or opposing a proposal for decision under a schedule established by the office.

(2) A party's written argument in support of an exception or supporting or opposing a proposal for decision shall do all of the following:

(a) Identify any specific findings of fact in the proposal for decision to which exception is taken and identify the evidence in the record supporting the party's view.

(b) Identify specifically the evidence from the record supporting a party's view that other factual findings should have been made.

(c) Use the names of witness and exhibit numbers when referring to the record, including transcript volumes and page numbers, if relevant.

(d) State any specific conclusions of law to which exception is taken and the basis for the exception.

(e) If it is believed other conclusions of law should have been reached, submit them in writing, identify the basis for them in the record, and provide arguments supporting the proposed conclusion.

(f) Identify any policy judgment or exercise of discretion in the proposal for decision with which there is disagreement, provide argument as to why a different policy or discretionary decision is appropriate, submit a specific statement of policy or decision to replace any challenged policy or discretionary decision, and identify factors in the relevant statutes and rules supporting the proposed policy or exercise of discretion.

(g) State specifically the proposed decision the final decision maker should render.

R 324.73 Proposal for decision; request for oral argument; opportunity for rebuttal.

Rule 73. (1) A party desiring to make oral argument in support of exceptions to a proposal for decision or in addition to written argument shall include a request in the exceptions filed under R 324.72. Oral argument may be granted by leave of the final decision maker and may be limited in scope and duration. Oral argument shall not be permitted without a written request supported by written exceptions and arguments filed in a timely manner. If oral argument is granted, notice shall be served on the parties.

(2) If oral argument is granted, all parties shall be given an opportunity for rebuttal argument, which the final decision maker may limit as to scope and duration.

(3) The final decision maker may schedule oral argument without a request for oral argument by a party.

R 324.74 Final decisions; evidence; date; basis for overturning proposal for decision; record for judicial review.

Rule 74. (1) Review of a proposal for decision by the final decision maker shall be restricted to the record made at the hearing and the exceptions and arguments submitted by the parties.

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Issues not raised in the written exceptions and arguments shall not be considered at oral argument. The final decision maker shall not accept additional testimony or exhibits.

(2) Except as otherwise provided by law, the final decision maker shall issue a final agency decision within a reasonable time after the date for filing of any exceptions or, if oral argument is permitted, a reasonable time after argument.

(3) The final decision maker may remand, reverse, modify, or set aside a proposal for decision and make a final decision which differs from the proposal for decision. The final decision maker shall consider whether the proposal for decision is deficient due to any of the following:

- (a) Misapplied a rule, statute, or constitutional provision governing the issues involved.
- (b) Adopted an incorrect interpretation of a rule or statute or an incorrect conclusion of law.
- (c) Incorporated typographical, mathematical, or other obvious errors that affect the substantial rights of 1 or all of the parties to the action.
- (d) Failed to address a relevant issue.
- (e) Made factual findings inconsistent with the evidentiary record.
- (f) Improperly excluded or included evidence that substantially affects the outcome of the case.

(4) The final decision maker's order shall include findings of fact and conclusions of law pursuant to section 85 of the act. The final decision maker may adopt the proposal for decision or any part of it as the final agency decision.

(5) The final agency decision in a contested case is the exhaustion of administrative remedies as set forth in section 301 of the act.

R 324.75 Request for rehearing; objections; effect; remand for further consideration.

Rule 75. (1) A request for rehearing shall be addressed to the administrative law judge, served on the parties, and shall state the grounds upon which the moving party relies. A response to the motion shall not be filed, and there shall be no oral argument, unless the administrative law judge otherwise directs.

(2) Generally, and without restricting the discretion of the administrative law judge, a motion for rehearing or reconsideration which merely presents the same issues previously ruled on, either expressly or by reasonable implication, shall not be granted. The moving party shall demonstrate a palpable error by which the tribunal and the parties have been misled and show that a different disposition must result from the correction of the error. A rehearing may be ordered on grounds there is newly discovered evidence that could affect the outcome of the case only if the lack of its discovery is not attributable to the moving party.

(3) The final decision maker may determine the record or a proposal for decision is inadequate for purposes of his or her review or for judicial review, or that evidence was improperly included or excluded, and remand the case to the administrative law judge for further consideration.

## PART 8. DECLARATORY RULINGS

R 324.81 Declaratory rulings.

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Rule 81. (1) An interested person requesting a declaratory ruling as to the applicability of a licensing statute, rule, or order administered by the department to an actual state of uncontested facts may do so on a form provided by the department. Requests regarding enforcement issues are not a proper subject for a declaratory ruling. The department shall not process a request that is incomplete. The request shall contain, at a minimum, all of the following information:

- (a) The requesting person's name, mailing address, and telephone number.
- (b) The requesting person's interest in the matter, including assertions regarding the person's legal standing to request a declaratory ruling.
- (c) The statute, rule, or order to which the request applies.
- (d) A detailed statement of the actual uncontested facts to which the statute, rule, or order may apply. Drawings, sketches, photographs, illustrations, and maps may be attached to the form.

(2) Within 60 days of receipt of the request, the department shall take 1 of the following actions:

- (a) Deny the request and state the reasons for the denial.
- (b) Grant the request and issue the declaratory ruling.
- (c) Advise the person requesting the ruling that further clarification of the facts must be provided, or that the department requires additional time to conduct a review, including, but not limited to, an on-site investigation.

(3) If subrule (2)(c) of this rule is invoked, the department shall either deny or grant the request within 60 days after receiving satisfactory clarification of facts from the requesting person or from the date the department notifies the requesting person of the need for additional time to investigate.

(4) The department shall issue a declaratory ruling only in matters where all relevant facts are stipulated to by the requesting party and appropriate division. If relevant facts necessary to issue a declaratory ruling are contested, then a declaratory ruling shall not be issued.

(5) A denial or adverse decision of a declaratory ruling does not entitle a person to a contested case hearing.

## Epilogue

### SAVINGS CLAUSE

If any provision, paragraph, section or article of these rules are invalidated by any court of competent jurisdiction, the remaining provisions, paragraphs, words, sections and articles shall not be affected and shall continue in full force and effect.

Approved: November 30, 2016

Published:

Effective:





**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>   |         |          |
|---------------|------------------------------------------|----------------------|---------|----------|
| 27260         | 3M Company                               | 11900 E. 8 Mile Road | Detroit | MI 48205 |

| <u>Permits</u> | <u>Raw Materials</u>                                                                  | <u>Limits</u>                                |
|----------------|---------------------------------------------------------------------------------------|----------------------------------------------|
| 00227260IU     | abrasive media, paper substrate,<br>phenolic & epoxy<br>resins, dyes, glues, solvents | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |          |       |
|------------------|---------------------------|------------|----------|-------|
| 01               | Process Wastewater        | Batch      | 1,300.00 | gal/r |
| 02               | Process Wastewater        | Continuous | 790.00   | gpd   |
| 02               | Non-contact Cooling Water | Continuous | 6,940.00 | gpd   |

Process Description

The process consists of paper, film and cloth webs coating to produce abrasive paper. The manufacturing process consists of the following steps:

- a) Web unwind
- b) Adhesive mixing and coating
- c) Solids and mineral application
- d) Drying
- e) Final coating
- f) Curing
- g) Winding
- h) Final curing and moisturization

The backtreater process involves the application of moisture to the web backing of the final product utilizing either one of two methods or both: water wetting roller and/or water sprayer bar. The moisturization process for each jumbo roll of product is approximately sixteen (16) minutes with an average of twelve (12) to sixteen (16) jumbo rolls of product. When both water wet roller and water spray bar applications are used, approximately one (1) gallon per minute or a maximum of two hundred sixty (260) gallons of process wastewater per batch is generated. The contact water from the water wetting pan and water sprayer drains to the floor sump and pumped to sample location, SL#1. The non contact water from hot cams is drained once a month. The facility installed a flow meter to record the batch discharge flow information. The wastewater generated from the above process undergoes sedimentation before discharge to the sewer. The effluent from tanks cleaning generated from coating process with high pH undergoes neutralization prior to discharge to the sample location, SL#2 with the non contact water from the heating and cooling jackets for tanks.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>           |
|---------------|------------------------------------------|------------------------------|
| 93958         | A & R Packing Co., LLC                   | 34165 Autry Livonia MI 48150 |

| <u>Permits</u> | <u>Raw Materials</u>        | <u>Limits</u>        |
|----------------|-----------------------------|----------------------|
| 00693958IU2    | pork and poultry meat parts | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 400.00 gpd    |
| 01               | Process Wastewater  | Continuous | 13,273.00 gpd |
| 01               | Boiler Blowdown     | Continuous | 20.00 gpd     |

Process Description

Pork and poultry meat parts are brought to the plant. Those are washed in brine, cured, smoked, preserved, packed and shipped. Process wastewater is generated from washing of pork and poultry, during meat preparation, from smoke house, washing and cleaning of equipment and floors. Process wastewater is passed through a grease trap before discharge to the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                              |
|---------------|------------------------------------------|-------------------------------------------------|
| 27254         | A-W Custom Chrome, Inc.                  | 17726 E. 9 Mile Road<br>East Pointe<br>MI 48021 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                      |
|----------------|----------------------|------------------------------------|
| 021-27254-IU   | Copper sulfate       | 01 LOC. Local Limits               |
|                | Nickel sulfate       | 01 413.A.14f (PSES) Electroplating |
|                | Chromic acid         | <10,000 gpd                        |
|                | Boric acid           | 01 413.A.14b (PSES) Electroplating |
|                | Sulfuric acid        | <10,000 gpd                        |
|                | Hydrochloric acid    |                                    |
|                | Nickel anodes        |                                    |
|                | Copper anodes        |                                    |
|                | lead anodes          |                                    |

| <u>Flow Rate</u> |                     |            |            |
|------------------|---------------------|------------|------------|
| 01               | Sanitary Wastewater | Continuous | 60.00 gpd  |
| 01               | Process Wastewater  | Continuous | 472.00 gpd |

Process Description

Steel and aluminum parts are polished, alkaline cleaned, rinsed (overflow), acid dipped, rinsed (overflow), nickel plated, rinsed (dead rinse), chrome plated, rinsed (dead rinse), followed by hot water rinse. The facility also performs copper and zinc plating. The hot water rinses are deionized and circulated. The overflow rinses are discharged to the sewer on a continuous basis after being neutralized.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                            |
|---------------|------------------------------------------|---------------------------------------------------------------|
| 92724         | A. G. Simpson (USA), Inc.                | 6640 Sterling Drive South      Sterling Heights      MI 48312 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15192724IU2    | Sodium Hydroxide     | 01 LOC. Local Limits                |
|                | Hydrochloric Acid    | 01 433.A.15a (PSES) Metal Finishing |
|                | Sulfuric Acid        |                                     |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 3,000.00 gpd  |
| 01               | Process Wastewater  | Continuous | 31,000.00 gpd |
| 01               | Ground Water        | Continuous | 600.00 gpd    |

Process Description

Stamped parts (bumpers) are alkaline cleaned (soak & electrolytic), rinsed (spray & soak), acid cleaned (electrolytic & soak), rinsed (soak), Nickel electroplated, rinsed (soak), Chrome electroplated, rinsed (soak and DI). The rinse water, spent alkaline cleaner solution and spent acid cleaner solution along with the ground water and the part of the boiler condensate will be pretreated prior to discharge into the City sewer system. The pretreatment consists of chrome reduction, pH adjustment, flocculation, clarification/settling and sludge filtration. Groundwater is generated from the active onsite remediation system. The remediation system is in place to address nickel contamination. Groundwater and boiler condensate contributes 3-6% of the total process wastewater generated. Spent Nickel solution will pass through carbon units and recycle back into the process line.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                 |
|---------------|------------------------------------------|------------------------------------|
| 95315         | A123 Systems LLC                         | 38100 Ecorse Road Romulus MI 48174 |

| <u>Permits</u> | <u>Raw Materials</u>                              | <u>Limits</u>                                                       |
|----------------|---------------------------------------------------|---------------------------------------------------------------------|
| 22695315IU1    | graphite or Lithium phosphate and organic solvent | 01 LOC. Local Limits<br>01 461.E.55a.1 (PSNS) Battery Manufacturing |

| <u>Flow Rate</u>                               |
|------------------------------------------------|
| 01 Process Wastewater Continuous 14,400.00 gpd |

Process Description

A123 Systems LLC coating operations consist of up to 5 separate coating lines to produce anode and cathode materials for lithium-ion phosphate batteries. Proprietary powders, graphite or lithium-ion phosphate are mixed with binders and an organic solvent (m-Methylprolidone or MNP) to form a slurry. The slurry is spray applied as a thin coating onto rolls of copper or aluminum foil sheets in the coating lines to produce electrodes. The carrier solvent which is driven off in the curing oven, is captured in a scrubber system, condensed, distilled and reused in the process. The wastewater generated from the boiler blow-down, non-contact cooling water, and incidental discharge from the scrubber system is discharged into public sewers without the benefit of pre-treatment. The finished electrodes are shipped to other A123 Systems LCC where other component manufacturing and assembly are completed

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                   |
|---------------|------------------------------------------|--------------------------------------|
| 93207         | ABC Custom Chrome                        | 3370 Warren Drive Waterford MI 48329 |

| <u>Permits</u> | <u>Raw Materials</u>                        | <u>Limits</u>                                               |
|----------------|---------------------------------------------|-------------------------------------------------------------|
| 15793207IU4    | Chrome, Nickel, Copper, Acid, Caustic soda, | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |                      |
|------------------|---------------------|----------------------|
| 01               | Process Wastewater  | Batch 10.00 gpd      |
| 01               | Sanitary Wastewater | Continuous 40.00 gpd |

Process Description

Processes in the plant include:

- 1) Stripping and Cleaning,
- 2) Rinsing,
- 3) Polishing or buffing,
- 4) Electroplating, and
- 5) Rinsing.

The pretreatment system includes:

- 1) Addition of sodium bisulfate, 2) raises pH to 10 in the mixing tank, 3) addition of polymer, 4) filtration of all content of mixing tank, and 5) pH adjustment to near 7

The wastewater is collected and discharged intermittently

## Facility Name: Detroit Water &amp; Sewerage

NPDES Permit #: MI 0022802

| SIU ID | Significant Industrial User (SIU) | SIU Address       |         |          |
|--------|-----------------------------------|-------------------|---------|----------|
| 27441  | ACME Plating, Inc.                | 18636 Fitzpatrick | Detroit | MI 48228 |

| Permits | Raw Materials     | Limits                                            |
|---------|-------------------|---------------------------------------------------|
| 025001  | Sulfuric acid     | 01 LOC. Local Limits                              |
|         | Hydrochloric acid | 01 413.A.14b (PSES) Electroplating<br><10,000 gpd |
|         | Caustic solution  | 01 433.A.17a (PSNS) Metal Finishing               |
|         |                   | 02 LOC. Local Limits                              |
|         |                   | 02 413.A.14b (PSES) Electroplating<br><10,000 gpd |
|         |                   | 03 LOC. Local Limits                              |
|         |                   | 03 413.A.14f (PSES) Electroplating<br><10,000 gpd |
|         |                   | 03 413.A.14b (PSES) Electroplating<br><10,000 gpd |
|         |                   | 03 413.E.54b (PSES) Electroplating<br><10,000 gpd |

| Flow Rate |                    |            |          |     |
|-----------|--------------------|------------|----------|-----|
| 01        | Process Wastewater | Continuous | 2,100.00 | gpd |
| 03        | Process Wastewater | Continuous | 2,100.00 | gpd |

Process Description

Acme electroplates zinc and cadmium in a barrel process on steel components such as nuts, bolts, washers and small brackets basically for the automotive industry. Acme also applies zinc phosphate and oil on similar parts and pickle and oil to remove rust. The Electroplating consists of alkaline cleaning, rinsing, plating and drying. The zinc phosphating consists of cleaning, rinsing, phosphating and dipping of parts in water-soluble oil. All processes prevent corrosion of base metal.

Waste rinse water is collected in a sump and is treated in existing treatment system, whose operations involve the pH adjustment, cyanide destruction, polymer addition, clarifier for water/sludge separation, and sludge filter press.

Facility's new rack zinc-nickel plating line is under construction. There is no process wastewater discharge.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                              |
|---------------|------------------------------------------|-----------------------------------------------------------------|
| 27618         | Aactron, Inc.                            | 29306 Stephenson Highway      Madison Heights      MI 480712317 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                     |
|----------------|----------------------|---------------------------------------------------|
| 02927618IU2    | Caustic Soda         | 01 LOC. Local Limits                              |
|                | Acid                 | 01 413.B.24f (PSES) Electroplating<br><10,000 gpd |
|                | Alkaline Cleaners    | 01 413.A.14b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u> |                     |            |              |
|------------------|---------------------|------------|--------------|
| 01               | Sanitary Wastewater | Continuous | 300.00 gpd   |
| 01               | Process Wastewater  | Continuous | 1,015.00 gpd |

Process Description

The process involves alkaline cleaning, acid pickling (using HCl), Mg or Zn phosphating and dipping in a rust inhibitor. On occasions, some of the parts are plastisol coated, solid film lubricated and painted. The wastewater is generated from the alkaline cleaning, acid pickling and phosphating processes. The process water is treated through a four-step process as follows: pH adjustment, precipitation, clarification and filtration.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                  |
|---------------|------------------------------------------|-------------------------------------|
| 96253         | Advance Engineering Company              | 7505 Baron Drive<br>Canton MI 48187 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00696253IU1    |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                       |
|----------------------------------------|
| 01 Process Wastewater Batch 200.00 gal |

Process Description

The facility produces stamped parts by using various different stamping machines - deep draw stamping, eyelet stamping, high speed progressive stamping, progressive die stamping. Products are produced mainly from stainless steel, brass, copper, bronze, aluminum, galvanized steel and cold/hot rolled steel. The operations involve: a) Stamping/Deep Drawing b) Alkaline and non alkaline parts washing and Deburring/tumbling.

Process wastewater is generated from rinsing after tumbling/deburring, parts cleaning and floor cleaning. The wastewater is collected into a sump and pumped into a 1000 gallon holding tank where oil is skimmed off. The oil free wastewater from here is then transferred to 200 gallon tank, pretreated and discharged into the sewer system through a sampling box, in several batches.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                         |
|---------------|------------------------------------------|--------------------------------------------|
| 27528         | Advanced Disposal Services Arbor Hill:   | 10690 W. Six Mile Road Northville MI 48167 |

| <u>Permits</u> | <u>Raw Materials</u>      | <u>Limits</u>        |
|----------------|---------------------------|----------------------|
| 706008         | non hazardous solid waste | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 300.00 gpd    |
| 01               | Process Wastewater  | Continuous | 55,186.00 gpd |

Process Description

The facility is a type II Municipal Solid Waste Landfill. Activities include receipt, compaction, and disposal of municipal solid waste and non-hazardous industrial solid waste. The facility is also involved with recycling of wood, paper, plastic, metal, and glass.

The process wastewater is generated from leachate and gas condensate collection. The process wastewater generated from the west landfill is aerated prior to discharge into the City sewer, while the process wastewater generated from East Landfill, is hauled off-site for disposal due to the contaminants PCBs.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 27555         | Advanced Disposal Services Solid Was     | 501 Collier Road<br>Pontiac<br>MI 48326 |

| <u>Permits</u> | <u>Raw Materials</u>  | <u>Limits</u>                                |
|----------------|-----------------------|----------------------------------------------|
| 70727555IU5    | Municipal Solid Waste | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                     |                       |
|------------------|---------------------|-----------------------|
| 01               | Process Wastewater  | Continuous 500.00 gpd |
| 01               | Other               | Continuous 400.00 gpd |
| 02               | Sanitary Wastewater | Continuous 500.00 gpd |
| 02               | Process Wastewater  | Continuous 370.00 gpd |
| 02               | Other               | Continuous 380.00 gpd |

Process Description

Municipal solid waste brought by the collection trucks are dumped inside the transfer station building, then loaded into semi-trailers for transportation to its landfill site. The facility generates wastewater from wet waste and floor washing, which are collected by the floor drains, then pumped to oil/water separator before discharged to the sanitary sewer. The facility also generates wastewater from the footing drains, which is impacted by contaminated fill soils and groundwater. The footing drain wastewater is collected in a sump before it is pumped to the sanitary sewer.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u>          | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                     |         |          |
|------------------------|------------------------------------------|----------------------------------------|---------|----------|
| 27488                  | Advanced Resource Recovery, L.L.C.       | 27140 Princeton Avenue                 | Inkster | MI 48141 |
| <u>Permits</u>         | <u>Raw Materials</u>                     | <u>Limits</u>                          |         |          |
| 92627488IU2            | Hauled in waste -                        | 01 LOC. Local Limits                   |         |          |
|                        | Leachate/Catchbasins                     | 01 PHEN. Phenols                       |         |          |
|                        | Coolants & Water Soluble Oil             | 01 437.D.46e1 (PSES) Centralized Waste |         |          |
|                        | Other Oil                                | Treatment                              |         |          |
| <u>Flow Rate</u>       |                                          |                                        |         |          |
| 01 Sanitary Wastewater | Continuous                               | 540.00                                 | gpd     |          |
| 01 Process Wastewater  | Batch                                    | 90,915.00                              | gpd     |          |

Process Description

The facility accepts metal-bearing, oily and organic wastes for treatment on the site. The facility's metal-bearing waste receipts include spent electroplating baths and/or sludge, metal finishing rinse water and sludge, air pollution control blow-down water and sludge, spent anodizing solutions, incineration wastewater, cleaning, rinsing and surface preparation solutions from electroplating or phosphating operations, vibratory deburring wastewater and alkaline and acid solutions used to clean metal parts or equipment. The oily wastes receipts include used oils, oil-water emulsions or mixtures, lubricants, coolants, contaminated groundwater clean-up from petroleum sources, used petroleum products, rinse/wash water from petroleum sources, interceptor wastes, off-specification fuels, underground storage remediation waste, tank clean-out from petroleum or oily sources, non-contact used glycols, oil spill clean-up, aqueous and oil mixtures from parts cleaning operations and wastewater from oil bearing paint washes. The organic wastes receipts include landfill leachate, contaminated groundwater clean-up from non petroleum sources, solvent bearing wastes, off-specification organic product, byproduct waste glycol, wastewater from paint washes, wastewater from adhesives and/or epoxies formulation, wastewater from organic chemical product operations and tank clean-out from organic non-petroleum sources.

Incoming waste loads are tested for metals (Zn, Cu and Ni), pH and flash points. Each waste load is then assigned with a confirmation number and issued an Inbound Load Notification. The facility's waste receipts and treatments are for oily, metal-bearing, organic and mixed types of waste. Based on the type of waste, the waste load is given the designated protocol treatment. The treatment processes involved are as follows.

Oily waste is treated by filtration through basket strainers, and by heat and chemical addition (sulfuric acid/polymer) in tanks T-14 to T-27. Break water from the oil treatment gets pumped into tanks T-36, T-37, T-40, or T-41 and then to tank T-34 or T-35 for further treatment with lime and polymer for removal of high metals through precipitation. After filtration through a filter press, the wastewater gets pumped into the water tank (DAF), T-46 to be processed further.

Metal-bearing wastewater is received into T-36, T-40, or T-41 and treated for metals removal in T-34, or T-35 as described above. Metal-bearing wastes mixed with oils get treated in tanks T-14 - T-27 before treated for the metal removal. After the metals removal treatments, the wastewater gets pumped into the water tank (DAF), T-46.

Leachate wastewater (organic waste) is also received into the water tank (DAF), T-46 after a preliminary filtration through a basket strainer for further treatment. Wastewater from water tank T-46 is pushed through tank T-45 by its suction pump for post treatment. The wastewater is post treated through a basket filter, an oil/water separator, a second basket filter, Mix Tank T-30 (using ferric and caustic), Flocculation Tank (using polymer), Clarifier and two oxidizer tanks (using aeration) in parallel before discharge. The wastewater is also injected with a concentrated solution of bleach before discharge. The wastewater is discharged either from tank T-38 or tank T-39. The maximum volume discharged at a time from a tank is 23,000 gallons.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 93916         | Aero Box, LLC                            | 20101 Cornillie Drive<br>Roseville MI 48066 |

| <u>Permits</u> | <u>Raw Materials</u>               | <u>Limits</u>        |
|----------------|------------------------------------|----------------------|
| 00193916IU3    | Corrugated Board<br>Ink<br>Polymer | 01 LOC. Local Limits |

| <u>Flow Rate</u>                       |
|----------------------------------------|
| 01 Process Wastewater Batch 125.00 gpd |

Process Description

Process consists of: (1) printing on corrugated boards purchased from outside sources, (2) cutting printed corrugated boards and (3) making shipping containers using the corrugated boards and purchased glue.

The facility uses different types of water based flexographic ink for printing. Print station is washed whenever the ink needs to be changed and always at the end of the shift even if there is no change in ink. Wastewater from the print station washing goes into an underground sump (3,000 gallons capacity) and is then pumped into an ink splitter for treatment. Process wastewater is coagulated and then flocculated by adding ink splitter polymer (clay material). Wastewater is then passed through paper filter to remove separated solids. Filtrate is collected in the bottom tank of the ink splitter and then discharged into the city sewer. Filter cake is air dried and then disposed in regular dumpster.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| 94645         | Aevitas Specialty Services Corp.         | 663 Lycaste Street<br>Detroit<br>MI 48214 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                                                              |
|----------------|----------------------|--------------------------------------------------------------------------------------------|
| 91394645IU2    |                      | 01 LOC. Local Limits<br>01 PHEN. Phenols<br>01 437.B.26 (PSNS) Centralized Waste Treatment |

| <u>Flow Rate</u>                |
|---------------------------------|
| 01 Process Wastewater Batch gpd |

Process Description

## PROCESS DESCRIPTION

Aevitas Specialty Services Corporation receives and treats oily wastewater. The followings describe briefly the pretreatment operations conducted at the facility:

The oily waste is received in one of six tanks (TF-1), where it is first heated and chemically treated to accelerate the oil/water separation. Separated oily wastewater from oily waste treatment and oily wastewater received from customers pumped into one of the wastewater treatment tanks (Tanks 51-56). Wastewater treatment involves heating the wastewater to approximately 160oF and adding caustic or sulfuric acid for adjusting pH between 5 and 9 to separate the oil from the water. Oil is removed by gravity separation and separate oil is collected in sludge processor. Polymer flocculants and coagulants are used to agglomerate small particles into larger particles. Large particles float to the surface and are collected with oil in the sludge processor. The pretreated water at top of the tank is pumped to the final discharge tank to be sent later to a sand filter and carbon adsorption unit for the removal of any traces of organic compounds before discharge.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>   |         |              |
|---------------|------------------------------------------|----------------------|---------|--------------|
| 27317         | Ajax Metal Processing Inc.               | 4651 Bellevue Avenue | Detroit | MI 482071713 |

| <u>Permits</u> | <u>Raw Materials</u>                      | <u>Limits</u>                                                                                                                                                                                                       |
|----------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 153-27317-IU   | Zinc, Chromating and Phosphating material | 01 LOC. Local Limits<br>01 413.A.14g (PSES) Electroplating<br>01 413.E.54g (PSES) Electroplating<br>01 413.A.14c (PSES) Electroplating<br>01 413.E.54c (PSES) Electroplating<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Process Wastewater        | Continuous | 399,481.00 | gpd |
| 01               | Process Wastewater        | Continuous | 83,520.00  | gpd |
| 01               | Non-contact Cooling Water | Continuous | 17,340.00  | gpd |

Process Description

The clarification, Process consists of (1) Soak and electro-cleaning, (2) double rinse, (3) pickling, (4) double rinse, (5) electroplating, (6) triple rinse, (7) sour rinse (HCL), (8) final rinse, (9) chromate coating (optional), (10) drying. The pretreatment operation consists of chrome reduction, precipitation, flocculation, filtration, sludge collection and pH adjustment.

Process consists of (1) Soak and electro-cleaning, (2) double rinse, (3) pickling, (4) double rinse, (5) electroplating, (6) triple rinse, (7) sour rinse (HCL), (8) final rinse, (9) chromate coating (optional), (10) drying. The pretreatment operation consists of pH adjustment, metals precipitation, flocculation, settling (clarifier), sludge collection & filtration.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                               |
|---------------|------------------------------------------|--------------------------------------------------|
| 91838         | Ajax Tocco Magnethermic                  | 30100 Stephenson Hwy<br>Madison Heights MI 48071 |

| <u>Permits</u> | <u>Raw Materials</u>          | <u>Limits</u>        |
|----------------|-------------------------------|----------------------|
| 009-91838-IU   | parts received from customers | 01 LOC. Local Limits |

| <u>Flow Rate</u>                       |
|----------------------------------------|
| 01 Process Wastewater Batch 382.00 gpd |

Process Description

Parts received from the customer are checked for rust. Parts containing rust are returned to customer and those without rust are sent to temporary storage room. The selected parts are then sent to induction hardening machine. Induction hardening process consists of induction heating and quenching. In induction heating setup, a solid state RF power supply sends an AC current through a copper coil in which the part to be heated is placed. Inductive heated parts are then dropped in water soluble polymer quench. Some parts such as wheel hubs, gear and train pistons are alkaline washed in a one-stage parts washer.

Process wastewater is generated from quenching and parts washing. The facility has eleven quench tanks having capacity varying from 155 gallons to 500 gallons. Three (3) quench tanks (155 gallons) containing Aqua Quench 251 is pumped out every two (2) weeks, quench tanks containing Aqua Quench 365 and parts washer are pumped out once a month.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>         |                 |                 |
|---------------|------------------------------------------|----------------------------|-----------------|-----------------|
| <b>96589</b>  | <b>Algal Scientific Corporation</b>      | <b>14925 Galleon Court</b> | <b>Plymouth</b> | <b>MI 48170</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00696589IU1    |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 240.00   | gpd |
| 01               | Process Wastewater        | Continuous | 4,577.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 350.00   | gpd |
| 01               | Other                     | Continuous | 227.00   | gpd |
| 01               | Boiler Blowdown           | Continuous | 20.00    | gpd |

Process Description

The raw materials dextrose, ammonium sulfate, ammonium hydroxide, magnesium sulfate, citric acid, potassium phosphate and various trace metal salts are combined with water and pumped into a sterile fermenter seeded with algae cells and allowed fermentation and production of algal cells. When ready for harvesting, a portion of the broth is transferred to a holding tank. It is then passed through an ultra filtration unit to separate algal cells from water. The water portion is collected into a sump and then pumped into a 250 gallon tote equipped with continuous mixing and automatic pH adjustment system. The cells are directed back into the holding tank. The filtration is carried out until a desired product level is achieved in the holding tank. The wastewater is mixed well and pH adjusted to 6.5 and discharged into sewer system through flow meter and sampling box.

The collected cells (Algamune 50) are sent to another facility for drying and packaging until the facility starts its own drying and packaging operations in the same facility. The product Algamune ZPC is produced by adding zinc to the cells before drying.

## Facility Name: Detroit Water &amp; Sewerage

NPDES Permit #: MI 0022802

| SIU ID | Significant Industrial User (SIU) | SIU Address   |         |          |
|--------|-----------------------------------|---------------|---------|----------|
| 94587  | Alpha Resins, L.L.C.              | 17350 Ryan Rd | Detroit | MI 48212 |

| Permits     | Raw Materials             | Limits                                                                                                                                                                                                     |
|-------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 47294587IU2 | Various resin ingredients | 01 414.E.55 (PSES) Organic Chemicals, Plastics, and Synthet (Fac.-specific limits TBD)<br>01 414.K.111b (PSES & PSNS) Organic Chemicals, Plastics, and Synthet<br>02 LOC. Local Limits<br>02 PHEN. Phenols |

| Flow Rate |                           |            |           |     |
|-----------|---------------------------|------------|-----------|-----|
| 01        | Process Wastewater        | Continuous | 12,607.00 | gpd |
| 02        | Sanitary Wastewater       | Continuous | 440.00    | gpd |
| 02        | Process Wastewater        | Continuous | 12,607.00 | gpd |
| 02        | Non-contact Cooling Water | Continuous | 3,000.00  | gpd |
| 02        | Other                     | Continuous | 9,000.00  | gpd |
| 02        | Boiler Blowdown           | Continuous | 1,000.00  | gpd |

Process Description

Chemical blending of various resin ingredients to synthesize thermosetting resins. The process produces Phenol-Formaldehyde, Phenol-Urea-formaldehyde, Isocyanate, and Alkyd resins.

Part of the water used in the manufacturing process is used to make the product. Some of the excess water in the product is distilled out and it may contain some of the organics used in the manufacturing process. This distillate is separately collected and transported off site by a licensed hauler, and a manifest is maintained.

Apart from the above, rest of the water used in the manufacturing process goes to sampling location #1 (SL#1), as the "Process Wastewater". It is monitored for organics as per requirements of Categorical classification. Waste stream from Sampling Location (SL#1) goes to Sampling Location #2 (SL#2) where it combines with other wastestreams from the plant (non-contact cooling water, steam/condensate blowdown, sanitary) and discharges into DWSD sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                   |
|---------------|------------------------------------------|--------------------------------------|
| 27507         | Alpha Stamping Company                   | 33375 Glendale Ave. Livonia MI 48150 |

| <u>Permits</u> | <u>Raw Materials</u>                     | <u>Limits</u>        |
|----------------|------------------------------------------|----------------------|
| 00627507IU2    | coiled steel sheets<br>synthetic coolant | 01 LOC. Local Limits |

| <u>Flow Rate</u>                       |
|----------------------------------------|
| 01 Process Wastewater Batch 250.00 gal |

Process Description

Stampings are manufactured by feeding coiled steel into the stamping machine and cut to customer specifications. During the process, a synthetic coolant is sprayed on the steel. Stampings are deburred, washed as needed and packed as per requirements. Spent synthetic coolant is collected into a holding tank of 275 gallons capacity and hauled by the manufacturer "Marand" for recycle. Process wastewater generated from parts washing and floor cleaning is pretreated prior to discharge into the city sewer system. The pretreatment operations include pH adjustment, flocculation and filtration.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                               |
|---------------|------------------------------------------|--------------------------------------------------|
| 27220         | American Beverage Equipment Co., Inc     | 27560 Groesbeck Highway<br>Roseville<br>MI 48066 |

| <u>Permits</u> | <u>Raw Materials</u>                           | <u>Limits</u>                                               |
|----------------|------------------------------------------------|-------------------------------------------------------------|
| 15127220IU     | Brass, metals (Nickel, zinc) acid and alkaline | 01 LOC. Local Limits<br>01 433.A.15a (PSES) Metal Finishing |

| <u>Flow Rate</u>                            |
|---------------------------------------------|
| 01 Process Wastewater Continuous 850.00 gpd |

Process Description

The process includes (a) machining and assembling of brass parts, (b) nickel plating of brass parts, and (c) distribute tubing: SS fitting, refrigerators, and beer dispensing equipment that is manufactured by others.

The nickel plating process includes electro/alkaline-cleaned, rinsed (overflow), acid cleaned, rinsed (overflow), nickel plated, rinsed for three (3) times (dead rinses), dried naturally, and shipped.

The process wastewater is generated from rinses after alkaline and acid cleaning. Both rinse process wastewaters are mixed for neutralization before discharge into the sewer. The plating rinses are recycled.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |       |          |
|---------------|------------------------------------------|--------------------|-------|----------|
| 96113         | American Jetway Corp.                    | 3850 Howe          | Wayne | MI 48184 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00696113IU     |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                    |       |            |
|------------------|--------------------|-------|------------|
| 01               | Process Wastewater | Batch | 100.00 gpd |

Process Description

Processes consist of mixing of chemicals and ingredients in a 304 Stainless steel mixing vessel to make batches of up to 1000 gallons of the water based cleaning products which are comprised of > 88% ionized water, < 2% hydrogen peroxide and ~ 10% additive package which consists of non-ionic and anionic surfactants, fragrance, preservative chemicals and polymeric soil repellants agents (non-hazardous). The liquid is packaged in a "bag-on-valve" aerosol container which is pressurized with either nitrogen or carbon dioxide to expel the content. After aerosol cans are filled, they enter a water bath for leak detection. A shallow tank containing approximately 100- gallons of water is heated and maintained at 130F. Aerosol cans are immersed for approximately 1-2 minutes. Approximately 8 ounce of sodium nitrate and Dawn dish soap are added to the water bath to keep the oil content minimal and make sure labels adhere to the cans. If the labels begin coming off the cans, the bath water is changed out. The used bath water is stored in 350-gallon totes until proper disposal. Approximately on 350- gallon tote is filled each week.

About 99% of the product mixed is packaged. There is little waste water generated from the batch mixing procedure.

Before each production campaign (a production campaign is a period of several days when the product is mixed and filled into containers for shipment), all of the manufacturing equipment is rinsed with a conditioning rinse solution consisting of a solution of diluted hydrogen peroxide

Wastewater generated during cleaning and rinsing is collected in 300 gallons totes and pretreated (pH adjusted) prior to discharge into the sewer system through sampling box

Once a year, stainless steel vessel is cleaned, passivated (300 gallons stainless steel vessel inside wall) and neutralized. Inside surface of the vessel is scrubbed with iron scrub manually (whenever it is required, vessel is welded and grinded for maintenance) and then it is washed with dilute citric acid (2% solution) to remove any iron parts resulted from scrubbing and/or grinding. During cleaning with 2% dilute citric acid, stainless steel surface is self-passivated, i.e. the protective oxide "coating" forms spontaneously in air – no chemical treatment is needed. Citric acid solution only removes iron without affecting chromium and nickel metals of the stainless steel. This cleaning is required as it is critical to remove residual iron from manufacturing equipment, when blending products containing Hydrogen peroxide solutions, which diminishes efficiency of cleaning solution). Washed dilute citric acid solution is neutralized prior to discharge into the sewer system.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                            |
|---------------|------------------------------------------|-----------------------------------------------|
| 92132         | American Metal Finishing, Inc.           | 35860 Beattie Drive Sterling Heights MI 48312 |

| <u>Permits</u> | <u>Raw Materials</u>                    | <u>Limits</u>        |
|----------------|-----------------------------------------|----------------------|
| 00192132IU     | Metals, alkaline, stones, clay (solids) | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |            |
|------------------|---------------------|------------|------------|
| 01               | Process Wastewater  | Batch      | 225.00 gpd |
| 01               | Sanitary Wastewater | Continuous | 120.00 gpd |
| 01               | Process Wastewater  | Batch      | 325.00 gpd |

Process Description

- The Company receives steel and aluminum parts from stamping companies and the parts are loaded into vibrators.
- During the deburring processes, the parts are tumbling with alkaline cleaner and deburring media (ceramic grinding stones impregnated in aluminum oxide).
- Finished parts are immersed in water base rust inhibitor (50-R), Then parts are sent back to customers.

Waste alkaline solution from the deburring machines is collected in a pit, and then is treated through a clay-based combined machine. The clay generates liquid flocculent, which runs through a paper filter. The filtered solution is collected in a holding tank for recycling in the deburring machine and the non-recycling wastewater is pumped to a settling storage tank for batch discharging into the Sewer.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                           |
|---------------|------------------------------------------|--------------------|---------------------------|
| 27519         | American Waste Technologies, Inc.        | 44141 Yost Road    | Van Buren Townsh MI 48111 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                  |
|----------------|----------------------|------------------------------------------------|
| 91627519IU2    | HAULED-IN WASTE oil  | 01 LOC. Local Limits                           |
|                |                      | 01 437.B.25 (PSES) Centralized Waste Treatment |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 150.00    | gpd |
| 01               | Process Wastewater  | Batch      | 13,109.00 | gpd |

Process Description

There are two wastewater generating activities at the facility - waste oil reclamation process and wastewater treatment. The waste oil reclamation process includes processing of waste crankcase oils (usually >90% oil), which are processed through dedicated tanks (#1 - #7, #21 and #22). This process also uses the recovered oils that are collected from the facility's on-site wastewater treatment. The reclaimed oil is sold as a fuel.

The oily wastewater resulting from the reclamation process is segregated and collected in Tank #15 to be transported to an off-site treatment/disposal facility because it is difficult for the company to effectively remove the heavy metals contained in the wastewater. [The facility submits copies of the waste manifests to the Department during six months reporting. See permit Section K - Other Requirements (4)(iii)].

The second wastewater generating activity at the facility is the wastewater treatment. The wastewater (containing 5-10% oil) is unloaded into the facility's heated wastewater treatment pits and treated by applying heat, acid and air. Oil is recovered and transferred to Tank #1 for reclamation. The wastewater is pumped into the batch treatment tank (#13) and treated by chemical precipitation, mixing, flocculation and settling. The solids from the tank bottom are drained into the in-ground oil/water separator. The treated wastewater from Tank #13 is transferred through a sand/gravel filter into Tank #14 for discharge. When discharged, the wastewater gets filtered again by passing through a six-cartridge primary filter, a five-cartridge secondary filter and metered

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                   |
|---------------|------------------------------------------|------------------------------------------------------|
| 91493         | Applied Technology Industries, Inc.      | 50271 E. Russell Schmidt Drive Chesterfield MI 48051 |

| <u>Permits</u> | <u>Raw Materials</u>            | <u>Limits</u>                       |
|----------------|---------------------------------|-------------------------------------|
| 001111         | PVDC (Polyvinyl idene Chloride) | 01 LOC. Local Limits                |
|                | polymer                         | 01 433.A.17a (PSNS) Metal Finishing |
|                | alkaline cleaners, acids,       |                                     |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 1,000.00  | gpd |
| 01               | Process Wastewater  | Continuous | 28,193.00 | gpd |
| 01               | Boiler Blowdown     | Continuous | 20.00     | gpd |

Process Description

The Company has two autophoretic coating lines. Autophoretic is a trademark name for the Autodeposition Process manufactured by Henkel Surface Technologies. It is a waterbourne process that depends on a chemical reaction to achieve deposition unlike an E-coat that requires an Electrostatic reaction to achieve the deposition. A mild acid in the Autophoretic batch etches the surface of the steel and releases the iron ions. The latex in the Autophoretic bath attaches themselves to the iron ions and reattaches them to the surface of the metal. The surface is then placed in an oven at 225 degrees F to remove moisture. The process generates zero VOC's and does not require any pretreatment of the metal.

Line #1:

Parts are alkaline cleaned twice (spray and immersion), rinsed thrice (spray, dip & dip) using Reverse Osmosis (R.O.) water, coated (dip) with polymer using the auto deposition method, rinsed (dip), sealed (dip), cured for forty (40) minutes at 225 degree F, air cooled, packed and shipped out.

Line #2:

The steps involved in this line are similar to Line #1, except this line has four more steps after the alkaline cleaning and rinse steps. These steps are acid cleaning (mixture of phosphoric and sulfuric acid solution), rinse, alkaline cleaning and rinse. Acid cleaning step removes remove the oxide and tarnish from the steel parts. This operation is called bright dipping, a specialized form of etching.

Process wastewater (rinse waster from both lines and reject from the R. O. unit) is discharged into City sewer system without any pretreatment.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>             |                   |                 |
|---------------|------------------------------------------|--------------------------------|-------------------|-----------------|
| <b>95609</b>  | <b>Arbor Hills Energy, LLC</b>           | <b>10611 W. Five Mile Road</b> | <b>Northville</b> | <b>MI 48167</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00695609IU1    | Steam                | 01 LOC. Local Limits |

55% pure methane generated from  
Onyx Arbor Landfi

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 280.00    | gpd |
| 01               | Process Wastewater  | Continuous | 10,500.00 | gpd |
| 01               | Boiler Blowdown     | Continuous | 1,500.00  | gpd |

Process Description

The facility generates electricity using combined cycle power systems. The electricity is generated from three gas turbines and one steam turbine:

Gas Turbine Generation: The recovered methane gas is compressed from 12 psia to 300 psia (maximum) in a three-stage compressor and is piped to the main building. Compressed gas is then fed into three gas turbines to be combusted. The hot gas generated from the combustion process will lead to the generation of electricity via turbine blades and then the generator.

Steam Turbine Generation: The recovered methane gas is compressed, filtered, and cooled to be sent later to the boilers as fuel. The hot exhaust gases from the gas turbines are also used to provide heat source for the boiler. The water from the wells that surround the facility is pumped to the boiler after pretreatment. The high temperature and high pressure steam generated from the boiler will lead eventually to the generation of electricity via steam turbine and then the generator. The steam condensate is pumped back to the boiler after treatment.

The water fed to the boiler is treated using chemicals and using a reverse osmosis system to eliminate the suspended solids and dissolved salts to protect the boiler tubes from scale formation. The de-aeration of the treated feed water is done before pumping to the boiler.

The wastewater is generated from reverse osmosis rejection, boiler blowdown, gas and steam condensate, and from floor washing. The facility has an oil/water separator and also an ozone treatment system to treat odorous gas condensate. All of the plant process wastewater flows through a second oil/water separator (2,000 gal) and discharges into the sanitary sewer. All spent oil is pumped from oil/water separators and hauled away by licensed contractors for treatment and disposal.

The steam condensation is accomplished by air-cooled condensers.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                            |
|---------------|------------------------------------------|-----------------------------------------------|
| 27589         | Arted Chrome Plating Inc.                | 38 Piquette Street<br>Detroit<br>MI 482023511 |

| <u>Permits</u> | <u>Raw Materials</u>                                | <u>Limits</u>                                                                                                                  |
|----------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 02827589IU2    | motorcycle parts from customer<br>alkaline cleaners | 01 LOC. Local Limits<br>01 413.A.14f (PSES) Electroplating<br><10,000 gpd<br>01 413.A.14b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u> |                     |            |              |
|------------------|---------------------|------------|--------------|
| 01               | Sanitary Wastewater | Continuous | 120.00 gpd   |
| 01               | Process Wastewater  | Continuous | 2,452.00 gpd |

Process Description

The parts brought to the site are sorted, cleaned and nickel or chrome plated. Wastewater generated from the cleaning and plating rinses is pretreated in an ion exchange system prior to discharge to the city sewer.

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| <b>SIU ID</b> | <b>Significant Industrial User (SIU)</b> | <b>SIU Address</b>       |                |                 |
|---------------|------------------------------------------|--------------------------|----------------|-----------------|
| <b>85496</b>  | <b>Atwater Brewery</b>                   | <b>237 Joseph Campau</b> | <b>Detroit</b> | <b>MI 48207</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 003-85496-IU   |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Sanitary Wastewater | Continuous | 400.00   | gpd |
| 01               | Process Wastewater  | Batch      | 5,300.00 | gal |
| 01               | Process Wastewater  | Continuous | 1,170.00 | gpd |
| 01               | Boiler Blowdown     | Continuous | 10.00    | gpd |

Process Description

Grains are milled and transferred to Mash Kettle for brewing process. After brewing, the solids and protein are separated and the liquid portion is fed to the fermenter for fermentation. The liquid then is passed through centrifuges for excess yeast removal and then conditioned (forced carbonation) and packaged in kegs or pasteurized, bottled and packaged.

The process water is generated from CIP equipment cleaning which is done once every two weeks and daily miscellaneous plant use water. The facility has ten (10) fermenters. The facility discharges wastewater into sewer without pretreatment.



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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>          |
|---------------|------------------------------------------|-----------------------------|
| 96811         | BMT Aerospace                            | 18559 Malyn Fraser MI 48026 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15196811IU     |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |                       |
|------------------|--------------------|-----------------------|
| 01               | Process Wastewater | Continuous 240.00 gpd |

Process Description

The categorical wastewater generating operation is a chemical etching process. The process consists of hot water rinse, methanol dip, acid dip, cold water rinse, nitric acid dip, cold water rinse, hot water rinse and blow dry, methanol dip & blow dry, hydrochloric acid dip & cold rinse, sodium hydroxide neutralizer, cold water rinse, hot water rinse & blow dry rust preventative oil followed by inspection of the parts.

Wastewater is generated from the overflow of the rinse waters.

The main operations of the facility consist of machining and tooling and water is added in the coolants used for various machines and the spent coolant is hauled off-site.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 87112         | Baron Industries                         | 999 East Mandoline Madison Heights MI 48071 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 009-87112-IU   |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                              |
|-----------------------------------------------|
| 01 Process Wastewater Continuous 4,500.00 gpd |

Process Description

Various parts such as aluminum or iron castings for engine components, machined transmission cases, parts related to plumbing industries are processed by Vacuum Impregnation process (Wet Vacuum Pressure and Wet Vacuum) using resins to remove porosity. The process consists of six stages. The parts are arranged in baskets and are subjected to the following processes in series- immersing in sealant resin (vacuum and/or pressure applied as desired), centrifuging, surge washing, hot water rinsing (two tanks in series) and spin drying.

There are three process lines. Line 110 is used for small electronic parts. Line 128-132 is used for big parts such as castings, transmission cases etc. Line 122-140 is used for small regular or plastic parts.

Wastewater is generated from the surge washing and hot water washing/rinsing operations of the parts for removing excess resins from surfaces. Wastewater is collected in a collection tank and is pumped through a 25 micron synthetic cloth filter and a stacked mesh cloth filter. The filtered wastewater is collected into the sampling tank and pumped to the sewer system periodically throughout the day, using a level activated pump.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>          |                                  |
|---------------|------------------------------------------|-----------------------------|----------------------------------|
| <b>27496</b>  | <b>Bayloff Stamped Products</b>          | <b>5910 Belleville Road</b> | <b>Van Buren Townsh MI 48111</b> |

| <u>Permits</u> | <u>Raw Materials</u>                                             | <u>Limits</u>        |
|----------------|------------------------------------------------------------------|----------------------|
| 00627496IU3    | steel metal sheets, deburring chemical<br>soaps,<br>Coolant oils | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                    |            |            |
|------------------|--------------------|------------|------------|
| 01               | Process Wastewater | Batch      | 330.00 gal |
| 01               | Process Wastewater | Continuous | 480.00 gpd |

Process Description

The process involves the stamping of metal sheets, robotic welding of stampings, machining and tumbling of welded parts.

Discharged wastewater is generated from two (2) processes:

Batch: This wastewater generated from cleaning and washing of stamping dies and floor cleaning is batch treated prior to discharge into public sewers. The wastewater is passed through the pretreatment system, consisting of pH adjustment, flocculation & metal precipitation and filtration, prior to discharge.

Currently the batch discharge is 330 gallons per week with the discharge occurring on Mondays and Tuesdays @ eight (8) hours per batch. The company is planning on increasing the frequency and volume to ~ 600 gallons per week on Mondays, Wednesdays and Fridays.

Continuous: This wastewater is generated from the main tumbling operation which is passed through a tank equipped with baffles and magnets in order to remove metallic particles and solids. It is then collected (pumped) in a tank to allow for more settling prior to discharge (480 gpd).

Not Discharged: Wastewater from the "Press 40 Parts Washer"

Bayloff has a galvanized steel stamped product line which uses a solvent solution (Cadco 6001) for parts washing. The Company ceased discharge of this wash water due to high concentrations of Zinc (Zn). The material is currently being hauled off-site for disposal.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>          |                |                 |
|---------------|------------------------------------------|-----------------------------|----------------|-----------------|
| <b>91884</b>  | <b>Better Made Snack Foods, Inc.</b>     | <b>10148 Gratiot Avenue</b> | <b>Detroit</b> | <b>MI 48213</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                |
|----------------|----------------------|----------------------------------------------|
| 003-91884-IU   | Fresh Potatoes       | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |            |     |
|------------------|---------------------|------------|------------|-----|
| 01               | Sanitary Wastewater | Continuous | 2,625.00   | gpd |
| 01               | Process Wastewater  | Continuous | 205,315.00 | gpd |
| 02               | Sanitary Wastewater | Continuous | 4,858.00   | gpd |
| 02               | Process Wastewater  | Continuous | 157,084.00 | gpd |

Process Description

The facility makes salted snacks (potato chips and popcorn of various flavors) from potatoes, vegetable oil, seasoning of various flavors, popcorn seed, and cheese powder.

Raw potatoes are washed, peeled and sliced, then cooked in vegetable oil. The finished product is then packaged, shipped to distribution warehouses or stores.

The process wastewater is from the washing of raw potatoes and cleaning of potato peeling and slicing.

The pretreatment of wastewater is the use of a SWECO vibrating micro screen system. Wastewater passes over the screens, which separate the solids from the wastewater prior to it being discharged to the city sewer.

The solids are disposed of by a contracted hauler to be processed into animal feed.

The waste oil is picked up by Darling International for processing.

All other garbage/trash is contracted for pickup by Quantum Waste Solutions, disposed of in landfill.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 91804         | Black Ox Corporation                     | 36865 Schoolcraft Road Livonia MI 48150 |

| <u>Permits</u> | <u>Raw Materials</u>              | <u>Limits</u>                       |
|----------------|-----------------------------------|-------------------------------------|
| 15691804IU4    | metallic parts of customer parts  | 01 LOC. Local Limits                |
|                | Alkaline cleaners: Uni-Kleen 3D   | 01 433.A.17a (PSNS) Metal Finishing |
|                | Acid: Muriatic Acid22             |                                     |
|                | Black oxider: Nickel Pentrate     |                                     |
|                | rust preventive oil: Pen Dipp 300 |                                     |

| <u>Flow Rate</u> |                    |       |              |
|------------------|--------------------|-------|--------------|
| 01               | Process Wastewater | Batch | 1,000.00 gal |

Process Description

The process consists of the following steps:

- (a) Alkaline cleaning (Uni-Kleen 3D) followed by water rinsing
- (b) Acid Pickling (Muriatic Acid22) followed by water rinsing
- (c) Coating with Black oxider (Nickel Pentrate) followed by water rinsing
- (d) Dipping in rust preventive oil (Pen Dipp 300)

Process wastewater is generated from various rinsing operations. The process water is passed through a 30 micron bag filter and skimmer and collected in a 1000 gallons holding tank for pH adjustment. The wastewater is then passed through a 5 micron filter and discharged in to the sewer system through the sampling box.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                           |
|---------------|------------------------------------------|--------------------|---------------------------|
| 27727         | Botsford General Hospital                | 28050 Grand River  | Farmington Hills MI 48336 |

| <u>Permits</u> | <u>Raw Materials</u>                       | <u>Limits</u>        |
|----------------|--------------------------------------------|----------------------|
| 00927727IU1    | Patient Care<br>Laboratory<br>Food Service | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Process Wastewater        | Continuous | 70,085.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 22,000.00 | gpd |
| 01               | Boiler Blowdown           | Continuous | 1,500.00  | gpd |
| 01               | Sanitary Wastewater       | Continuous | 46,000.00 | gpd |

Process Description

## PROCESS DESCRIPTION

Operations in the facility consists of general/specialized health care services and research activities. Process wastewater is generated from patient care, x-ray services, kitchen/cafeteria and laboratories (the main lab discharges approximately 3 gpd of diluted alcohol from their stainer processes). Only process wastewater from x-ray film developer and kitchen/cafeteria is pretreated. Pretreatment in the facility consists of the following:

- a) Silver Recovery: The silver is recovered from spent fixers by ionic exchange method
- b) Fats, Oil and Grease (FOG) Removal: Wastewater from kitchen/cafeteria is passed through grease traps in order to reduce FOG.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>               |
|---------------|------------------------------------------|----------------------------------|
| 96583         | Brew Detroit                             | 1401 Abbott St. Detroit MI 48216 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 008-96583-IU   |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                              |
|-----------------------------------------------|
| 01 Process Wastewater Continuous 5,700.00 gpd |

Process Description

The facility manufactures beer from malt and grain. Its process operations are grinding, brewing and fermenting. Hops and coagulated proteins are separated from the brew by centrifuging before it is fermented. After allowing for fermentation beer is filtered, pasteurized and filled in containers like cans and bottles. Wastewater is generated from the production cleaning operations, which include brew house rinsing, brew house CIP, production rinsing, production CIP and production container rinsing. The wastewater is sewer discharged after pH adjustment.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>     |                                  |
|---------------|------------------------------------------|------------------------|----------------------------------|
| <b>27244</b>  | <b>Burkard Industries, Inc.</b>          | <b>35300 Kelly Rd.</b> | <b>Clinton Township MI 48035</b> |

| <u>Permits</u> | <u>Raw Materials</u>      | <u>Limits</u>                       |
|----------------|---------------------------|-------------------------------------|
| 151-27244-IU   | metal Parts from customer | 01 LOC. Local Limits                |
|                | zinc phosphate            | 01 433.A.17a (PSNS) Metal Finishing |
|                | epoxy or polyester        |                                     |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Process Wastewater  | Continuous | 38,300.00 | gpd |
| 01               | Sanitary Wastewater | Continuous | 2,920.00  | gpd |
| 01               | Process Wastewater  | Continuous | 46,934.00 | gpd |

Process Description

The facility has three (3) coating lines, one (1) Powder Coating line, one (1) E-coat line, and one Liquid Painting/CARC line.

Liquid Painting:

Line #1: The parts are hung on racks, alkaline cleaned, rinsed, deoxidized with a phosphoric based product, rinsed twice, pretreated with Alodine 5900 TCP, and rinsed with deionized water. The parts are dried, sprayed with primer, force cured, and top coated usually with a chemical agent resistant coating (CARC), force cured, cooled, packed, and shipped out. Some parts are also primed on the E-coat line, and are run through the parts washer with only the rinse stages running.

Powder Coating:

Line #2: The parts are hung on racks, alkaline cleaned twice, rinsed twice, iron phosphated, rinsed, dry on sealed (steel and aluminum parts only using different seals). The parts are dried, powder sprayed with epoxy or polyester materials, cured, cooled, packed and shipped out.

The process wastewater generated from the rinse operations from both lines is discharged at the sample location without any pretreatment.

E-coat:

The parts are hung on racks, alkaline cleaned thrice (dip, spray and dip cleaned), rinsed twice (dip and spray rinsed), acid cleaned (as needed), rinsed, dipped in zinc phosphate conditioner, zinc phosphated, rinsed, non-chromate sealed and Reverse Osmosis (R. O.) spray rinsed and R. O. dip rinsed, e-coated, rinsed thrice, dried, packed and shipped out.

The process wastewater generated from the rinse operations is pretreated prior to discharge.

Other process wastewater generated is from wash booth. Racks and large size parts are cleaned in the wash booth using high pressure water and cleaner.

The generated wastewater from this wash booth was directly discharged at the sample location without ant pretreatment. However, since December 2006, this wastewater is pretreated with the wastewater from the E-coat line prior to discharge into the City sewer system.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                       |
|---------------|------------------------------------------|------------------------------------------|
| 91513         | Butcher Boy Meats, LLC                   | 20643 Stephens St. Clair Shores MI 48080 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00191513IU2    | Pork, meat & spices  | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |               |
|------------------|---------------------------|------------|---------------|
| 01               | Sanitary Wastewater       | Continuous | 2,000.00 gpd  |
| 01               | Process Wastewater        | Continuous | 26,000.00 gpd |
| 01               | Non-contact Cooling Water | Continuous | 3,500.00 gpd  |

Process Description

Fresh meat is ground, mixed, stuffed into casings, cooked, partially cooled with fresh water shower, chilled in coolers packaged and sold. Some of the casings are soaked.

The process wastewater is generated from cleaning floors, walls, equipment, and from chilling and soaking processes. Catch basins and grease traps are used to remove the grease from the process wastewater.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                           |
|---------------|------------------------------------------|----------------------------------------------|
| 27469         | C. F. Burger Creamery                    | 8101 Greenfield Road<br>Detroit MI 482282220 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 005008         | Milk and cream       | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Sanitary Wastewater       | Continuous | 1,200.00   | gpd |
| 01               | Process Wastewater        | Continuous | 111,840.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 2,100.00   | gpd |

Process Description

The process consists mainly of pasteurization of milk and the separation of cream from milk for the manufacture of various milk products. Wastewater is generated from washing of process equipment and storage tanks. The resulting wastewater is discharged into public sewer without treatment.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| SIU ID | Significant Industrial User (SIU) | SIU Address        |        |          |
|--------|-----------------------------------|--------------------|--------|----------|
| 95336  | Canton Renewables, LLC            | 4345 S. Lilley Rd. | Canton | MI 48188 |

| Permits    | Raw Materials | Limits               |
|------------|---------------|----------------------|
| 00695336IU |               | 01 LOC. Local Limits |

| Flow Rate |                     |            |           |     |
|-----------|---------------------|------------|-----------|-----|
| 01        | Process Wastewater  | Continuous | 50,000.00 | gpd |
| 01        | Sanitary Wastewater | Continuous | 45.00     | gpd |

Process Description

The facility receives and processes the landfill gas to a product quality natural gas meeting the standards for injection into the DTE MichCon distribution system. The various process steps involved are gas compression, filtration, condensate removal (gas chilling), carbon dioxide removal (water scrubber) and oxygen removal (oxygen catalyst). Within the plant, the wastewater discharge streams are divided into two distinct streams: Process Water and Oily Condensate.

The Process Water constitutes water from the discharge (blow down) of the water scrubber, discharge from moisture separators downstream of the oxygen removal, discharge from waste gas H<sub>2</sub>S removal system and condensate from gas flare (negligible).

The Process Water coming from the water scrubber is collected in a single pipe running throughout the plant and is directed to an oil/water separator (OWS) located outdoors, underground on the west side of the plant building. Oil, if any, is removed by the OWS and the process water is pumped back into the building into the Equalization and Neutralization tanks located in the building. The discharge from moisture separators downstream of the oxygen removal and discharge from the H<sub>2</sub>S removal system is also directed into the process Water at the equalization and neutralization tanks. The process water is then pH adjusted in the neutralization tank, treated with granular activated carbon, particulate filtered, metered and then discharged into sewer through the sampling location manhole.

The Oily Condensate stream constitutes moisture condensate from gas filtration, chilling and gas compression. The Oily Condensate coming from the filtration, chilling and compression processes is collected in a single pipe running throughout the plant and is directed to a separation vessel and a separate OWS located inside the building for removing any oil in it. The Oily Condensate OWS discharge is then discharged to the OWS located outdoors, underground on the west side of the plant building and combined with the Process Water for treatment through the equalization and neutralization tank system as described above and subjected to same pretreatment prior to discharge into sewer through the same flow meter and sampling location manhole.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                     |
|---------------|------------------------------------------|----------------------------------------|
| 94334         | Chemical Process Industries, LLC         | 25428 John R, Madison Heights MI 48071 |

| <u>Permits</u> | <u>Raw Materials</u>     | <u>Limits</u>                                                                                                         |
|----------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 159-94334-IU   | fasteners from customers | 01 LOC. Local Limits<br>01 413.A.14c (PSES) Electroplating<br>01 433.A.17a (PSNS) Metal Finishing<br>01 PHEN. Phenols |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 300.00 gpd    |
| 01               | Process Wastewater  | Continuous | 13,292.00 gpd |

Process Description

The process is a bulk operation, which involves the use of barrels, baskets and a hoist to transport in-coming parts from one operational stage to another. The operation consists of alkaline cleaning, acid cleaning, plating, zinc phosphating, chromate conversion and drying.

Wastewater generated from the rinsing of parts with water at different stages of the process, is collected into two storage pits, one for flow from the chromating process and the other for all other sources. The chromium bearing wastewater in one of the pits, is treated to reduce chromium from its hexavalent form to that of trivalent. The wastewater in the other pit is adjusted for pH. Thereafter the streams from both pits are pumped into a treatment tank where they are mixed, further adjusted for pH and dosed with polymer to induce precipitation of heavy metals. The treated wastewater is then directed to a lamella to settle out solids for removal and eventual disposal. The solid-free overflow from the lamella is discharged into public sewers.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>              |                     |                 |
|---------------|------------------------------------------|---------------------------------|---------------------|-----------------|
| <b>85295</b>  | <b>Chemico Systems, Inc.</b>             | <b>50725 Richard West Blvd.</b> | <b>Chesterfield</b> | <b>MI 48051</b> |

| <u>Permits</u> | <u>Raw Materials</u>                                   | <u>Limits</u>        |
|----------------|--------------------------------------------------------|----------------------|
| 00185295IU3    | automotive parts and tools from customers<br>Chemicals | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Process Wastewater  | Batch      |          | gpd |
| 01               | Sanitary Wastewater | Continuous | 640.00   | gpd |
| 01               | Process Wastewater  | Batch      | 5,074.00 | gpd |

Process Description

1. Paint removal: Following for processes are used to remove coating/paint from the Automotive parts and tools:

(a) Hot chemical Dip Bath: Painted parts are dipped for six hours in a hot bath, which contains solution of Glycol Ether, Potassium Hydroxide and detergent. Parts are rinsed using high-pressure (3,000 pound) water jet. Dipped in rust preventative water based solution (5% concentration), dried and shipped off.

(b) Pyrolytic Burn Off: Painted parts and tools are placed in the furnace operated at 800 degree F, which burns paint into ash. Remaining ash from the parts is removed by dipping them in Hydrochloric Acid bath (3% concentration) followed by dipping in Potassium Hydroxide bath (3% concentration). Parts are rinsed using high-pressure (3,000 pound) water jet. Dipped in rust preventative water based solution (5% concentration), dried and shipped off.

(c) High Pressure Washer: Large size painted parts are cleaned using very high pressure (40,000 pound water) jet.

2. Blending of Chemicals: Chemicals are blended to manufacture water based floor cleaners and wall coatings. After each blending operation, equipment is washed. Generated wastewater from washing of the tanks is reused to prepare another batch. However, wastewater (50 gpd), generated from washing of the buckets and hoses.

Wastewater generating operations are process 1. (a), (b), (c) and 2 is passed through a pretreatment system, which includes pH adjustment, coagulation, sedimentation and filtration prior to discharge into the City sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>      |         |          |
|---------------|------------------------------------------|-------------------------|---------|----------|
| 96172         | Children's Hospital of Michigan, Inc.    | 3901 Beaubien Boulevard | Detroit | MI 48201 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00896172IU2    | Food Service         | 01 LOC. Local Limits |
|                | Patient Care         | 02 LOC. Local Limits |
|                | Laboratory & Morgue  | 03 LOC. Local Limits |
|                |                      | 04 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 12,400.00 | gpd |
| 01               | Process Wastewater        | Continuous | 20,933.00 | gpd |
| 02               | Process Wastewater        | Continuous | 20,933.00 | gpd |
| 03               | Sanitary Wastewater       | Continuous | 12,400.00 | gpd |
| 03               | Process Wastewater        | Continuous | 20,934.00 | gpd |
| 03               | Non-contact Cooling Water | Continuous | 8,000.00  | gpd |
| 04               | Sanitary Wastewater       | Continuous | 14,400.00 | gpd |
| 04               | Process Wastewater        | Continuous | 25,000.00 | gpd |

Process Description

## PROCESS DESCRIPTION

The process consists of treating children by providing necessary health care services. The process wastewater generating operations include laboratories, morgue, physical therapy and kitchen/cafeteria. The pretreatment system consists grease traps

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |             |                 |
|---------------|------------------------------------------|--------------------|-------------|-----------------|
| <b>27566</b>  | <b>Chor Industries Inc.</b>              | <b>500 Robbins</b> | <b>Troy</b> | <b>MI 48083</b> |

| <u>Permits</u> | <u>Raw Materials</u>                | <u>Limits</u>                       |
|----------------|-------------------------------------|-------------------------------------|
| 15727566IU3    | Nickel sulphate, Acid, Caustic soda | 01 LOC. Local Limits                |
|                |                                     | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 320.00    | gpd |
| 01               | Process Wastewater  | Continuous | 12,303.00 | gpd |

Process Description

The facility does electro-less nickel plating of steel and aluminum following the given operations: a) Alkaline cleaning b) Acid activation and c) Nickel electro-less plating. The facility's operations also include nitric acid stripping of nickel-plated parts, and nitric acid cleaning of facility's plating racks and gratings. All the operations are associated with water rinsing. The spent cleaning wastes resulting from the alkaline cleaning and acid activation processes including rinses are pH adjusted and discharged to the sewer. The plating rinses undergo pH adjustment, and ion exchange treatment (viable system), before discharge to the sewer. Spent nickel plating waste and the nitric acid stripping/cleaning wastes are hauled off-site (EQ Industrial Services) for treatment/recovery/disposal.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                           |
|---------------|------------------------------------------|--------------------|---------------------------|
| 96037         | Cinetic Automation                       | 23400 Halsted Rd.  | Farmington Hills MI 48335 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00996037IU1    | Part washers         | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |              |
|------------------|---------------------|------------|--------------|
| 01               | Sanitary Wastewater | Continuous | 4,438.00 gpd |
| 01               | Process Wastewater  | Batch      | 100.00 gpd   |

Process Description

Process consists of Production and Testing of industrial washer systems, and any wastewater streams created by such a mass production scale. Small scale testing of the washing machines before shipment to customers.

The washer division at Cinetic Automation designs, assembles components of, and tests industrial washers for engine blocks, crankshafts, and camshafts for the automotive industry. Components of these washers (such as housings, filters, robots, or piping) are purchased from manufacturers, and assembled in the facility. When the washers have been assembled, testing of these machines to verify performance is conducted. During this testing process, an alkaline wash fluid chosen by the customer must be placed into the washer system until the machine is verified, and can be shipped to the customer. Before shipment, this alkaline fluid is to be discharged to the city sewer

The purpose of the washer testing is to simulate how the machine will be operating in the field, and predict the kind of performance the company can expect from it. At the customer plant, an engine block (or other part) will undergo a series of metal working operations (such as drilling, cutting, grinding, etc.). These operations leave the part soiled with bits of metal, dust, and fluids used to perform those operations (like coolants or drilling oils), and must be cleaned. To provide accurate test results, the facility try to recreate these conditions by soiling a test part (provided by the customer) with a mixture of mineral seal oil, and either Aluminum or Steel chips Cinetic Automation run the part through the machine, and analyze it for cleanliness. An alkaline wash fluid is used during the testing process. These fluids are chosen by the customer based on their regulations and standards. However, many of these fluids are similar, and are often ethanolamine based cleaners (such as QuakerClean 624 CP). All of the systems the facility designs are closed systems that filter and recirculate the wash fluid constantly. It's a comparatively small amount of soil the facility introduce into the recirculating system and nearly all of the oil and debris is captured by the filtration system and pH adjusted if needed.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <b>SIU ID</b> | <b>Significant Industrial User (SIU)</b>    | <b>SIU Address</b>                        |
|---------------|---------------------------------------------|-------------------------------------------|
| <b>93174</b>  | <b>Cintas Corporation - Clean Room Reso</b> | <b>39120 Webb Drive Westland MI 48185</b> |

| <b>Permits</b> | <b>Raw Materials</b>                                                                                                                                                                                                                        | <b>Limits</b>        |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 00693174IU1    | uniforms for laboratories,<br>pharmaceutical companie<br>uniforms for electronics industries<br>Laundry detergent-Dipropylene Glycol<br>Methyl ether<br>Sodium Hydroxide, Aliphatic Petroleum<br>Distillates<br>Liquid Sour-Phosphoric Acid | 01 LOC. Local Limits |

| <b>Flow Rate</b> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 1,000.00 gpd  |
| 01               | Process Wastewater  | Continuous | 23,313.00 gpd |
| 01               | Other               | Continuous | 1,200.00 gpd  |
| 01               | Boiler Blowdown     | Continuous | 25.00 gpd     |

Process Description

Processes consist of laundry sorting by classification (sterile v/s non sterile), washing & rinsing with de-ionized water (each batch of 315 lbs) runs for sixty (60) minutes, dried (each load takes 39 minutes), folded and packed. All process is conducted in control climate and heat is recovered from the wastewater generated, before discharging it into the sewer system. Wastewater from washers (at 140 °F) is collected in a pit, allowed to settle and is pumped to sewer system through a heat exchanger and sampling location sump. Wastewater generated from Reverse Osmosis system, boiler blow down and deionized water system is discharged in to the sewer system without any pretreatment.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>   |         |          |
|---------------|------------------------------------------|----------------------|---------|----------|
| 96010         | Cintas Corporation - Livonia             | 37005 Industrial Dr. | Livonia | MI 48150 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00696010IU1    |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Sanitary Wastewater | Continuous | 190.00   | gpd |
| 01               | Process Wastewater  | Continuous | 9,600.00 | gpd |

Process Description

Floor mats are washed, rinsed, dried, sorted and shipped out to customers.

The process wastewater generated from the washing operations is transferred to the holding pit, where solids are allowed to settle down. Then it is pumped and discharged into the city sewer system via sampling location.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 27186         | Cintas Corporation - Macomb Township     | 51518 Quadrate Drive<br>Macomb MI 48042 |

| <u>Permits</u> | <u>Raw Materials</u>                                  | <u>Limits</u>        |
|----------------|-------------------------------------------------------|----------------------|
| 00127186IU2    | soiled Floor mats, shop towels,<br>garments and apron | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 2,620.00 gpd  |
| 01               | Process Wastewater  | Continuous | 72,554.00 gpd |

Process Description

Floor mats, shop towels, shop towels and linen products are washed, rinsed, dried sorted and shipped out to customers. In addition, the facility's trucks are washed on-site and also provides carpet cleaning services at the customer sites.

The process wastewater generated from truck washing operation passes through an oil/water separator prior to mixing with the laundry wash in the pit. The wastewater from carpet cleaning is discharged in the wastewater pit on as needed basis. Then the wastewater from the pit is further pretreated (screening/filtration and settling) prior to discharge into the City sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                  |
|---------------|------------------------------------------|-----------------------------------------------------|
| 27612         | Cintas Corporation - Madison Heights     | 31850 Sherman Drive<br>Madison Heights MI 480711428 |

| <u>Permits</u> | <u>Raw Materials</u>                              | <u>Limits</u>        |
|----------------|---------------------------------------------------|----------------------|
| 009007         | soiled uniforms, floor mats, towels from customer | 01 LOC. Local Limits |

| <u>Flow Rate</u>                               |
|------------------------------------------------|
| 01 Process Wastewater Continuous 49,125.00 gpd |

Process Description

It's process involves machine washing of uniforms, floor mats and towels. The waste wash water is treated through a series of settling pits and a screening system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>      |                 |                 |
|---------------|------------------------------------------|-------------------------|-----------------|-----------------|
| <b>27522</b>  | <b>Cintas Corporation - Westland</b>     | <b>39145 Webb Drive</b> | <b>Westland</b> | <b>MI 48185</b> |

| <u>Permits</u> | <u>Raw Materials</u>                                                                                                                                                | <u>Limits</u>        |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 00627522IU     | Laundry soaps- Eclipse, Horizon, Express, Pinnacle Antichlor, Pinnacle Sour, Accentuate Sodium Hypochlorite (Bleach) uniforms, shop towels, mats and linen received | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 3,000.00  | gpd |
| 01               | Process Wastewater  | Continuous | 61,524.00 | gpd |
| 01               | Boiler Blowdown     | Continuous | 25.00     | gpd |

Process Description

Laundry and other items (mats/rugs/mops etc) for washing are picked up from customers and brought back to the facility, washed, dried, sorted, packaged and returned to the customers. The process consists of the following:

1. Laundry sorting - Uniforms, mats, shop towels, and linen are sorted as per classification and color.
2. Batch Washing - Each batch of 400 lbs runs for 40 minutes. Facility has 11 washers - nine (9) washers with 400 lbs capacity, one (1) washer with 75 lbs capacity and one (1) washer with 140 lbs capacity.
3. Drying - Each load takes 15 minutes to dry.
4. Inspection and sorting - Dried items are inspected, sorted, and packaged for delivery.

The company uses industrial laundry detergents, industrial laundry alkali, bleach, starch (for executive pressed shirts), souring products and base oil (solvent) to wash the products. The wastewater generated from washing is passed through a heat reclaimer to heat incoming water and then it is pretreated through a series of settling pits for oil separation and sedimentation, and discharged into the sewer system through the sampling location.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |         |          |
|---------------|------------------------------------------|---------------------|---------|----------|
| 27487         | City of Livonia - Type III Landfill      | 32500 Glendale Road | Livonia | MI 48150 |

| <u>Permits</u> | <u>Raw Materials</u>              | <u>Limits</u>        |
|----------------|-----------------------------------|----------------------|
| 70627487IU2    | Construction or demolition debris | 01 LOC. Local Limits |

| <u>Flow Rate</u> |            |           |     |
|------------------|------------|-----------|-----|
| 01 Other         | Continuous | 16,000.00 | gpd |

Process Description

The process involves the collection of leachate generated from the landfill operation. The leachate is pumped and discharged into the city sewer system. The leachate is monitored at sampling location #1(SL#1).

The waste material collected from the street sweeping and catch basin cleaning is dumped into a transfer building for dewatering. The wastewater generated will be hauled off-site to a wastewater treatment facility.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                   |
|---------------|------------------------------------------|--------------------------------------|
| 93175         | City of Pontiac                          | 575 Collier Road<br>Pontiac MI 48340 |

| <u>Permits</u> | <u>Raw Materials</u>      | <u>Limits</u>        |
|----------------|---------------------------|----------------------|
| 70793175IU     | Landfill wates - Leachate | 01 LOC. Local Limits |

| <u>Flow Rate</u>                               |
|------------------------------------------------|
| 01 Process Wastewater Continuous 97,000.00 gpd |

Process Description

The landfill has commercial, industrial and household refuses deposited in the ground. A soil bentonite slurry wall keyed into the underlying natural clay layer surrounds the solid waste disposal area. The landfill leachate collects at the eastern side of the property by means of the gradient slopping towards East and the pipelines distributed along the collection points throughout the landfill bottom. It flows through a manhole (sampling point) and a leachate metering point before it goes to the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                       |
|---------------|------------------------------------------|------------------------------------------|
| 91799         | Classic Container Corporation dba Prat   | 32432 Capitol Street<br>Livonia MI 48150 |

| <u>Permits</u> | <u>Raw Materials</u>         | <u>Limits</u>        |
|----------------|------------------------------|----------------------|
| 006183         | corrugated cardboards sheets | 01 LOC. Local Limits |

| <u>Flow Rate</u>                              |
|-----------------------------------------------|
| 01 Process Wastewater Continuous 1,019.00 gpd |

Process Description

The facility converts corrugated cardboards sheets into boxes using flexographic presses. The raw corrugated stock is put through the presses, labeled and glued with waterborne inks and adhesives, cuts, folded and glued. The finished cardboard boxes are then shipped to customers.

Process wastewater is generated from the washing of flexographic presses (daily) and is collected in the pit where solids, if any, are allowed to settle. Wastewater free of solids is pumped into the sewer system through sampling box.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>    |         |          |
|---------------|------------------------------------------|-----------------------|---------|----------|
| 96945         | Great Lakes Coca-Cola Distribution LLC   | 5981 W. Warren Avenue | Detroit | MI 48210 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 004015         | Concentrated flavors | 01 LOC. Local Limits |
|                | Sugar                |                      |
|                | Washing Soap         |                      |
|                | Carbon dioxide       |                      |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Process Wastewater        | Continuous | 164,556.00 | gpd |
| 01               | Sanitary Wastewater       | Continuous | 3,040.00   | gpd |
| 01               | Non-contact Cooling Water | Continuous | 5,500.00   | gpd |

Process Description

The process involves treatment of fresh city water (through ultra-filtration, carbon adsorption, UV treatment/ filtration, reverse osmosis and second UV treatment), mixing of treated water with concentrated flavors to make syrups and mixing of syrups again with treated water and carbon dioxide to produce carbonated beverages.

In mineral water (Dasani) production process, the city water is treated through chlorination, ultra-filtration, carbon adsorption, reverse osmosis (RO) and UV treatment/filtration. It is then bottled after addition of minerals to produce bottled water.

The wastewater is generated from floor cleaning, equipment washing and rinsing, and reverse osmosis reject water from water treatment processes. Wastewater is discharged into the city sewer without pretreatment. Truck washing wastewater is discharged into sewer on Wesson Avenue and does not pass through sampling location.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>   |                                 |
|---------------|------------------------------------------|----------------------|---------------------------------|
| <b>27739</b>  | <b>Color Coat Plating Company</b>        | <b>355 W. Girard</b> | <b>Madison Heights MI 48071</b> |

| <u>Permits</u> | <u>Raw Materials</u>    | <u>Limits</u>                       |
|----------------|-------------------------|-------------------------------------|
| 159-27739-IU   | metal parts             | 01 LOC. Local Limits                |
|                | Alkaline cleaners, acid | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |       |            |
|------------------|--------------------|-------|------------|
| 01               | Process Wastewater | Batch | 400.00 gpd |

Process Description

Metal Finishing operations are in four different process lines, as described below:

- a) Anodizing Line: Aluminum parts undergo the following steps:
  1. Alkaline Cleaning: Parts are cleaned in alkaline cleaner
  2. Rinsing: Parts are still rinsed using city water
  3. Etching: Parts are etched with NaOH
  4. Still rinsing
  5. Acid Dipping: Parts are dipped in 15% Nitric Acid
  6. Still rinsing
  7. Anodizing: Parts are anodized with 15% Sulfuric Acid
  8. Still rinsing
  9. Dyeing: Parts are dyed with black dye or various auxiliary organic colors
  10. Still rinsing
  11. Sealing: Parts are sealed using 1.5% Nickel acetate solution (color or black)
  12. Still rinsing
  13. Clear sealing: Parts are sealed with water
- b) Black oxidizing: Steel parts undergo the following steps:
  1. Alkaline cleaning: Parts are cleaned in alkaline cleaner
  2. Rinsing: Parts are still rinsed using city water
  3. Acid cleaning: If required, some parts are cleaned in 15% Hydrochloric Acid
  4. Still rinsing
  5. Black oxidizing: Parts are immersed in black oxide solution
  6. Still rinsing
  7. Oil Dipping: Parts are dipped in rust preventive oil
- c) Nickel and Zinc Plating Lines: Steel parts undergo the following steps:
  1. Alkaline cleaning: Parts are cleaned in alkaline cleaner
  2. Still rinsing
  3. Etching: Parts are etched in alkaline solution
  4. Still rinsing
  5. Acid cleaning: Parts are cleaned in 15% Hydrochloric Acid
  6. Still rinsing
  7. Plating: Some parts are electroless nickel plated and others are zinc plated
  8. Still rinsing
  9. Chromating: Zinc plated parts are coated with 1% chromate solution (gold or blue)
  10. Still rinsing

## PERMIT DEFINITION (con't)

All rinses are for batch treatment. The rinse water is pH adjusted, and allowed to settle out, solids which are then sent through a filter press to produce cakes for eventual disposal.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>             |             |                 |
|---------------|------------------------------------------|--------------------------------|-------------|-----------------|
| <b>27547</b>  | <b>Controlled Power Company</b>          | <b>1955 Stephenson Highway</b> | <b>Troy</b> | <b>MI 48083</b> |

| <u>Permits</u> | <u>Raw Materials</u>                                                 | <u>Limits</u>        |
|----------------|----------------------------------------------------------------------|----------------------|
| 157014         | steel and electrical parts,<br>Zinc & Iron phosphate, Alkali, Copper | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                    |       |            |
|------------------|--------------------|-------|------------|
| 01               | Process Wastewater | Batch | 551.00 gpd |

Process Description

Principal raw material used for manufacturing is sheet steel. The manufacturing process includes metal fabrication, electrical assembly, transformer building and powder coat painting. Prior to powder coating, the parts are pretreated by soak cleaning in an alkaline cleaner (CPC-122 SOAK) and coated by a bonding agent. The coating material is a ceramic composite (ECO-QUEST BS-1400). The soak cleaning operation has two rinsing stages whereas the coating operation has no associated rinse. The rinse wastewater collects in the 8000 gallon pit under the tanks for pH adjustment which is then pumped out in batches into the sewer.

Note: The facility has no discharge of wastewater into the sewer from the SOAK CLEANER TANK and NON PHOS BONDING TANK. Any spent waste generated from these tanks will be manifested out for off-site disposal.

Principal raw material used for manufacturing is sheet steel. The manufacturing process includes metal fabrication, electrical assembly, transformer building and powder coat painting. Prior to powder coating, the parts are pretreated by soak cleaning in an alkaline cleaner (CPC-122 SOAK) and coated by a bonding agent. The coating material is a ceramic composite (ECO-QUEST BS-1400). The soak cleaning operation has two rinsing stages whereas the coating operation has no associated rinse. The rinse wastewater collects in the 8000 gallon pit under the tanks for pH adjustment which is then pumped out in batches into the sewer.

Note: The facility has no discharge of wastewater into the sewer from the SOAK CLEANER TANK and NON PHOS BONDING TANK. Any spent waste generated from these tanks will be manifested out for off-site disposal.

The principal raw material used in the manufacturing is sheet steel. The facility manufactures electrical conversion systems such as power supplies, rectifiers, emergency lightings and uninterruptible power systems. The process includes metal fabrication, electrical assembly, transformer building and Dip room powder coat painting. In Dip Room, the parts are soak cleaned in alkali, rinsed and dipped (1-3 min) in a non-phosphate, biodegradable bonding chemical, ECO - Quest BS - 1400 (ceramic composite, pH = 9.9). The soak clean and dip coat operations are heated processes maintained at about 115 and 145 degrees F respectively. There is no post rinsing process after the coating stage, and the parts are air dried and powder coated directly after the dip coat process. The facility does not sewer discharge from the dip coat process. The soak clean operation has a two-stage countercurrent rinsing. The stage one rinse tank into the facility's 8,000 gallon discharge pit, pH adjusted and pumped out into the sewer. The soak clean tank gets pH adjusted and dumped into the discharge pit once every 3 months.

The facility switched to the new Dip Room process on March 26, 2012. The facility's non-phosphate bonding treatment is a new process and it has replaced the facility's previous iron phosphate operation (Metal Finishing 40 CFR Part 433.17). The facility's new process requirements are not consistent with the metal finishing requirement of coating as specified by 40 CFR Part 433. In the new coating process, the facility does not discharge wastewater from the pre-coat tank. Any spent wastes generated from this process will be manifested out for off-site disposal.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                |
|---------------|------------------------------------------|---------------------------------------------------|
| 27471         | Country Fresh LLC                        | 31770 Enterprise Drive<br>Livonia<br>MI 481501959 |

| <u>Permits</u> | <u>Raw Materials</u>       | <u>Limits</u>        |
|----------------|----------------------------|----------------------|
| 006030         | Milk<br>fruit concentrates | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Sanitary Wastewater       | Continuous | 3,253.00   | gpd |
| 01               | Process Wastewater        | Continuous | 126,836.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 649.00     | gpd |
| 01               | Boiler Blowdown           | Continuous | 15.00      | gpd |

Process Description

Operations are as follows:

1. Raw milk is brought to facility and is pasteurized by temperature control, and formulated as products such as skim milk, 2% milk and butter milk. Ice cream is produced from the mixture of milk, cream, sugar, and other ingredients.
2. Fruit juices are produced from concentrates diluted with water.

Process wastewater generated from the cleaning of equipments, floors and trucks is discharged directly into city sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                 |
|---------------|------------------------------------------|----------------------------------------------------|
| 27548         | Crittenton Hospital Medical Center       | 1101 W. University Drive<br>Rochester MI 483074351 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                |
|----------------|----------------------|----------------------------------------------|
| 00727548IU     | Patients Care        | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 15,000.00 | gpd |
| 01               | Process Wastewater  | Continuous | 22,417.00 | gpd |
| 02               | Sanitary Wastewater | Continuous | 15,000.00 | gpd |
| 02               | Process Wastewater  | Continuous | 22,417.00 | gpd |

Process Description

The processes generating wastewater at the facility are: (a) Kitchen/Cafeteria, (b) Laboratories (Micro, Toxicology, Pathology and Histology), (c) Morgue, (d) Physical Therapy and (f) Patient Care/Housekeeping. Waste formalin is collected in 5-gallon containers, neutralized and disposed of into the sewer (approximately 15 gallons/week). Wastewater generated from the kitchen is sewer discharged through the grease trap. Used frying oil is collected and hauled off-site for recycling.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u>              | <u>Significant Industrial User (SIU)</u>    | <u>SIU Address</u>            |                 |                 |
|----------------------------|---------------------------------------------|-------------------------------|-----------------|-----------------|
| <b>94561</b>               | <b>Cross Chemical Co.</b>                   | <b>1210 Manufacturers Dr.</b> | <b>Westland</b> | <b>MI 48186</b> |
| <u>Permits</u>             | <u>Raw Materials</u>                        | <u>Limits</u>                 |                 |                 |
| 00694561IU2                | Surfactant, vegetable oils                  | 01 LOC. Local Limits          |                 |                 |
|                            | Petroleum Oils, oxidized polyethylene waxes |                               |                 |                 |
| <u>Flow Rate</u>           |                                             |                               |                 |                 |
| 01 Process Wastewater      | Batch                                       | gpd                           |                 |                 |
| <u>Process Description</u> |                                             |                               |                 |                 |

The process involves mixing oil and wax, transferring the mixture to blending tanks, heating, adding hot water and different additives in proportions based on product specification. The contents are blended in the blending tanks to produce final products. Examples of additives used are non-ionic surfactants, corrosion inhibitors, and various intermediate emulsions. The facility has about 20-30 blending tanks of different sizes. The blending tanks get washed and rinsed thoroughly before starting to manufacture different specifications products. Due to the slippery nature of raw materials and manufactured products, floors get washed almost daily as safety measures. The process wastewater is generated from washing and rinsing of blending tanks and floors.

Via floor drains, the process wastewater is collected in a common sump to be pumped later through two consecutive filters to a 6,500-gallon holding tank, where it is discharged to the sewer on batch basis. Each filter is 250-micron nylon mesh. The main pollutant of concern is Total suspended solids (TSS).

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |         |          |
|---------------|------------------------------------------|--------------------|---------|----------|
| 27331         | Curtis Industrial Services, Inc.         | 9797 Erwin Ave     | Detroit | MI 48213 |

| <u>Permits</u> | <u>Raw Materials</u>                    | <u>Limits</u>        |
|----------------|-----------------------------------------|----------------------|
| 003-27331-IU   | Small auto parts such as nuts and bolts | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                    |       |
|------------------|--------------------|-------|
| 01               | Process Wastewater | Batch |
|                  |                    | gpd   |

Process Description

The facility performs two different kinds of operations as follows:

1. Paint stripping:

a. Paint stripping using high temperature ovens: Undesired paint in racks and other metal objects is removed by first placing the painted objects in high temperature oven to burn off the paint. The objects are then removed to be power washed manually to remove ashes and paint residues. Majority of objects are power washed after removing from oven, but not all. The process wastewater generated from the power washing is sent to a holding pit and then pumped to a batch tank for treatment.

b. Chemical paint stripping: This process is used to remove paint from vent and register covers as these parts cannot withstand the high heat of the burn off process. This process involves placing the covers into the hot strip tank containing P3 Hot Stripper and P3 Hot Stripper Additive or similar product that is required to remove paint from parts. The parts are then rinsed and power washed to remove loose paint particles and residual chemicals. The chemical paint stripping process is used about six (6) times per year with a water usage of about eight (8) gallons of water on days this process is used. Wastewater generated from this process is held in the holding pit until it is transferred to the batch treatment tank.

2. Vinyl cover washing: Soiled plastic totes and vinyl covers are manually washed with water and detergent. Examples of covers washed are engine covers, steering covers, and motor home chassis covers. The generated process wastewater is accumulated in small pails that are hand-carried to the same batch tank stated in (One) above. The content of the batch tank is therefore composed of process wastewater generated from operations One (1) and Two (2).

The content of the batch tank is pretreated by adjusting pH and adding polymer for flocculation. The contents then are allowed to settle. The clear water is discharged via sampling location on batch basis, and the sludge is hauled offsite. The facility generates about 200 gallons of sludge per year average; the sludge is hauled by Birks Works and disposed off by Envirosolids.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>     |                         |                 |
|---------------|------------------------------------------|------------------------|-------------------------|-----------------|
| <b>27240</b>  | <b>Curtis Metal Finishing Company</b>    | <b>6645 Sims Drive</b> | <b>Sterling Heights</b> | <b>MI 48313</b> |

| <u>Permits</u> | <u>Raw Materials</u>                             | <u>Limits</u>                       |
|----------------|--------------------------------------------------|-------------------------------------|
| 15127240IU3    | alkaline cleaners, solvents, phosphates          | 01 LOC. Local Limits                |
|                | fasteners (bolts and nuts) and stampings, acids, | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |                |
|------------------|---------------------|------------|----------------|
| 01               | Sanitary Wastewater | Batch      | 1,950.00 gpd   |
| 01               | Process Wastewater  | Continuous | 245,204.00 gpd |

Process Description

Steel fasteners are alkaline cleaned, rinsed, acid pickled with sulfuric acid and zinc phosphated. Some parts are oiled and others are sealed with chrome free sealer, painted and cured. The painting is done either by dip spinning or by anodic electro-deposition. The process wastewater is generated from the rinsing operations, spent alkaline/acid cleaners and sludge thickening and dewatering.

The pretreatment system consists of pH adjustment, flocculation, sedimentation, sludge thickening and dewatering.

Steel fasteners are alkaline cleaned, rinsed, acid pickled with sulfuric acid and zinc phosphated. Some parts are oiled and others are sealed with chrome free sealer, painted and cured. The painting is done either by dip spinning or by anodic electro-deposition. The process wastewater is generated from the rinsing operations, spent alkaline/acid cleaners and sludge thickening and dewatering.

The pretreatment system consists of pH adjustment, flocculation, sedimentation, sludge thickening and dewatering.



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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                             |
|---------------|------------------------------------------|------------------------------------------------|
| <b>27694</b>  | <b>Cygnnet Automated Cleaning, L.L.C</b> | <b>45889 Mast Street<br/>Plymouth MI 48170</b> |

| <u>Permits</u> | <u>Raw Materials</u>                                                            | <u>Limits</u>        |
|----------------|---------------------------------------------------------------------------------|----------------------|
| 00627694IU2    | Used paint containers, alkaline detergents,<br>Organic cleaning solvents, soaps | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |              |
|------------------|---------------------|------------|--------------|
| 01               | Sanitary Wastewater | Continuous | 600.00 gpd   |
| 01               | Process Wastewater  | Continuous | 7,633.00 gpd |

Process Description

The incoming empty containers (totes) of paint are brought and cleaned of residual paint. The waste paint is collected in containers, labeled and hauled away. The totes are then thoroughly cleaned with alkaline detergents, organic solvents and soap, rinsed with water, air-dried and are then returned to the paint company for reuse. The process wastewater generated is collected in a tank, passed through a 200 micron bag filter and discharged into the city sewer through the sampling box.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>           |
|---------------|------------------------------------------|------------------------------|
| 27466         | DCI Aerotech                             | 7501 Lyndon Detroit MI 48238 |

| <u>Permits</u> | <u>Raw Materials</u>                    | <u>Limits</u>                                               |
|----------------|-----------------------------------------|-------------------------------------------------------------|
| 00527466IU2    | CN, , caustic solution, Hcl, Zn,Ni, Cu, | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                          |              |
|------------------|--------------------------|--------------|
| 01               | Process Wastewater Batch | 6,840.00 gpd |

Process Description

Initially, incoming parts are cleaned with sandblasting, then either undergo through Cyanide bath processing line to be cleaned with caustic solutions, followed with copper and zinc plating and rinsing; or undergo through acid processing line to be cleaned with caustic solutions, etched with hydrochloric acid (HCL), then followed with nickel plating and final rinsing.

Wastewater is generated from rinsing operations in the process lines and is collected into sumps and batch treated on-site. The pretreatments include pH adjustment, cyanide destruction, metal precipitation, clarification, filtration, and sludge thickening. The treated water is sand filtered prior into sampling box to be discharged into public sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>               |
|---------------|------------------------------------------|----------------------------------|
| 96030         | DNR Parts Cleaning                       | 45759 Helm St. Plymouth MI 48170 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15696030IU1    |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |                       |
|------------------|--------------------|-----------------------|
| 01               | Process Wastewater | Continuous 724.00 gpd |
| 01               | Other              | Continuous 30.00 gpd  |

Process Description

The process consists of aqueous washing, cleaning and finishing of metal parts. Aqueous washing uses alkaline cleaner. For cleaning and finishing, the facility uses different acid formulations. And the processes include stripping of copper from stainless steel, aluminum etching and brass brightening. The facility also does washing and rust inhibiting of steel parts in a belt washer. Wastewater is generated from all processes including associated rinses. Wastewater pretreatment includes equalization, neutralization, coagulation, clarification, sludge thickening and filtration.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| 27353         | Dana Container, Inc. Tank Cleaning Div   | 1551 Caniff Street<br>Detroit<br>MI 48211 |

| <u>Permits</u> | <u>Raw Materials</u>                                | <u>Limits</u>                                                                                        |
|----------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 56327353IU     | Soap and detergent for cleaning<br>totes/containers | 01 LOC. Local Limits<br>01 442.A.15a (PSES) Transportation<br>Equipment Cleaning<br>01 PHEN. Phenols |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 13,500.00 gpd |

Process Description

The incoming empty tank trailers are cleaned (inside and outside) of residual chemical products from the chemical manufacturers. Alkaline detergents and organic solvents are the preferred cleaning agents used. The resulting process wastewater is pretreated by physical separation of precipitation, clarification and filtration. Further pretreatment is by pH adjustment. The pretreated process wastewater is discharged into the sewer system and the sludge is hauled off-site to a certified landfill by a licensed hauler.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                   |
|---------------|------------------------------------------|--------------------------------------|
| 27351         | Dana Containers Inc.                     | 11430 Russell<br>Detroit<br>MI 48211 |

| <u>Permits</u> | <u>Raw Materials</u>                      | <u>Limits</u>                            |
|----------------|-------------------------------------------|------------------------------------------|
| 00327351IU2    | Caustics and soap used for cleaning totes | 01 LOC. Local Limits<br>01 PHEN. Phenols |

| <u>Flow Rate</u> |                     |                    |
|------------------|---------------------|--------------------|
| 01               | Sanitary Wastewater | Continuous gpd     |
| 01               | Process Wastewater  | Batch 2,000.00 gpd |

Process Description

The incoming containers (totes) are cleaned of residual paint. The waste paint is labeled, and hauled away. The totes are thoroughly cleaned with caustics and soap, rinsed, air-dried and ready for reuse. The facility pre-treats the process (rinse) wastewater by settling, filtering and pH adjustment.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                 |
|---------------|------------------------------------------|------------------------------------|
| 94080         | Daniels Sharpsmart, Inc.                 | 5770 Hix Road<br>Westland MI 48185 |

| <u>Permits</u> | <u>Raw Materials</u>                                            | <u>Limits</u>        |
|----------------|-----------------------------------------------------------------|----------------------|
| 00694080IU2    | Oils, Detergents,<br>smartguard (Non stick coating<br>chemical) | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Process Wastewater  | Continuous | 3,600.00 | gpd |
| 01               | Sanitary Wastewater | Continuous | 420.00   | gpd |

Process Description

Containers containing sharp infectious waste material are brought in from clinics and hospitals in 2, 4 and 8 gallon containers. The containers are emptied, and then thoroughly cleaned and sanitized in a 6-step continuous washer; high pressure rinse, pre-wash, high temperature wash of 180 0F, detergent bath, hot water rinse, and the last step is coating the empty containers from the inside with a layer of smartguard, a non-stick coating chemical. The empty, clean containers are then sent back to the clinics and hospitals to be reused. The process wastewater generated from the washer is discharged to the city sewer without pretreatment.

OS - author

# Facility Name: Detroit Water & Sewerage

# NPDES Permit #: MI 0022802

| SIU ID | Significant Industrial User (SIU) | SIU Address     |            |              |
|--------|-----------------------------------|-----------------|------------|--------------|
| 27364  | Darling Ingredients, Inc.         | 3350 Greenfield | Melvindale | MI 481222615 |

| Permits    | Raw Materials                                                                               | Limits               |
|------------|---------------------------------------------------------------------------------------------|----------------------|
| 00427364IU | Slaughterhouse waste: bones, scrap, offal<br>Restaurant waste: used cooking oil/trap grease | 01 LOC. Local Limits |

| Flow Rate |                               |            |           |     |
|-----------|-------------------------------|------------|-----------|-----|
| 01        | Sanitary Wastewater           | Continuous | 720.00    | gpd |
| 01        | Process Wastewater            | Continuous | 23,200.00 | gpd |
| 01        | Non-contact Cooling Water     | Continuous | 1,920.00  | gpd |
| 01        | Other                         | Continuous | 424.00    | gpd |
| 01        | Boiler Blowdown               | Continuous | 250.00    | gpd |
| 01        | Air Pollution Control Wastew. | Continuous | 5,600.00  | gpd |
| 01        | Stormwater/Rain               | Continuous | 20.00     | gpd |

## Process Description

The process consists of rendering of used restaurant cooking oil and trap grease to make yellow grease (feed fat). The used cooking oil and spent grease are delivered to the facility, filtered to remove coarse solids, heated in the cooker to remove water and then filtered again to remove fine solids to produce the yellow grease. It is further blended with antioxidant and stabilizers and shipped to farms as stabilized animal fat.

The process wastewater generating operations are rendering of used cooking oil and spent/trap grease, floor washing and truck cleaning. Plant wastewater is treated by passing through a rotary drum screen for the removal of solids, and then through a skimmer for the removal of fat, oil /grease. The pH of the wastewater is adjusted automatically immediately after the rotary drum and also at the grease trap prior to the discharge into the sanitary sewer system. The truck cleaning wastewater is discharged into the sanitary sewer without pretreatment.

The facility processes used restaurant cooking oil and trap grease to make yellow grease (feed fat). The used cooking oil and spent grease are delivered to the facility, filtered to remove coarse solids, heated in the cooker to remove water and then filtered again to remove fine solids to produce the yellow grease. It is further blended with antioxidant and stabilizers and shipped to farms as stabilized animal fat.

The process wastewater generating operations are processing of used cooking oil and spent/trap grease, floor washing and equipment washing. Plant wastewater is treated by passing through a rotary drum screen for the removal of solids, and then through a skimmer for the removal of fat, oil /grease. The pH of the wastewater is adjusted automatically at sump #1 and #3 prior to the discharge into the sanitary sewer system. The truck cleaning wastewater is discharged into the sanitary sewer without pretreatment.

The facility processes used restaurant cooking oil and trap grease to make yellow grease (feed fat). The used cooking oil and spent grease are delivered to the facility, filtered to remove coarse solids, heated in the cooker to remove water and then filtered again to remove fine solids to produce the yellow grease. It is further blended with antioxidant and stabilizers and shipped to farms as stabilized animal fat.

The process wastewater generating operations are processing of used cooking oil and spent/trap grease, floor washing and equipment washing. Plant wastewater is treated by passing through a rotary drum screen for the removal of solids, and then through a skimmer for the removal of fat, oil /grease. The pH of the wastewater is adjusted automatically at sump #1 and #3 prior to the discharge into the sanitary sewer system. The truck cleaning wastewater is discharged into the sanitary sewer without pretreatment.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                    |
|---------------|------------------------------------------|---------------------------------------|
| <b>85657</b>  | <b>Dearborn Sausage Co., Inc.</b>        | <b>2471 Wyoming Dearborn MI 48120</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00485657IU3    | Spices               | 01 LOC. Local Limits |

Washing Soap

Raw Beef/Pork/Poultry meat

Flow Rate

|    |                     |            |               |
|----|---------------------|------------|---------------|
| 01 | Sanitary Wastewater | Continuous | 3,900.00 gpd  |
| 01 | Process Wastewater  | Continuous | 51,600.00 gpd |

Process Description

The beef, pork and poultry meat are first blended, seasoned and then smoked. The products are then packaged and stored in cooler until shipped. The wastewater is generated from equipment washing, building floors washing, NW yard garbage storage area floor washing & storm water and in-house laundry operations.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>           |
|---------------|------------------------------------------|------------------------------|
| 27558         | Depor Industries, Inc.                   | 1902 Northwood Troy MI 48084 |

| <u>Permits</u> | <u>Raw Materials</u>                             | <u>Limits</u>                                               |
|----------------|--------------------------------------------------|-------------------------------------------------------------|
| 157-27558-IU   | Zinc phosphate, Liquid sealing, polymer & paints | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 20,200.00 gpd |

Process Description

The process operations include degreasing, de-scaling, zinc phosphate coating, liquid sealing and painting. Parts are rinsed after the processes of degreasing, de-scaling and phosphate coating. The coated parts are then painted by dip/spin process. The wastewater from the process undergoes pH adjustment, flocculation, and clarification. The overflow from the clarifier is sand filtered prior to discharging into the sewer. The clarifier sludge is thickened and filtered. Filter cakes are shipped off-site for disposal while the filtrate being sent back to the treatment system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>               |
|---------------|------------------------------------------|----------------------------------|
| 27434         | Detroit Chrome Electro Forming Co.       | 7515 Lyndon Detroit MI 482382406 |

| <u>Permits</u> | <u>Raw Materials</u>                                                                   | <u>Limits</u>                                                                                                            |
|----------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 02527434IU4    | Chromic acid, Sodium bisulphite, acetone, Customer Metal Parts Alkaline solution, Acid | 04 LOC. Local Limits<br>04 413.H.84f (PSES) Electroplating <10,000 gpd<br>04 413.A.14b (PSES) Electroplating <10,000 gpd |

| <u>Flow Rate</u>                         |
|------------------------------------------|
| 04 Process Wastewater Batch 4,200.00 gpd |

Process Description

The process consists of cleaning with acetone, sandblasting, etching using chromic acid and reverse etching followed by chrome plating and rinsing. The wastewater is generated from rinsing of parts at various stages of the process. The wastewater is collected in a holding tank and then transferred to the treatment tank where it undergoes pH adjustment, chrome reduction by sodium bisulphite, flocculation and filtration. The overflow is discharged into the public sewer. The treatment and the sampling tanks are located in the treatment area of DCI Aerotech building 7501 Lyndon, Detroit.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                           |
|---------------|------------------------------------------|----------------------------------------------|
| 27435         | Detroit Diesel Corporation               | 13400 W. Outer Drive<br>Detroit MI 482391309 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                            |
|----------------|----------------------|------------------------------------------|
| 005-27435-IU   | Diesel Engine parts  | 01 LOC. Local Limits<br>01 PHEN. Phenols |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 61,000.00 gpd |

Process Description

The operations consist of designing, testing, manufacturing heavy and medium duty diesel engines, transmissions, truck axles and gear sets, and other truck components. The process includes machining, grinding, hot water rinse, cold water rinse, and rust preventive dip in oil, painting, and assembling of parts followed by assembling and testing of engines. Process wastewater is generated from rinsing, cleaning of process areas and testing operation. Wastewater is also generated from boiler blow-down and non-contact cooling water resulting from the water usages by the heat exchanger and air conditioning systems. The facility's pretreatment operations consist of oil-water separation, emulsion breaking, coagulation and flocculation. Waste oil recovered is hauled off-site for treatment/disposal. The treated wastewater, free of oil, is discharged into the public sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>     | <u>SIU Address</u>   |                |                 |
|---------------|----------------------------------------------|----------------------|----------------|-----------------|
| <b>27360</b>  | <b>Detroit Edison Company - Warren Servi</b> | <b>6200 W.Warren</b> | <b>Detroit</b> | <b>MI 48210</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00427360IU     | Electrical parts     | 01 LOC. Local Limits |
|                | Transformers         | 02 LOC. Local Limits |
|                | Lubricating oil      |                      |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 12,960.00 | gpd |
| 01               | Process Wastewater        | Continuous | 19,000.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 500.00    | gpd |
| 01               | Stormwater/Rain           | Batch      | 15,000.00 | gpd |
| 02               | Sanitary Wastewater       | Continuous | 12,960.00 | gpd |
| 02               | Process Wastewater        | Continuous | 1,000.00  | gpd |

Process Description

The facility is engaged in general maintenance of transformers and trucks, salvaging of transformer parts, lab chemical analysis, reclamation of transformer oils, machining, welding, electrical repair work, and washing of rubber insulating and fire retardant personal protective equipment.

The facility is also engaged in the electroplating of silver on copper details for electrical equipment. The electroplating is carried out at a significantly low volume, which is infrequent and depends on job order. The facility does not discharge the process wastewater generated from electroplating operation into the City sewer. The process wastewater generated from electroplating operation is hauled off-site under manifest.

The process wastewater is generated from (a) cutting of metal parts with a water cutting machine (b) laboratory testing using chemical (c) trucks, equipment and floor washing. The wastewater generated from cutting operation is allowed to settle in a settling tank and filtered prior to discharge to the City sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                |
|---------------|------------------------------------------|---------------------------------------------------|
| 92742         | Detroit Metropolitan Wayne County Airp   | 1 L. C. Smith Terminal - Mezzani Detroit MI 48242 |

| <u>Permits</u> | <u>Raw Materials</u>  | <u>Limits</u>        |
|----------------|-----------------------|----------------------|
| 006-92742-IU   | Air Transport Service | 01 LOC. Local Limits |

| <u>Flow Rate</u>                                |
|-------------------------------------------------|
| 01 Process Wastewater Continuous 722,353.00 gpd |

Process Description

The process includes aircraft and pavement deicing and anti-icing, aircraft fueling, and aircraft servicing (lavatory truck activity and food service). Aircraft deicing is done on the airport's four deicing pads (22L, 21R, 3L and 4R) located inside the airfield and at terminal gates and aprons. The ADFs used by DTW are of two (2) types, Type I and Type IV. The Type I is used for deicing and the Type IV for anti-icing. The Type IV is more viscous than Type I. To keep the runways and taxiways free from ice, they are usually sprayed with potassium acetate fluid to give an anti-icing coating.

Only a minimal amount of runoffs contaminated with potassium acetate is reaching the Pond 3W. Majority of those runoffs are directed toward the storm water detention basins - Pond 3E, Pond 4 and Pond 6 for direct discharge into storm sewers like all other surface discharges from the facility.

The inclement weather deicing/anti-icing operation at the airport is supported by an extensively large scale glycol recovery operation. The spent aircraft deicing fluid runoffs (SADR) from the deicing pads are captured in below ground recycling sumps. The spent aircraft deicing fluid runoff (SADR) captured in the below ground recycling sumps is then pumped into the 21,000 gallons Frac-Tanks if the glycol content is 2% and better and shipped out to EQ Resource Recovery, Inc. for recycling. The glycol content of SADR collected can be as high as 45% some cases. Glycol content in SADR is tested using a refractive index measurement technique. SADR accumulates from the deicing operation at the terminal gates and aprons is retrieved by 10,000 gallon GRVs and transported to EQ Resource Recovery, Inc. for recycling. During the deicing season of 2010-2011, DTW recycled 703,000 gallons (100%) of propylene glycol. The total volume of SADR captured during the season was 4,009,000 gallons.

The spent deicing fluid containing glycol at lower concentrations is captured and sent to the glycol runoff detention basin - Pond 3W where sedimentation takes place before pumping out to the POTWs. The pond has a capacity of 90 million gallons. The deicing pads 3L and 4R have also secondary storage ponds for the low concentrate SADR. The facility has also other storm water runoff detention basins - Pond 3E, Pond 4 and Pond 6, which have direct discharges into the storm sewers. Pond 3E discharges into Sexton-Kilfoil Drain and Pond 4 and Pond 6 into Frank & Poet Drain.

DTW operates the new Force-main Pump Station, which has four (4) pumps for servicing. They are 15 HP, 25 HP, 50 HP and 100 HP. The 50 HP pump is to be mainly used for servicing Pond 3W SADR pumping into the DWSD sewer. The maximum allowed volume of discharge into the DWSD sewer from Pond 3W by DTW is 1,000,000 GPD. The facility's average flow of SADR expected for a deicing season is approximately 750,000 GPD Average.

DTW is discharging SADR into the DWWTP only when dry weather conditions prevail. DTW will stop pumping of SADR to DWWTP when the DWWTP's PS-1 wet well level is 90', the plant influent is 930 MGD or more or when there is a storm event forecast to take place within 12 hours. The Force-main Pump Station is equipped for continuously monitoring and communicating with DWSD using its SCDA signal via internet. DTW is monitoring COD daily during the deicing season when there is SADR discharge from Pond 3W. The conversion factor of COD to BOD is 0.6, and the BOD loading in the discharges from the Pond 3W has been between 167 lbs/day and 23,000 lbs/day during the past three deicing seasons. These BOD loadings are well below the DWSD allowable maximum of 30,000 lbs/day. DTW will start discharging SADR at a steady rate of 5,000 lbs/day for acclimation of the microorganisms at the DWWTP and then gradually increases the BOD loading up to the maximum allowable limit within 14 days.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>              |
|---------------|------------------------------------------|---------------------------------|
| 96080         | Detroit Nameplate Etching Company        | 10610 Galaxie Ferndale MI 48220 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15996080IU1    | Precut sreel         | 01 LOC. Local Limits                |
|                | Etching acids        | 01 433.A.17a (PSNS) Metal Finishing |
|                | Paint thinner        |                                     |
|                | Minerial Spirits     |                                     |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 700.00   | gpd |
| 01               | Process Wastewater        | Continuous | 2,687.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 1,029.00 | gpd |

Process Description

Precut stainless steel, aluminum or brass sheets are brought to facility, cleaned using a thinner and soap, printed, engraved, etched and painted. Process wastewater is generated from all cleaning, rinse operations for etching stainless steel, brass and aluminum, degreasing screens and metals parts degreasing. During etching, aluminum parts undergo 10% HF acid cleaning followed by rinsing, etching, rinsing, 10% HF acid cleaning and rinsing stages.

The facility's wastewater pretreatment operation consists of metals precipitation, flocculation (polymer addition), settling and final pH adjustment. Spent acid from etching machines is hauled off site. Sludge is filtered in a filter press and solids hauled away.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>            |                |                 |
|---------------|------------------------------------------|-------------------------------|----------------|-----------------|
| <b>96175</b>  | <b>Detroit Receiving Hospital, Inc.</b>  | <b>4201 St. Antoine Blvd.</b> | <b>Detroit</b> | <b>MI 48211</b> |

| <u>Permits</u> | <u>Raw Materials</u>    | <u>Limits</u>        |
|----------------|-------------------------|----------------------|
| 00896175IU1    | food services           | 01 LOC. Local Limits |
|                | patient care            | 02 LOC. Local Limits |
|                | clinic laboratory waste |                      |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Sanitary Wastewater       | Continuous | 24,000.00  | gpd |
| 01               | Process Wastewater        | Continuous | 187,286.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 17,000.00  | gpd |
| 02               | Sanitary Wastewater       | Continuous | 14,000.00  | gpd |
| 02               | Process Wastewater        | Continuous | 103,000.00 | gpd |
| 02               | Non-contact Cooling Water | Continuous | 8,500.00   | gpd |

Process Description

The process consists of patient care services including clinical lab testing, radiology, physical therapy and surgical procedures. The process wastewater generating operations include clinical laboratories and kitchen/cafeteria. The facility's pretreatment system consists of grease traps.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                             |
|---------------|------------------------------------------|------------------------------------------------|
| <b>91644</b>  | <b>Detroit Thermal, L.L.C</b>            | <b>541 Madison Avenue<br/>Detroit MI 48226</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                |
|----------------|----------------------|----------------------------------------------|
| **8-91644-IU   | Softener, boilers    | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                     |                          |
|------------------|---------------------|--------------------------|
| 01               | Sanitary Wastewater | Continuous 920.00 gpd    |
| 01               | Boiler Blowdown     | Continuous 33,250.00 gpd |
| 02               | Process Wastewater  | Batch 9,750.00 gpd       |

Process Description

Fresh water is softened to the desired degree and is heated in the boilers to generate steam is sent to customers through pipe lines for their use. The facility has total five (5) boilers. Two has design capacity of 450,000 lbs/hr., two has capacity of 150,000 lbs/hr., and one has capacity of 300,000 lbs/hr.

The process wastewater generated from boiler blowdown is discharged to the city sewer system through SL # 1 continuously and softener regeneration (Water softener backwash) is discharged to the city sewer through SL # 2, batch wise.

Floor cleaning mop water is collected in a tot and hauled off by Bentley Environmental Services & Transportation to dispose at American Waste Technologies, Inc.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |                  |          |
|---------------|------------------------------------------|---------------------|------------------|----------|
| 27140         | Detronic Industries, Inc.                | 35800 Beattie Drive | Sterling Heights | MI 48312 |

| <u>Permits</u> | <u>Raw Materials</u>                             | <u>Limits</u>                       |
|----------------|--------------------------------------------------|-------------------------------------|
| 151025         | Alkaline Cleaner, Acids, Polymer                 | 01 LOC. Local Limits                |
|                | different kinds of Sheet metal, coating solution | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |           |     |
|------------------|--------------------|------------|-----------|-----|
| 01               | Process Wastewater | Batch      | 30.00     | gpd |
| 01               | Process Wastewater | Continuous | 10,970.00 | gpd |

Process Description

The facility receives different kinds of raw materials, such as aluminum, cold rolled steel, galvanized steel, and stainless steel sheets. Sheet metal (Aluminum, cold rolled steel, galvanized steel and stainless steel) undergoes sheering, laser cutting, punching, tube bending, machining, forming, welding, grinding and metal finishing (Zinc plating, Iron phosphating, Chromating) prior to powder coating or painting.

Iron Phosphating: This operation is carried out in two ways.

(a) Single stage Iron Phosphate spray booth: The wastewater (excess spray solution) from the spray booth is discharged into the City sewer system without any treatment.

(b) Three stage dip Iron Phosphate Line: The process steps are alkaline cleaning, rinsing (dead) and iron phosphating. There is no wastewater discharged into the City sewer system from this line.

Zinc Plating: The process steps are alkaline cleaning, rinsing (overflow), acid etching, rinsing (overflow), Zinc plating, rinsing (dead), Chromating/sealing, rinsing (overflow), and hot rinsing (dead). The wastewater generated from the overflow rinse operation is discharged into the City sewer system without any pretreatment. However, the wastewater generated from the dead rinse operation is collected in a lagoon and is pretreated prior to discharge into the City sewer system. Once every three weeks, the dead rinse tanks are drained into the lagoon. From the lagoon the wastewater is pumped to a 900 gallons holding tank and is pretreated in a batch prior to discharge into the City sewer system. The pretreatment includes evaporation and condensation of the dead rinse water. The sludge is manifested offsite.

Alodine Line (Chromating of Aluminum): The process steps are acid cleaning, rinsing (overflow), activation, rinsing (overflow), Chromating/sealing, rinsing (overflow). The wastewater generated from the overflow rinse operation is discharged into the City sewer system without any pretreatment

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 27585         | Difco Laboratories Inc./Becton Dickinson | 920 Henry Street<br>Detroit<br>MI 482012531 |

| <u>Permits</u> | <u>Raw Materials</u>                          | <u>Limits</u>                                |
|----------------|-----------------------------------------------|----------------------------------------------|
| 008048         | Animal and vegetable proteins, salt and sugar | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                           |                           |
|------------------|---------------------------|---------------------------|
| 01               | Sanitary Wastewater       | Continuous 1,450.00 gpd   |
| 01               | Process Wastewater        | Continuous 173,137.00 gpd |
| 01               | Non-contact Cooling Water | Continuous 2,460.00 gpd   |
| 02               | Sanitary Wastewater       | Continuous 550.00 gpd     |
| 02               | Process Wastewater        | Continuous 38,273.00 gpd  |
| 02               | Non-contact Cooling Water | Continuous 540.00 gpd     |

Process Description

Animal and vegetable proteins are ground, mixed with water, salts, sugars, reagents and allowed to break down into basic desired proteins. The concentrated and dried product is then packaged for shipment. The process wastewater generated from washing and cleaning of processing equipment and condensation from vacuum pans is discharged to the city sewer system without any pretreatment.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>           |
|---------------|------------------------------------------|------------------------------|
| 91572         | Disposal and Recycling Technologies, I   | 8647 Lyndon Detroit MI 48238 |

| <u>Permits</u> | <u>Raw Materials</u>                               | <u>Limits</u>                                                                                                                                                                              |
|----------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 91591572IU2    | Non hazardous oily wastestreams, used oil, leachat | 01 LOC. Local Limits<br>01 PHEN. Phenols<br>01 437.D.47e (PSNS) Centralized Waste Treatment<br>02 LOC. Local Limits<br>02 PHEN. Phenols<br>02 437.D.47e (PSNS) Centralized Waste Treatment |

| <u>Flow Rate</u> |                     |            |            |     |
|------------------|---------------------|------------|------------|-----|
| 01               | Sanitary Wastewater | Continuous | 220.00     | gpd |
| 01               | Process Wastewater  | Batch      | 234,000.00 | gpd |
| 02               | Sanitary Wastewater | Continuous | 300.00     | gpd |
| 02               | Process Wastewater  | Batch      | 234,000.00 | gpd |

Process Description

The facility receives two (2) different categories of wastewater:

**Oily Wastewater:** Inbound emulsified oily wastewater is pumped to Tank#4 where it is treated with sulfuric acid and polymers for phase separation and the oily phase is pumped to Tanks#1, 2 & 3 for further treatment by gravity separation. The oil phase is skimmed and transferred to oil storage tanks. Further treatment for metals removal is carried out in Tank 14 via chemical precipitation, flocculation/coagulation, filtration, carbon adsorption and pumped to storage Tank#100 before discharging to the City sewer system.

**Organic Wastewater:** The organic waste stream is pumped to one of the treatment tanks#11,12,13,15,16,&17. The treatment processes include chemical oxidation, precipitation, flocculation/coagulation, filtration, carbon adsorption and pumped to storage Tanks#101&102 before discharging to the City sewer system.

The facility also manufactures pure ethanol from off spec sugar based products by consumer product destruction, fermentation and distillation.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>   |         |              |
|---------------|------------------------------------------|----------------------|---------|--------------|
| 27438         | Diversified Chemical Technologies, Inc   | 15477 Woodrow Wilson | Detroit | MI 482381507 |

| <u>Permits</u> | <u>Raw Materials</u>                                                                                                | <u>Limits</u>        |
|----------------|---------------------------------------------------------------------------------------------------------------------|----------------------|
| 00527438IU3    | phosphoric acid, citric acid, sodium metasilicate, alcohol, water<br>alkalis, phosphates, surfactants, fatty acids, | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |        |     |
|------------------|---------------------------|------------|--------|-----|
| 01               | Sanitary Wastewater       | Continuous | 240.00 | gpd |
| 01               | Process Wastewater        | Batch      | 130.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 144.00 | gpd |

Process Description

The process consists of mixing various raw materials including alkalis, phosphates, surfactants, fatty acids, phosphoric acid, citric acid, sodium metasilicate, alcohol and water. The facility has a list of over 120 formulations or products and their mixing is done in batches in tanks varying in size from 400 to 4000 gallons. Wastewater is generated from rinsing of mixing tanks, after manufacture along with the cleaning of floors and customer-returned totes. The wastewater is collected into two sumps located in the center and pumped into the 1500-gallon equalization tank. It is then transferred to the 1200-gallon treatment tank, where a representative sample is collected for pretreatment analysis of pH and phosphate. Sufficient sulfuric acid is added to lower the pH, and alum is added to coagulate the phosphates. Caustic is then added to readjust the pH between 6 and 9. The tank is mixed thoroughly and then allowed to settle overnight. The wastewater is tested for pH and phosphate and if the criteria are met, it is then pumped through a filter press to remove solids and discharged into public sewer. The treatment plant discharges approximately 2 times per month. Non-hazardous filter cakes are collected in a roll-off box for off-site disposal.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                       |
|---------------|------------------------------------------|------------------------------------------|
| 27584         | Domestic Uniform Rental                  | 3800 18th Street<br>Detroit MI 482082511 |

| <u>Permits</u> | <u>Raw Materials</u>                                                   | <u>Limits</u>                            |
|----------------|------------------------------------------------------------------------|------------------------------------------|
| 008-27584-IU   | Uniforms, linen supplies, towels, mats and aprons<br>Laundry Detergent | 01 LOC. Local Limits<br>01 PHEN. Phenols |

| <u>Flow Rate</u> |                    |                          |
|------------------|--------------------|--------------------------|
| 01               | Process Wastewater | Continuous 35,446.00 gpd |

Process Description

Uniforms, linen supplies, towels, mats and aprons are sorted according to color, sizes and types, laundered, dried, sorted and packaged for shipping. The process wastewater is generated from washing and rinsing. All process wastewater goes to the shaker screens (filtration) to remove all lint, and then goes to a 10,000 gallon settling pit prior to discharge into the City sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                     |
|---------------|------------------------------------------|----------------------------------------|
| 27350         | Dynamic Metal Finishing                  | 5999 Bewick Street<br>Detroit MI 48213 |

| <u>Permits</u> | <u>Raw Materials</u>                  | <u>Limits</u>                                               |
|----------------|---------------------------------------|-------------------------------------------------------------|
| 15327350IU3    | Small auto parts such as nuts & bolts | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |                         |
|------------------|---------------------|-------------------------|
| 01               | Sanitary Wastewater | Continuous 40.00 gpd    |
| 01               | Process Wastewater  | Continuous 3,667.00 gpd |

Process Description

With occasional variation, processes in the plant usually follow in this sequence: (a) Parts washing with soap to remove dirt/grime, (b) Alkaline cleaning, (c) Rinse, (d) Acid cleaning, (e) Rinse, (f) Copper or nickel plating, (g) Rinse, and (h) Chrome plating. Dead rinse tanks are located between the plating bath and flowing rinse tanks.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>     |                     |                 |
|---------------|------------------------------------------|------------------------|---------------------|-----------------|
| <b>94154</b>  | <b>Dynamic Robotic Solutions Inc.</b>    | <b>1255 Harmon Rd.</b> | <b>Auburn Hills</b> | <b>MI 48326</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                |
|----------------|----------------------|----------------------------------------------|
| 00794154IU3    | Steel                | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 02               | Process Wastewater        | Continuous | 109.00   | gpd |
| 02               | Non-contact Cooling Water | Continuous | 1,245.00 | gpd |

Process Description

Facility fabricates steel structures, machine materials, paint structures, mechanically integrate systems and build epoxy fixtures. Process wastewater generated from the cutting table is allowed to settle in three in-series settling tank before discharge into the City sewer through sampling location No.1. Process wastewater is generated by high pressure water jet which is used as tool to cut wide range of materials and non-contact cooling water from high pressure is discharged in the city sewer system without any treatment through sampling location No. 2

Facility fabricates steel structures, machine materials, paint structures, mechanically integrate systems and build epoxy fixtures. Process wastewater generated from the cutting table is allowed to settle in three in-series settling tank before discharge into the City sewer through sampling location No.1. Process wastewater is generated by high pressure water jet which is used as tool to cut wide range of materials and non-contact cooling water from high pressure is discharged in the city sewer system without any treatment through sampling location No. 2

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The facility fabricates steel structures, machines material, paints structures, mechanically integrates systems and builds epoxy fixtures. The facility uses a high pressure water jet table in the fabrication area for cutting a wide range of materials such as steel, aluminum, rubber and plastic. Process wastewater generated from the water jet table is pumped into the sampling tank after filtration and settling before being discharged into the sewer. The facility generates process wastewater also from its water jet system in the Process Solution Center (R&D) and from the test cut/cleaning process in the Integration Floor which are sewer discharged through the same sampling location after filtration. Process wastewater is also generated wastewater generated from floor scrubbing is also passed through a filter prior to being sewer discharged.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |         |          |
|---------------|------------------------------------------|--------------------|---------|----------|
| 92718         | EES Coke Battery, L.L.C.                 | 1400 Zug Island    | Detroit | MI 48209 |

| <u>Permits</u> | <u>Raw Materials</u>                  | <u>Limits</u>                                                                                |
|----------------|---------------------------------------|----------------------------------------------------------------------------------------------|
| 03492718IU1    | Coal, phenols, acid, caustic, polymer | 02 LOC. Local Limits<br>02 PHEN. Phenols<br>04 420.A.15a (PSES) Iron and Steel Manufacturing |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 02               | Sanitary Wastewater       | Continuous | 3,300.00   | gpd |
| 02               | Boiler Blowdown           | Continuous | 1,500.00   | gpd |
| 02               | Stormwater/Rain           | Continuous | 8,700.00   | gpd |
| 02               | Process Wastewater        | Continuous | 264,387.00 | gpd |
| 02               | Non-contact Cooling Water | Continuous | 153,573.00 | gpd |
| 04               | Process Wastewater        | Continuous | 264,387.00 | gpd |

Process Description

The facility manufactures Coke from Coal in Coke Oven Batteries in the absence of Oxygen at high temperatures. Various by products are separated from the coke oven gases at the By-Product Plant. The wastewater generating processes are:

- a. Wet scrubbing of coke oven gases and gas condensate over coke oven batteries generates liquor to By-Product Plant,
- b. Chemical recovery from liquor and air pollution control in By-Product Plant generate process wastewater

The process wastewater is pretreated in the on-site wastewater treatment plant (WWTP), which includes the operations: neutralization, bio-treatment, chemical precipitation, DAF separation, and sludge centrifuge. Total plant discharge is metered prior to discharge to the City sewer.

08/19/2015 - Note that a copy of the Agreement to Terminate the Consent Decree is attached in the documents tab of the general info tab of PIMS (SJK-8-19-15)  
The facility manufactures Coke from Coal in Coke Oven Batteries in the absence of Oxygen at high temperatures. Various by products are separated from the coke oven gases at the By-Product Plant. The wastewater generating processes are:

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08/19/2015 - Note that a copy of the Agreement to Terminate the Consent Decree is attached in the documents tab of the general info tab of PIMS (SJK-8-19-15)



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <b>SIU ID</b> | <b>Significant Industrial User (SIU)</b> | <b>SIU Address</b>           |                |                 |
|---------------|------------------------------------------|------------------------------|----------------|-----------------|
| <b>91964</b>  | <b>EQ Detroit dba US Ecology</b>         | <b>1923 Frederick Street</b> | <b>Detroit</b> | <b>MI 48211</b> |

| <u>Permits</u> | <u>Raw Materials</u>                            | <u>Limits</u>                                     |
|----------------|-------------------------------------------------|---------------------------------------------------|
| 923-91964      | HAULED-IN WASTE: Hazardous                      | 01 LOC. Local Limits                              |
|                | HAULED-IN WASTE: Non-Hazardous                  | 01 437.D.46b.1 (PSES) Centralized Waste Treatment |
|                | Hauled in metal bearing, oily and organic waste | 01 PHEN. Phenols                                  |
|                |                                                 | 05 437.C.35 (PSES) Centralized Waste Treatment    |
|                |                                                 | 06 437.C.35 (PSES) Centralized Waste Treatment    |
|                |                                                 | 08 437.B.25 (PSES) Centralized Waste Treatment    |
|                |                                                 | 09 437.C.35 (PSES) Centralized Waste Treatment    |
|                |                                                 | 10 LOC. Local Limits                              |

| <u>Flow Rate</u> |                     |            |            |     |
|------------------|---------------------|------------|------------|-----|
| 01               | Sanitary Wastewater | Continuous | 2,000.00   | gpd |
| 01               | Process Wastewater  | Continuous | 157,459.00 | gpd |

Process Description

The facility receives wastestreams that may fall into one of three wastewater subcategories: metal-, oily-, or organic-bearing. Each wastestream is treated individually or collectively as described below.

Metal-bearing wastestreams are pretreated in the metal treatment tanks, where chemicals such ferrous salts (FeSO<sub>4</sub>, FeCl<sub>2</sub>, or FeCl<sub>3</sub>), sodium bisulfate and lime are added for pH adjustment and metal precipitation. Polymer is added for flocculation and the contents are allowed to settle (1-24 hours). After settlement, the water layer is tested before discharge to the sewer via meter #2. The sludge layer is pumped to a filter press. The dewatered solids (filter cake) are treated onsite, and the filtrate is pretreated for metals before discharge.

Oily wastestreams The facility receives two types of oily wastestreams. They are either non-emulsified or emulsified oily wastestreams and pretreated differently as follows:

a) The non-emulsified oily wastestream is stored in tanks where it is allowed to settle for further oil/water separation. Heat is sometimes applied to accelerate the separation. After separation, the oil layer or rag oil is stored for recycling purposes. The water or aqueous layer is redirected to one of the metal treatment tanks and is treated singly or in combination with other inbound metal-bearing wastestream.

b) The emulsified oil wastestream that shows no phase separation upon arrival is pretreated by heating it to aid the oil/water separation process. Reagents such as H<sub>2</sub>SO<sub>4</sub>, polymers, and NaOH may also be added to further aid in the oil/water separation. The separation process leads to three-phase separation

- i. Top layer is clean oil that is sold as finished product,
- ii. Middle layer is rag oil that is recycled, and
- iii. Bottom layer is oil-free water that is routed to one of the metal pretreatment tanks.

Organic wastestreams The facility receives either a highly impacted organic wastestream or leachate/underground wastestream. The two wastestreams are pretreated separately.

a) The highly impacted organic wastestream is pretreated by: 1) addition of FeCl<sub>3</sub> or lime to adjust the pH, 2) addition of H<sub>2</sub>O<sub>2</sub> to oxidize the organic compounds, and 3) addition of defoamer to minimize foaming during the treatment. The wastestream is allowed to stabilize for few hours prior to sampling and to ensure that the organics have been destroyed. Finally, the wastestream is redirected to one of the metal treatment tanks and is treated singly or in combination with other inbound metal-bearing wastestream.

# Facility Name: Detroit Water & Sewerage

# NPDES Permit #: MI 0022802

| SIU ID | Significant Industrial User (SIU) | SIU Address         |         |              |
|--------|-----------------------------------|---------------------|---------|--------------|
| 27517  | EQ Resource Recovery Inc.         | 36345 Van Born Road | Romulus | MI 481744057 |

| Permits     | Raw Materials                                   | Limits                                                                                                                                                                                                                                                  |
|-------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 93627517IU6 | Propylene glycol waste/off-spec organic product | 01 LOC. Local Limits<br>01 PHEN. Phenols<br>02 413.A.14g (PSES) Electroplating<br>02 SP.TTO.Purg Org Special Discharge<br>02 SP.TTO.Extract Special Discharge<br>02 SP.TTO.Pest PCB Special Discharge<br>03 437.C.35 (PSES) Centralized Waste Treatment |

| Flow Rate |                           |            |           |     |
|-----------|---------------------------|------------|-----------|-----|
| 01        | Sanitary Wastewater       | Continuous | 71.00     | gpd |
| 01        | Process Wastewater        | Continuous | 25,808.00 | gpd |
| 01        | Process Wastewater        | Continuous | 51,775.00 | gpd |
| 01        | Non-contact Cooling Water | Continuous | 2,000.00  | gpd |
| 02        | Ground Water              | Continuous | 21,711.00 | gpd |
| 03        | Process Wastewater        | Batch      | 30,064.00 | gpd |

## Process Description

EEQRR recovers spent aircraft de-icing fluid, which contains propylene glycol, utilizing filtration, chemical conditioning, evaporation, distillation, carbon filtration and reverse osmosis processes. EQRR also recovers n-methyl pyrrolidone (NMP) utilizing the same recovery systems. The wastewater from the processes is collected into the batch tanks (has two 65,000 gallon tanks), tested for propylene glycol, pH and metals to assess compliance, and then sewer discharged through sampling location SL #3.

EQRR operates an on-site contaminated groundwater remediation system as required by the Hazardous Waste Facility Operating License issued by the State of Michigan. The treatment system operates continuously, and the operations include ORP adjustment and air stripping. The treated remediation wastewater is discharged through sampling location SL #2. As part of its groundwater remediation monitoring program, EQRR is also conducting sampling and testing of the incoming raw remediation wastewater before treatment in order for evaluating its treatment removal efficiency. The sampling of raw remediation wastewater is done at the sampling port located at the under drain collection basin located south of EQRR's small tank farm west of the wastewater tank farm. A removal efficiency of 95% or greater is required.

A joint stream of treated process wastewater and groundwater from SL #3 and SL #2 respectively, along with the boiler water blowdown, noncontact cooling and sanitary flows, are discharged as total wastewater through sampling location SL #1 into the sewer.

Note: EQRR is licensed to store not more than 289,400 gallons of hazardous waste in tanks and containers for solvent recovery and fuel blending. The wastewater treatment plant will not receive any waste/wastewater from the storage.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                 |          |
|---------------|------------------------------------------|--------------------|-----------------|----------|
| 27557         | Eagle Ottawa LLC                         | 2930 W Auburn Road | Rochester Hills | MI 48309 |

| <u>Permits</u> | <u>Raw Materials</u>           | <u>Limits</u>                                                            |
|----------------|--------------------------------|--------------------------------------------------------------------------|
| 10727557IU2    | Leather from tanneries, paints | 01 LOC. Local Limits<br>02 425.D.46 (PSNS) Leather Tanning and Finishing |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 3,200.00  | gpd |
| 01               | Process Wastewater        | Continuous | 38,200.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 2,000.00  | gpd |
| 02               | Process Wastewater        | Batch      | 1,200.00  | gal |

Process Description

- Research & Development retanning which includes dyeing previously tanned hides and adding fatiquors (oils) to the hides to give the leather desirable characteristics.

- Whole crust leathers from tanneries are finished by subjecting it to various processes which include:

- a) Softening: Leathers received are put in mills for softening.
- b) Stretching: Leathers stretched to get rid of wrinkles.
- c) Roll or spray coating or combination of both. Water based paint is used in this process.
- d) Drying: After the roll and spray painting, leathers go to an oven like dryer followed by drying using air blower.
- e) Emboss/Print: Final shape given to the leather surface.
- f) Repeat the softening and stretching process.

The wastewater produced by the plant comes from the research & development process of dyeing tanned hides and addition of fatiquors and coating processes, which include:

- (1) Spray line washing water,
- (2) Fume air scrubbing wastewater,
- (3) Cleaning of roll coater, containers, spray line, roll coater brush, and pigment dispensing system, and, Shipping dock pump out

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                     |
|---------------|------------------------------------------|----------------------------------------|
| 91556         | Edw. C. Levy Co.-Plant 1                 | 8800 Dix Avenue<br>Detroit<br>MI 48209 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00491556IU2    | Blast Furnace Slag   | 01 LOC. Local Limits |
|                | Lubricating Oil      | 02 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 800.00 gpd    |
| 01               | Process Wastewater  | Continuous | 10,200.00 gpd |
| 02               | Process Wastewater  | Continuous | 4,800.00 gpd  |

Process Description

The slag is brought to the site in trucks, quenched with water, crushed and screened to produce construction aggregates. Heavy equipment used in the operation of the facility is power washed in maintenance garage located in the facility.

The wastewater generated by quenching slag is passed through a settling chamber to remove solids and then discharged into the city sewer.

The wastewater generated from power wash cleaning operation drains to a sump where heavy sediment settles at the bottom sump. It is then passed through a series of baffle in an oil water separator to remove oil and then discharged to the city sewer.

Storm water from the site is also discharged into the sewer system through Sampling location manhole SL#2.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                               |
|---------------|------------------------------------------|--------------------------------------------------|
| 27614         | Electro-Plating Services, Inc.           | 945 E. Ten Mile Rd. Madison Heights MI 480714206 |

| <u>Permits</u> | <u>Raw Materials</u>       | <u>Limits</u>                                                                                                                  |
|----------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 02927614IU     | metal parts from customers | 01 LOC. Local Limits<br>01 413.A.14f (PSES) Electroplating<br><10,000 gpd<br>01 413.A.14b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u>                         |
|------------------------------------------|
| 01 Process Wastewater Batch 1,300.00 gpd |

Process Description

The process consists of electroplating of metal parts with copper, nickel, lead, cadmium and chrome. Wastewater is generated from cleaning of parts and the rinses of various electroplating processes. The wastewater treatment operations include chrome reduction, cyanide destruction and precipitation of heavy metals.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                           |
|---------------|------------------------------------------|--------------------|---------------------------|
| 27139         | Electroplating Industries, Inc.          | 21410 Carlo Drive  | Clinton Township MI 48038 |

| <u>Permits</u> | <u>Raw Materials</u>                                                | <u>Limits</u>                                               |
|----------------|---------------------------------------------------------------------|-------------------------------------------------------------|
| 15127139IU2    | alkaline cleaners, acids, cyanides,<br>Copper, zinc, zinc phosphate | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |       |               |
|------------------|--------------------|-------|---------------|
| 01               | Process Wastewater | Batch | 24,000.00 gpd |

Process Description

The facility has six (6) process lines.

Line 1 (Alkaline Based Zinc plating - Barrel): Parts undergo alkaline cleaning, rinsing, acid etching, rinsing, zinc plating, rinsing, chromate treating (trivalent & hexavalent) and rinsing.

Line 2 (Copper plating - Barrel): Parts undergo alkaline cleaning, rinsing, acid etching, rinsing, copper plating, rinsing and sealing.

Line 3 (Acid Base Zinc plating - Barrel): Parts undergo alkaline cleaning, rinsing, acid etching, rinsing, zinc plating, rinsing, chromate treating (trivalent & hexavalent) and rinsing.

Line 4 (Zinc phosphating - Rack): Parts undergo alkaline cleaning, rinsing, acid etching, rinsing, zinc phosphating, rinsing and rust inhibitor oil and /or sealing application.

Line 5 Alodine & Passivation - Rack):

Alodine (Chromate on Aluminum): Parts undergo alkaline cleaning (aluminum soak cleaner), rinsing, acid etching (nitric acid), rinsing, dichromating, and rinsing. Passivation (Removal of impurities such as iron, copper, lead from the surface of the stainless steel alloys): Parts undergo alkaline cleaner (ironsoak cleaner), rinsing, acid etching (nitric acid), and rinsing.

Line 6 (Alkaline Based Zinc plating - Rack): Parts undergo alkaline cleaning, rinsing, acid etching, rinsing, zinc plating, rinsing and rust inhibitor oil and/or sealer application.

The process wastewater (rinse water, spent alkaline cleaning solution, spent acid etching solution and spent zinc phosphating solution) is pretreated (cyanide destruction, chrome reduction, neutralization, flocculation, clarification and filtration) prior to discharge into the City sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>       |              |          |
|---------------|------------------------------------------|--------------------------|--------------|----------|
| 94981         | Elite Fence Products                     | 50925 Richard West Blvd. | Chesterfield | MI 48051 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15194981IU1    |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |
|                |                      | 02 LOC. Local Limits                |
|                |                      | 02 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 02               | Sanitary Wastewater | Continuous | 3,000.00 | gpd |
| 02               | Process Wastewater  | Continuous | 7,686.00 | gpd |

Process Description

Aluminum fencing parts bought from outside suppliers are powder coated. The main process steps involved are:

Stage I: Parts are cleaned using Alkaline Cleaner, Bulk Kleen 745 D (Ingredients: Potassium Hydroxide, Sodium Gluconate, Alkyl Aryl Alkoxy Potassium salt and Sodium Hydroxide).

Stage II: Parts are spray rinsed using city water. Overflow from stage II is discharged into the City sewer system.

Stage III: Parts are spray rinsed using Reverse Osmosis (R.O.) water. Overflow from Stage III is used as make up water for stage II.

Stage IV: Parts undergo etching and conversion coating by dipping in E-CLPS 2101 (ingredient: Fluotitanic Acid).

Parts are dried in an oven prior to powder coating. Parts are powder coated either manually or automatically in the powder coating booth. Parts are baked and/or cured in an oven, packed and shipped out.

Process wastewater (rinse water overflow from stage II, and reject water from R.O. unit) continuously discharged into City sewer system without any pretreatment. Process wastewater (spent rinse water from stage II, spent R.O. water from stage III and spent acid cleaner solution from stage IV) are batch discharged into City sewer system without any pretreatment. Spent alkaline cleaner solution from stage I after pH adjustment is batch discharged into the City sewer system.

**Facility Name: Detroit Water & Sewerage**
**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                          |
|---------------|------------------------------------------|-------------------------------------------------------------|
| 95316         | Emerald Steel Processing                 | 31624 Stephenson Highway      Madison Heights      MI 48071 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                         |
|----------------|----------------------|-------------------------------------------------------|
| 039-95316-IU   | Steel coils          | 01    LOC. Local Limits                               |
|                |                      | 01    420.I.95a.5 (PSES) Iron and Steel Manufacturing |
|                |                      | 01    420.I.95a.1 (PSES) Iron and Steel Manufacturing |
|                |                      | 01    433.A.15a (PSES) Metal Finishing                |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Process Wastewater  | Continuous | 35,207.00 | gpd |
| 01               | Sanitary Wastewater | Continuous | 1,220.00  | gpd |
| 01               | Other               | Continuous | 2,200.00  | gpd |

Process Description

The Company moved the wire drawing operation to another building (901 West Whitcomb). This process does not generate any wastewater. All wastewater generating operations are in the building located at 31624 Stephenson Highway. The coils are heat treated, cleaned using sulfuric acid, zinc phosphated, lubed, lime and polymer coated. Wastewater from rinsing and scrubbing is pretreated prior to discharging into the public sewer. The pretreatment operations include neutralization and clarification, followed by filtration. The Company has a closed loop system for the non-contact cooling water.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |          |          |
|---------------|------------------------------------------|--------------------|----------|----------|
| 94075         | EnviroSolids, L.L.C.                     | 6011 Wyoming Ave.  | Dearborn | MI 48126 |

| <u>Permits</u> | <u>Raw Materials</u>                     | <u>Limits</u>                                   |
|----------------|------------------------------------------|-------------------------------------------------|
| 91494075IU3    | Wastewater and sludge for solidification | 01 LOC. Local Limits                            |
|                | Oily and Organic Wastewater              | 01 PHEN. Phenols                                |
|                |                                          | 01 437.D.46e (PSES) Centralized Waste Treatment |
|                |                                          | 02 LOC. Local Limits                            |
|                |                                          | 02 437.A.16a (PSES) Centralized Waste Treatment |
|                |                                          | 02 PHEN. Phenols                                |

| <u>Flow Rate</u> |                               |            |           |     |
|------------------|-------------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater           | Continuous | 340.00    | gpd |
| 01               | Process Wastewater            | Batch      | 38,323.00 | gpd |
| 01               | Other                         | Continuous | 480.00    | gpd |
| 01               | Boiler Blowdown               | Continuous | 1,000.00  | gpd |
| 01               | Air Pollution Control Wastew. | Continuous | 300.00    | gpd |
| 02               | Process Wastewater            | Batch      | 27,500.00 | gpd |

Process Description

The facility receives oily, organic, and metal bearing wastewater. The pretreatment systems at the facility are briefly described below:

A. Oily wastewater: Oily waste streams are treated based on the following technology: emulsion breaking, gravity or mechanical separation, thermal treatment, metal precipitation, chemical oxidation/reduction and dissolved air flotation. Oily waste streams are treated in tanks #6-8 to break the emulsion and the oil portion is recovered via gravity and/or mechanical separation. The subsequent water portion is transferred to Tank 1 for equalization and then treated by dissolved air flotation followed by chemical precipitation and clarification for total suspended solids (TSS) removal. This is further treated in the clarifier. The treated water is transferred to a holding tank (tank #9) before being discharged to the sewer. The waste oil is further processed in oil recovery process system which includes mechanical separation of water and oil as well as filtration.

B. Organic wastewater: Organic waste streams are treated based on the following technology: Gravity or mechanical separation, pH adjustment, chemical oxidation/reduction and dissolved air flotation. Organic waste streams may be treated first, if necessary for pH adjustment and/or chemical precipitation followed by liquid-solid separation. Secondly, the organic waste streams may be mixed with the water portion of the oily water and transferred to Tank 1 for equalization. The Tank 1 water is then sent to DAF building and treated through dissolved air flotation followed by chemical precipitation and clarification for total suspended solids (TSS) removal. Secondary gravity or mechanical separation may occur. The treated water is transferred to a holding tank (tank #9) before being discharged to the sewer.

C. Metal-bearing waste: All metal bearing waste is segregated from other streams, and processed and solidified in Pit # 2 only by addition of bed ash, lime and mill dust. All pit solids are ultimately disposed of at a licensed landfill. No wastewater is generated from this process.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| <b>96843</b>  | <b>Eton Street Brewery, LLC</b>          | <b>575 S Eton<br/>Birmingham MI 48009</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 009-96843-IU   |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                               |
|------------------------------------------------|
| 01 Process Wastewater Continuous 12,300.00 gpd |

Process Description

The process consists of brewing, filtering, fermenting and packaging of beer and distilling spirits from beer. Beer is packaged in bottles, cans and kegs. The brewery operation produces wastewater from general cleaning activities, and from the CIP [Clean in Place] processes that are required for the brewing, cellar/fermenting, filtering and packaging operations. Cleaning uses caustic and phosphoric acid, which requires pH adjustment of the wastewater prior to sewer discharging.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                    |
|---------------|------------------------------------------|-------------------------------------------------------|
| 27190         | Extrude Hone Corporation - Shelby Tov    | 50459 Central Industrial Dr. Shelby Township MI 48315 |

| <u>Permits</u> | <u>Raw Materials</u>                  | <u>Limits</u>                       |
|----------------|---------------------------------------|-------------------------------------|
| 00127190IU2    | ceramic stone                         | 01 LOC. Local Limits                |
|                | Oxygen, natural gas, soap & mild acid | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 300.00    | gpd |
| 01               | Process Wastewater  | Continuous | 10,200.00 | gpd |

Process Description

The parts are deburred by using Thermal Energy Machines as follows:

1. Thermal Energy Machines: Parts are alkaline cleaned, rinsed, and deburred using Thermal Energy Machines. These parts are deburred by burning off burrs with a mixture of oxygen and natural gas. These parts are deoxidized using a mixture of sulfuric and phosphoric acid, then rinsed and a rust inhibitor is applied. Rinse water from the post cleaning line of thermo deburring process is pretreated for pH adjustment. Spent solutions and oily wastewater from cleaning lines is processed in an evaporator. Water evaporates and oil is manifested offsite.
2. The electrolytic process uses a combination of electricity and salt water to deburr parts. The parts are placed in the electrolytic deburring machine, rinsed in a small bath, alkaline cleaned, and then rinsed in rust inhibitor. Rinse water, waste alkaline solution and spent rust inhibitor is sent to the evaporator. There is no discharge from this process. The salt used in this process is a mixture of sodium chloride or sodium nitrate and water. These solutions are recycled, filtered and separated. The solids generated from the recycling is hauled off site.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                  |          |
|---------------|------------------------------------------|--------------------|------------------|----------|
| 96865         | Extrude Hone Corporation - Sterling He   | 6145 Wall St       | Sterling Heights | MI 48312 |

| <u>Permits</u> | <u>Raw Materials</u>                  | <u>Limits</u>                       |
|----------------|---------------------------------------|-------------------------------------|
| 151-96865-IU   | Oxygen, natural gas, soap & mild acid | 01 LOC. Local Limits                |
|                | Ceramic stone                         | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Sanitary Wastewater | Continuous | 240.00   | gpd |
| 01               | Process Wastewater  | Continuous | 5,868.00 | gpd |

Process Description

There are two methods in use to deburr parts received at the facility:

1. Thermal Energy Method (TEM): Parts with burrs are first alkaline cleaned, rinsed, and then deburred. The deburring operations involve placing the parts in a sealed chamber first. The burrs are then burned off by igniting a high pressure air/gas mixture for two milliseconds. The process of burning off the burrs causes the parts to be oxidized. To deoxidize the parts, they get dipped in a mixture of phosphoric and sulfuric acid, rinsed, and rust inhibited. The process wastewater from the rinsing operations is pH adjusted before discharge. The spent alkaline cleaner and the spent acid mixture are pH adjusted and sent to the evaporator. The concentrate is hauled offsite by Safety Kleen once every six (6) months.

2. Electrochemical Method (ECM): Parts with burrs are first alkaline washed, rinsed, and rust inhibited before being placed in the electrolytic deburring machines that contain salty solution at certain concentration. Electricity is then applied to erode off the burrs. The salty solution used in this process is a mixture of sodium chloride or sodium nitrate and water. After usage, the salty solution is filtered, recycled, and replenished when necessary. The solids generated from the filtration process are hauled offsite. There is no discharge from this process. The spent alkaline solution, rinse water, and spent rust inhibitor are sent to the evaporator. Wastewater generated from mopping the floors is also sent to the evaporator. The concentrate is hauled offsite by Safety Kleen once every six (6) months.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |              |          |
|---------------|------------------------------------------|--------------------|--------------|----------|
| 93297         | FCA US LLC                               | 1000 Chrysler Dr.  | Auburn Hills | MI 48326 |

| <u>Permits</u> | <u>Raw Materials</u>   | <u>Limits</u>        |
|----------------|------------------------|----------------------|
| 00793297IU3    | Fuel, Paint, Autoparts | 01 LOC. Local Limits |
|                |                        | 02 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 78,500.00 | gpd |
| 01               | Process Wastewater        | Continuous | 23,050.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 16,650.00 | gpd |
| 02               | Sanitary Wastewater       | Continuous | 78,500.00 | gpd |
| 02               | Process Wastewater        | Continuous | 23,050.00 | gpd |
| 02               | Non-contact Cooling Water | Continuous | 16,650.00 | gpd |

Process Description

The facility's operations consist of design, testing and development of vehicles and their respective components. The process includes pilot plant painting, assembling and various fuel laboratories. Principal raw materials used by the facility are vehicle fuels, engine oil and lubricants, low VOC paints, transmission,, brake and hydraulic fluids, coolants, adhesives, sealants and refrigerants. Process wastewater is generated from aqueous parts washing, body preparation booth, dynamometer operations, miscellaneous shops, labs and car washes. The process wastewater discharge also includes wastewater discharges from the facility's fire suppression, chiller and hot water systems. The facility has oil/water separators used as wastewater treatment systems for its Road Test Garage and Central Energy Plant wastewater discharges.

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# Facility Name: Detroit Water & Sewerage

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| SIU ID | Significant Industrial User (SIU)    | SIU Address        |         |          |
|--------|--------------------------------------|--------------------|---------|----------|
| 93904  | FCA US LLC - Jefferson North Assembl | 2101 Conner Avenue | Detroit | MI 48215 |

| Permits     | Raw Materials                        | Limits                                                                                                                                                                                             |
|-------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15393904IU4 | Parts for assembly into light trucks | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing<br>02 LOC. Local Limits<br>03 LOC. Local Limits<br>04 LOC. Local Limits<br>05 LOC. Local Limits<br>05 433.A.17a (PSNS) Metal Finishing |

| Flow Rate |                           |            |            |     |
|-----------|---------------------------|------------|------------|-----|
| 01        | Sanitary Wastewater       | Continuous | 26,700.00  | gpd |
| 01        | Non-contact Cooling Water | Continuous | 85,000.00  | gpd |
| 01        | Process Wastewater        | Continuous | 814,000.00 | gpd |

## Process Description

The manufacturing process includes welding, phosphating, undercoating, and painting of automobile bodies. The painted bodies are then processed in the final assembly. The completed vehicles get fuel-filled, and then undergo final testing. Wastewater is generated from the phosphating, E-Coating, and painting processes. Wastewater generated from these processes undergoes chemical treatment [including pH adjustment], precipitation, flocculation and settling before discharging to the city sewer system.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>       |         |          |
|---------------|------------------------------------------|--------------------------|---------|----------|
| 93902         | FCA US LLC - Mack Avenue Engine Pla      | 11570 East Warren Avenue | Detroit | MI 48214 |

| <u>Permits</u> | <u>Raw Materials</u>                           | <u>Limits</u>        |
|----------------|------------------------------------------------|----------------------|
| 00393902IU3    | Engine blocks from machined steel and aluminum | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |              |            |     |
|------------------|---------------------|--------------|------------|-----|
| 01               | Process Wastewater  | Batch        | 124,000.00 | gpd |
| 02               | Sanitary Wastewater | Intermittent | 15,700.00  | gpd |
| 02               | Process Wastewater  | Batch        | 24,700.00  | gpd |

Process Description

The processes consist primarily of engine block, crankshaft and engine head machining. Other processes are camshaft assembly, water pump assembly and washing of various parts with detergents. The primary waste treatment process consists of washing of the parts with detergents, clarification and settling, and oil/water separation. Neutralization/pH adjustment is also used.

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The processes consist primarily of engine block, crankshaft and engine head machining. Other processes are camshaft assembly, water pump assembly and washing of various parts with detergents. The primary waste treatment process consists of washing of the parts with detergents, clarification and settling, and oil/water separation. Neutralization/pH adjustment is also used.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>    |                  |          |
|---------------|------------------------------------------|-----------------------|------------------|----------|
| 93899         | FCA US LLC - Sterling Heights Assemb     | 38111 Van Dyke Avenue | Sterling Heights | MI 48312 |

| <u>Permits</u> | <u>Raw Materials</u>                 | <u>Limits</u>                       |
|----------------|--------------------------------------|-------------------------------------|
| 15193899IU2    | stamped auto parts                   | 01 LOC. Local Limits                |
|                | Paints, solvents, sealers, adhesives | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Sanitary Wastewater       | Continuous | 60,000.00  | gpd |
| 01               | Process Wastewater        | Continuous | 520,000.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 47,000.00  | gpd |

Process Description

Automobile parts brought from other locations are assembled, alkaline washed, dried, zinc phosphated, rinsed, e-coated, rinsed, cured, spray painted, and cured. To form the final product, seats and doors are assembled, then leak testing and fluid filling are conducted before the cars are shipped out. Some of the stated rinses are done with de-ionized water, which the reverse osmosis system generates. The process wastewater is generated from all the stated rinses, from the painting and powder coating operations, from the spent alkaline cleaner, and from the car leak testing. All the generated process wastewater is discharged to the sewer after being pretreated.

The pretreatment system consists of pH adjustment, flocculation, sedimentation and filtration.

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The pretreatment system consists of pH adjustment, flocculation, sedimentation and filtration.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                  |          |
|---------------|------------------------------------------|--------------------|------------------|----------|
| 93900         | FCA US LLC - Sterling Stamping Plant     | 35777 Van Dyke     | Sterling Heights | MI 48312 |

| <u>Permits</u> | <u>Raw Materials</u>                               | <u>Limits</u>        |
|----------------|----------------------------------------------------|----------------------|
| 00193900IU3    | Steel coils, blanks, alkaline cleaners, acids,oils | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 29,000.00 | gpd |
| 01               | Process Wastewater        | Continuous | 13,070.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 5,050.00  | gpd |

Process Description

Metal sheets of various sizes are cut into blanks, stamped and shipped. The facility also receives different sizes of blanks from suppliers. The blanks are washed with dilute alkaline cleaner solution, stamped and shipped. The process wastewater is generated from parts washing, steam cleaning of dies and from floor scrubbing. The process wastewater is discharged to the sewer after many consecutive steps of oil-water separation.

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# Facility Name: Detroit Water & Sewerage

# NPDES Permit #: MI 0022802

| SIU ID | Significant Industrial User (SIU)  | SIU Address                            |
|--------|------------------------------------|----------------------------------------|
| 93890  | FCA US LLC - Warren Truck Assembly | 21500 Mound Road<br>Warren<br>MI 48091 |

| Permits    | Raw Materials                          | Limits                                                      |
|------------|----------------------------------------|-------------------------------------------------------------|
| 15193890IU | Sheet meta stampings, paint and parts. | 01 LOC. Local Limits<br>01 433.A.15a (PSES) Metal Finishing |

| Flow Rate                                             |
|-------------------------------------------------------|
| 01 Process Wastewater Batch gpd                       |
| 01 Non-contact Cooling Water Continuous 45,000.00 gpd |
| 01 Other Continuous 16,750.00 gpd                     |
| 01 Sanitary Wastewater Continuous 75,000.00 gpd       |

## Process Description

### PROCESS DESCRIPTION

Parts are machined, assembled, alkaline washed, rinsed, zinc phosphated, rinsed, uni-primed, rinsed, baked, coated with Anti-Chip Coat, baked again, sealed, baked, then sprayed with a final layer of paint and then baked.

A final assembly of a truck includes installing of interiors, trims, mirrors, engines, chasses, etc. When a truck is completely assembled, it undergoes leak testing and washing.

The process wastewater is generated from the rinses, leak testing, truck washing, and from floor scrubbing. The process wastewater is pretreated prior to discharge into the sewer.

The pretreatment system consists of filtration, oil skimming, pH adjustment, flocculation, and clarification.

### PROCESS DESCRIPTION

Parts are machined, assembled, alkaline washed, rinsed, zinc phosphated, rinsed, uni-primed, rinsed, baked, coated with Anti-Chip Coat, baked again, sealed, baked, then sprayed with a final layer of paint and then baked.

A final assembly of a truck includes installing of interiors, trims, mirrors, engines, chasses, etc. When a truck is completely assembled, it undergoes leak testing and washing.

The process wastewater is generated from the rinses, leak testing, truck washing, and from floor scrubbing. The process wastewater is pretreated prior to discharge into the sewer.

The pretreatment system consists of filtration, oil skimming, pH adjustment, flocculation, and clarification.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| 27311         | Faygo Beverages Inc.                     | 3579 Gratiot Road<br>Detroit MI 482071829 |

| <u>Permits</u> | <u>Raw Materials</u>         | <u>Limits</u>        |
|----------------|------------------------------|----------------------|
| 00327311       | sugar concentrates and water | 01 LOC. Local Limits |

| <u>Flow Rate</u>                               |
|------------------------------------------------|
| 01 Process Wastewater Continuous 63,000.00 gpd |

Process Description

The process consists of mixing sugar concentrates with water and flavoring ingredients. The mixture is subsequently diluted to desired flavor, carbonated, bottled and packaged. The process wastewater is generated from bottle washing, equipment washing during flavor changes, floors and production lines washing.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 27683         | Ferndale Laboratories, Inc.              | 780 W. Eight Mile Rd. Ferndale MI 48220 |

| <u>Permits</u> | <u>Raw Materials</u>       | <u>Limits</u>                                                           |
|----------------|----------------------------|-------------------------------------------------------------------------|
| 18927683IU     | pharmaceutical ingredients | 01 LOC. Local Limits<br>01 439.D.46 (PSES) Pharmaceutical Manufacturing |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 2,780.00  | gpd |
| 01               | Process Wastewater        | Continuous | 10,848.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 1,585.00  | gpd |
| 01               | Other                     | Continuous | 634.00    | gpd |

Process Description

The process involves compounding, formulating and packing of tablets, capsules, cream, ointments and liquids. The pharmaceutical ingredients include Water, petroleum, mineral oil, propylene glycol, and stearic acid flakes. Process water is generated from the rinsing and washing of mixing tanks.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                             |
|---------------|------------------------------------------|------------------------------------------------|
| 87742         | Ferro Industries Inc.                    | 35200 Union Lk. Rd. Harrison Township MI 48045 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 24187742IU2    | Plastic, Resin, Glue | 01 LOC. Local Limits |

| <u>Flow Rate</u>                      |
|---------------------------------------|
| 01 Process Wastewater Batch 10.00 gal |

Process Description

The facility manufactures urethane back-up pads with two polyurethane foaming machines. The machines use a two part urethane system. Polyurethane resin and isocyanate are drawn from separate tanks and mixed at a robotic head which then pours the material into molds to form urethane foam products. The machines are designed to flush out the build-up of urethane in mixing chamber head with hot water, then followed by air blowing to remove the remaining water. A machine uses about 25 gallons of flushing water for a day shift operation.

The process wastewater is generated from the hot water flushing of the mixing chamber and drained through a filter into a collection tank, then pumped through two filters into a storage drum of 55 gallons. At the end of the shift, the drum is emptied into the drain (the sewer).

The facility is also engaged in plastic injection molding, trimming, and packaging. The cooling water is a closed loop system. No process water discharges into the sewer for these operations

**Facility Name: Detroit Water & Sewerage**

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                    |
|---------------|------------------------------------------|---------------------------------------|
| <b>27486</b>  | <b>Final Touch Company Inc.</b>          | <b>8537 Ronda Dr. Canton MI 48187</b> |

| <u>Permits</u> | <u>Raw Materials</u>                         | <u>Limits</u>                       |
|----------------|----------------------------------------------|-------------------------------------|
| 15627486IU2    | Various steel parts                          | 01 LOC. Local Limits                |
|                | Alkaline, acid and sodium hydroxide solution | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                          |              |
|------------------|--------------------------|--------------|
| 01               | Process Wastewater Batch | 1,700.00 gal |

Process Description

The process consists of alkaline cleaning, acid cleaning, cold water rinse, and black oxidizing followed by cold rinse, neutralizing by alkaline cleaner followed by cold rinse and dipping in rust preventive mineral oil. Process wastewater is generated from rinses and passed through a filter to a holding tank where it is adjusted for pH prior to discharge into the public sewers. The spent sodium hydroxide solution is hauled off from the site.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>      |                |                     |
|---------------|------------------------------------------|-------------------------|----------------|---------------------|
| <b>27255</b>  | <b>Fitzgerald Finishing L.L.C.</b>       | <b>17450 Filer Ave.</b> | <b>Detroit</b> | <b>MI 482121908</b> |

| <u>Permits</u> | <u>Raw Materials</u>                            | <u>Limits</u>                       |
|----------------|-------------------------------------------------|-------------------------------------|
| 152-27255-IU   | automotive parts: fasteners and small stampings | 01 LOC. Local Limits                |
|                | Potassium Hydroxide solution, phosphating       | 01 413.E.54c (PSES) Electroplating  |
|                | acid, caustic, paints                           | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 36,900.00 gpd |

Process Description

- a) The facility has three (3) zinc phosphating lines (#1, #2 and #3) made by JESSUP Company. The operations for #1 & #2 started in 1968, and the operation of #3 started in 2011.
- b) The operation steps for the process lines (#1, #2, and #3) are the same: The automotive parts (metal fasteners and stampings) undergo alkaline cleaning/de-scaling and clean water rinsing, acid de-scaling and clean water rinsing, zinc phosphating and cleaning water rinsing. Then the parts are sealed and dried.
- c) The most resulted parts may undergo organic coating (dip-spin painting/coating) through spinner lines, which are no-water process lines.

Process wastewater is generated from the operations of cleaning and water rinsing through the process lines (#1, #2, and #3). The process wastewaters are combined together in underground collection pit, and then undergo pretreatment prior to discharge into the sewer. The pretreatment consists of equalization, pH adjustment, pH control and chemical retention, polymer addition, precipitation and sludge settling, clarification, pH monitoring for discharge, sludge thickening and press filtration. The resulting filter cake is hauled away by republic Services, Inc.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 27416         | Ford Motor Company - Allen Park Clay     | 17005 Oakwood Blvd. Allen Park MI 48101 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                            |
|----------------|----------------------|------------------------------------------|
| 70427416IU3    | Landfill material    | 01 LOC. Local Limits<br>01 PHEN. Phenols |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Process Wastewater  | Continuous | 15,700.00 | gpd |
| 01               | Sanitary Wastewater | Continuous | 20.00     | gpd |

Process Description

Leachate generated from the former landfill operations is collected and discharged to sewer system without treatment.



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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |          |          |
|---------------|------------------------------------------|--------------------|----------|----------|
| 96009         | Ford Motor Company - Dearborn Divers     | 3001 Miller Road   | Dearborn | MI 48121 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                                              |
|----------------|----------------------|----------------------------------------------------------------------------|
| 154-96009-IU   | Aluminum             | 01 433.A.17a (PSNS) Metal Finishing<br>02 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 02               | Sanitary Wastewater       | Continuous | 14,760.00 | gpd |
| 02               | Process Wastewater        | Continuous | 36,000.00 | gpd |
| 02               | Process Wastewater        | Continuous | 16,000.00 | gpd |
| 02               | Non-contact Cooling Water | Continuous | 66,689.00 | gpd |

Process Description

The process includes aluminum hydroforming, heat treating, machining, and chemical treatment prior to various subassembly operations. The plant existing operations consist of tire, axle, coil/shock and wheel end assemblies.

As part of the process, aluminum tubes are placed inside a die where high pressure hydraulic presses are used to shape the metal and high pressure water emulsion is injected to form the aluminum to the shape of a die. Oily emulsion wastewater is generated from this process. During production, oil is skimmed from the recirculated oily emulsion wastewater, then containerized and manifested for off-site disposal. On hydroform presses 1 and 2 after the hydroforming of the aluminum part the company will install a new hot water rinse station to remove oil on the aluminum part to prevent oil dripping in the racks and on the operating floor. The hot water rinse water will be recirculated and the oil will be skimmed and containerized for off-site disposal. Periodically the spent hot water rinse wastewater will be transferred to the die wash area for maintenance. During cleaning and maintenance activities, the oil/wastewater emulsion is containerized and manifested for off-site disposal. The seven dies used in the hydroforming process are washed with high pressured water approximately once per day in a designated die wash area. Other wastewater in this area includes, rack washing, floor scrubbing and other oily wastewaters from various equipment cleaning. The wastewater from the die wash area is processed through oil/water separation and is containerized/manifested for off-site disposal.

The parts are then moved to a machining area where they are physically modified. There is no wastewater discharge related to the machining processes. From the machining area, the parts are moved to the heat treating process. As part of the heat treating process, racks with parts are loaded into the oven. The oven is heated up to approximately 360 degrees and the racks enter the oven. The racks remain in the oven for up to 6 hours, at which time the racks then leave the oven and enter a cool down area. The racks and parts are cooled down to approximately 110 degrees by air. There is no water discharge related to this process. The parts are then transferred to the chemical treatment process.

The chemical treatment process consists of three alkaline cleaning stages followed by a double water rinse. The parts are then etched using an organic acid, followed by a triple rinse. The parts are then surface treated using organic acid and other non-volatile components followed by a final triple rinse. Sludge is generated and filtered at the etching and surface treatment stages. This waste material (along with filter media) is manifested and disposed offsite. The surface treatment chemicals are piped to an ion exchanged media to remove aluminum for maintaining tank chemistry. The overflow from the chemical rinse stages, spent acid baths and spent alkaline baths is transferred to the wastewater pretreatment system for pH adjustment. A Reverse Osmosis (RO) system is utilized to generate water as make up water or rinse water in the chemical treatment process.

The parts are then transferred to applicable subassembly areas for further processing or prepared for shipment to be utilized at other Ford locations.

The wastewater generating operations associated with the chemical surface treatment process line consist of rinses after alkaline cleaning, acid etching, surface treatment, spent alkaline and acid baths and RO reject water.

As part of the wastewater pretreatment process, rinse water from the chemical treatment process is collected in an equalization holding tank. Spent acid bath and spent alkaline bath are collected in separate holding tanks. The three materials (rinse water, spent acid bath and spent alkaline bath) are transferred to a neutralization tank for pH adjustment. Caustic soda or sulfuric acid is added in this tank on demand using a pH meter. The wastewater is then transferred to a tank for final pH adjustment, prior to discharge via Sampling Location #2 (SL#2). As needed de-foaming chemical will be added for foam control. The RO Reject water is discharged without treatment.

## Facility Name: Detroit Water &amp; Sewerage

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |          |          |
|---------------|------------------------------------------|--------------------|----------|----------|
| 27417         | Ford Motor Company - Dearborn Truck      | 3001 Miller Road   | Dearborn | MI 48121 |

| <u>Permits</u> | <u>Raw Materials</u>                                                                          | <u>Limits</u>                       |
|----------------|-----------------------------------------------------------------------------------------------|-------------------------------------|
| 15427417IU     | Automotive parts<br>Phosphating/Plating solutions<br>Caustic Soda<br>Acid<br>Polymer<br>Paint | 01 433.A.15a (PSES) Metal Finishing |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Sanitary Wastewater       | Continuous |            | gpd |
| 01               | Process Wastewater        | Batch      | 522,378.00 | gpd |
| 01               | Process Wastewater        | Continuous | 12,500.00  | gpd |
| 01               | Non-contact Cooling Water | Continuous |            | gpd |

Process Description

The manufacturing process involves metal forming, cutting, washing, welding, zinc phosphating, coating, painting, assembly and testing of automobile components in Dearborn Truck Plant and frame manufacturing, phosphating & plating at Dearborn Diversified Manufacturing Plant. The wastewater is generated from acid/caustic cleaning, phosphating, coating (enamel, prime, and top coating), water rinsing and janitorial services. The wastewater is discharged into the city sewer after pre-treatment. The pretreatment operation performed at the facility includes chemical precipitation, solids separation and sludge dewatering.

The manufacturing process involves metal forming, cutting, washing, welding, zinc phosphating, coating, painting, assembly and testing of automobile components in Dearborn Truck Plant and frame manufacturing, phosphating & plating at Dearborn Diversified Manufacturing Plant. The wastewater is generated from acid/caustic cleaning, phosphating, coating (enamel, prime, and top coating), water rinsing and janitorial services. The wastewater is discharged into the city sewer after pre-treatment. The pretreatment operation performed at the facility includes chemical precipitation, solids separation and sludge dewatering.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>    | <u>SIU Address</u>         |                |                     |
|---------------|---------------------------------------------|----------------------------|----------------|---------------------|
| <b>27510</b>  | <b>Ford Motor Company - Livonia Transmi</b> | <b>36200 Plymouth Road</b> | <b>Livonia</b> | <b>MI 481501441</b> |

| <u>Permits</u> | <u>Raw Materials</u>                                                                    | <u>Limits</u>                                                                                                               |
|----------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 15627510IU     | Aluminum transmission cases, valves and other steel or aluminum parts for transmissions | 02 LOC. Local Limits<br>03 LOC. Local Limits<br>03 SP.TTO.Purg Org Special Discharge<br>03 SP.TTO.Extract Special Discharge |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 02               | Sanitary Wastewater       | Continuous | 40,000.00  | gpd |
| 02               | Process Wastewater        | Continuous | 150,000.00 | gpd |
| 02               | Non-contact Cooling Water | Continuous | 13,300.00  | gpd |
| 02               | Other                     | Continuous | 4,000.00   | gpd |
| 02               | Boiler Blowdown           | Continuous | 5,500.00   | gpd |
| 03               | Other                     | Continuous | 100,000.00 | gpd |

Process DescriptionLivonia Transmission Plant (LTP):

Aluminum parts (transmission cases) received from the suppliers, are machined or micro finished, using both wet and dry operations. The wet operations are the traditional liquid coolant systems where coolants act as machining fluids when the part is micro finished, taking off micro units of material so that parts seal properly to each other and no contamination enters the transmission. Borings and holes are also drilled to allow assembly of the final transmission parts; gears, shafts, etc. The dry machining process accomplishes the same result but with a "dry" process or MQL (Minimum Quantity Lubricant) technology. The coolant that is used in MQL operations is sprayed on the part as a fine mist to help machine the part. This method avoids traditional machining end products such as oily waste and water usage in rinsing off the coolants.

Currently parts for heat treating are sent out to other facilities for heat treating and anodized parts are purchased from vendors. All the parts are assembled in aluminum transmission cases, tested, washed and shipped.

Process wastewater is generated from wet coolant operations (contact cooling water) during aluminum case machining, and rinsing during machining and equipment maintenance. Process water is also generated from floor cleaning of machining and other processing areas. Also wastewater is generated from non-contact cooling water and boiler blow down.

Wastewater generated from the contact cooling, parts/products rinsing and floor cleaning is pretreated batch wise prior to discharge into the sewer system. This treated wastewater is combined with untreated wastewater (wastewater generated from boiler blow down, non contact cooling, sanitary and fire hydrant testing is discharged without any pretreatment) from the facility and discharged directly into the sewer system and is monitored at sampling location (former SL#2). Storm water from the Tank Farm containment area is also treated at the facility's pretreatment system prior to discharge into the sewer system. (Facility's SL#1 is deactivated due to the fact that facility is a non categorical company currently with the elimination of metal finishing operations)

Automatic Transmission New Product Center (ATNPC):

This facility has prototype operations for development and testing of transmissions and powertrain components. Facility assembles and disassembles transmissions and power train components, does Dynamometer testing of these prototype parts/products and also has a non destructive evaluation laboratory. Recently the facility also started a small volume prototype electric vehicle battery assembly at the site.

The wastewater (process water) containing coolants and transmission fluids is generated at the facility during machining, grinding and testing operations. Facility also generates floor & equipment cleaning wastewater.

The process water along with cooling tower blow down from this facility is collected in a sump at the facility property and is pumped to LTP's wet well and treated along with LTP's process water. A very small quantity of storm water from the diked area of the metal scrap deck as well as UST piping open cavity also is directed to the sump for treatment at WTP of LTP, along with process water.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>    |       |          |
|---------------|------------------------------------------|-----------------------|-------|----------|
| 27511         | Ford Motor Company - Michigan Asser      | 38303 Michigan Avenue | Wayne | MI 48184 |

| <u>Permits</u> | <u>Raw Materials</u>                  | <u>Limits</u>                       |
|----------------|---------------------------------------|-------------------------------------|
| 15627511IU     | steel material for stamping products  | 01 433.A.15a (PSES) Metal Finishing |
|                | alkaline and acid cleaners for parts, | 02 LOC. Local Limits                |
|                | coolant oils                          |                                     |
|                | Lube oils, Paints                     |                                     |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Process Wastewater        | Batch      | 300,000.00 | gal |
| 02               | Sanitary Wastewater       | Continuous | 100,000.00 | gpd |
| 02               | Process Wastewater        | Continuous | 500,000.00 | gpd |
| 02               | Boiler Blowdown           | Continuous | 5,000.00   | gpd |
| 02               | Non-contact Cooling Water | Continuous | 123,000.00 | gpd |

Process Description

Operations at the various plants are as follows:

- (a) WISP - Manufactures car body stampings, assembles, and welds the stamping before sending the Assembly facility.
- (b) WAP - Does assembling, phosphate coating, painting, and final car assembling. The final car assembling consists of putting trims, chassis, and engines to the car body. Production activities would cease in fourth quarter of 2010.
- (c) MAP - Does assembling, phosphate coating, painting, and final car assembling. The final car assembling consists of putting trims, chassis, and engines to the car body.

Process wastewater is generated at various plant locations as follows:

- a) WISP: Die Cleaning using steam, coolant and oil spillage, and floor cleaning
- b) WAP: Phosphate coating, soak testing, and floor cleaning
- c) MAP: Phosphate coating, soak testing, floor cleaning and rinsing

The pretreatment operations consist of pH adjustment, flocculation, skimming, clarification, and sludge dewatering. The quantity of chemicals needed for the treatment is determined by jar testing. Pretreated wastewater is discharged through sampling location No. 1. This pretreated wastewater is combined with sanitary and non-contact cooling water prior to discharge into the city sewer system through sampling location No. 2.

## Facility Name: Detroit Water &amp; Sewerage

NPDES Permit #: MI 0022802

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |            |          |
|---------------|------------------------------------------|---------------------|------------|----------|
| 27363         | Ford Motor Company - New Model Prog      | 17000 Oakwood Blvd. | Allen Park | MI 48101 |

| <u>Permits</u> | <u>Raw Materials</u>     | <u>Limits</u>                       |
|----------------|--------------------------|-------------------------------------|
| 15427363IU1    | Prototype vehicle parts  | 01 433.A.17a (PSNS) Metal Finishing |
|                | Phosphoric acid          | 03 LOC. Local Limits                |
|                | Paints                   |                                     |
|                | Aluminum chloride        |                                     |
|                | Neutralization chemicals |                                     |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Process Wastewater        | Continuous | 54,000.00 | gpd |
| 03               | Sanitary Wastewater       | Continuous | 69,000.00 | gpd |
| 03               | Process Wastewater        | Continuous | 54,000.00 | gpd |
| 03               | Non-contact Cooling Water | Continuous | 6,000.00  | gpd |
| 03               | Process Wastewater        | Continuous | 12,000.00 | gpd |

Process Description

The prototype auto manufacturing includes parts receiving, welding, forming, phosphating, painting and assembly. The categorical process wastewater generated from phosphating operation is treated and monitored at SL #1. Process wastewater from car washing and assembly is combined with the wastewater from SL#1 and is discharged at SL #2.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |          |          |
|---------------|------------------------------------------|--------------------|----------|----------|
| 27419         | Ford Motor Company - Rouge Complex       | 3001 Miller Road   | Dearborn | MI 48121 |

| <u>Permits</u> | <u>Raw Materials</u>                                                 | <u>Limits</u>        |
|----------------|----------------------------------------------------------------------|----------------------|
| 00427419IU1    | Caustic<br>Acid<br>process wastewater<br>first flush oily stormwater | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |              |     |
|------------------|---------------------------|------------|--------------|-----|
| 01               | Sanitary Wastewater       | Continuous | 110,000.00   | gpd |
| 01               | Sanitary Wastewater       | Continuous | 159,000.00   | gpd |
| 01               | Process Wastewater        | Continuous | 1,411,680.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 127,850.00   | gpd |

Process Description

The process wastewater generated from Truck and Frame Operation, Engine and Fuel Tank Operations, Stamping and Body Operations, Powerhouse #3 and Substation #15 is pretreated for oil/water separation, oil skimming and settling prior to discharge into the City sewer.

The process wastewater generated from Truck and Frame Operation, Engine and Fuel Tank Operations, Stamping and Body Operations, Powerhouse #3 and Substation #15 is pretreated for oil/water separation, oil skimming and settling prior to discharge into the City sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                  |          |
|---------------|------------------------------------------|--------------------|------------------|----------|
| 91711         | Ford Motor Company - Sterling Plant      | 39000 Mound Road   | Sterling Heights | MI 48310 |

| <u>Permits</u> | <u>Raw Materials</u>                | <u>Limits</u>                       |
|----------------|-------------------------------------|-------------------------------------|
| 15191711IU1    | Polymer                             | 01 433.A.15a (PSES) Metal Finishing |
|                | Caustic Soda                        | 02 LOC. Local Limits                |
|                | Paint/Coating Solutions             |                                     |
|                | Acid                                |                                     |
|                | Raw steel casting and forging parts |                                     |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Process Wastewater        | Batch      | 200,000.00 | gpd |
| 02               | Non-contact Cooling Water | Continuous | 80,000.00  | gpd |
| 02               | Sanitary Wastewater       | Continuous | 40,000.00  | gpd |
| 02               | Process Wastewater        | Continuous | 200,000.00 | gpd |

Process Description

Metal forgings are machined, welded, heat-treated, and alkaline washed, rinsed, dried, and assembled. Some parts are alkaline washed, rinsed, zinc phosphated, rinsed, dried, painted, and baked.

The process wastewater is generated from the rinsing operations and from discharging the spent alkaline cleaner and spent coolant, which is used as a cooling agent while machining. Process wastewater is collected in a holding tank. Then it is pretreated in a batch for oil removal. The company has three (3) batch treatment tanks, each having a capacity of 300,000 gallons. Chemicals are added in the batch treatment tank. The content is heated and air agitated. After gravity settlement, oil is skimmed off from the batch treatment tank and wastewater is batch discharged into the City sewer system after checking the pH. Metal forgings are machined, welded, heat-treated, and alkaline washed, rinsed, dried, and assembled. Some parts are alkaline washed, rinsed, zinc phosphated, rinsed, dried, painted, and baked.

The process wastewater is generated from the rinsing operations and from discharging the spent alkaline cleaner and spent coolant, which is used as a cooling agent while machining. Process wastewater is collected in a holding tank. Then it is pretreated in a batch for oil removal. The company has three (3) batch treatment tanks, each having a capacity of 300,000 gallons. Chemicals are added in the batch treatment tank. The content is heated and air agitated. After gravity settlement, oil is skimmed off from the batch treatment tank and wastewater is batch discharged into the City sewer system after checking the pH.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |                  |          |
|---------------|------------------------------------------|---------------------|------------------|----------|
| 27169         | Ford Motor Company - Van Dyke Plant      | 41111 Van Dyke Road | Sterling Heights | MI 48314 |

| <u>Permits</u> | <u>Raw Materials</u>                                         | <u>Limits</u>        |
|----------------|--------------------------------------------------------------|----------------------|
| 00127169IU1    | Caustic Soda<br>Acid<br>Cast iron, steel, and aluminum parts | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Other                     | Continuous | 1,000.00  | gpd |
| 01               | Sanitary Wastewater       | Continuous | 50,000.00 | gpd |
| 01               | Process Wastewater        | Batch      | 72,050.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 25,000.00 | gpd |

Process Description

Cast iron, steel, and aluminum parts undergo machining such as milling, drilling, turning, and grinding. The facility does some stamping and assembling. The dies used in stamping are washed once per year during the maintenance period. All parts are alkaline washed and rinsed. Process wastewater is generated from alkaline cleaning, rinsing, stamping and floor scrubbing. The spent alkaline solution is discharged to the pretreatment system on a needed basis. All process wastewater is collected in a wet well and then pumped to one of the three 200,000 gallons receiving tanks (Tanks 1-3) where the oil and water is separated, polymer may be added, and then final pH is adjusted prior to discharge to city sewer. Skimmed oil from oil-water separation is transferred to one of the two storage tanks (Tanks 7 and Tanks 8) to begin the process of dewatering and preparation of resale. The used oil is then transferred to one of the two cook tanks (Tanks 4 & 5) where the oil is heated to remove water. After dewatering, the reclaimed oil is transferred to one of the saleable oil storage tanks (Tanks 9 & 10) where the used oil accumulates until sold and transferred to tanker trucks.



**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                  |
|---------------|------------------------------------------|-------------------------------------|
| 27457         | Fox Manufacturing Inc.                   | 12333 Schaefer Rd. Detroit MI 48227 |

| <u>Permits</u> | <u>Raw Materials</u>                       | <u>Limits</u>        |
|----------------|--------------------------------------------|----------------------|
| `005-27457-IU  | Sodium hydroxide, potassium hydroxide etc. | 01 LOC. Local Limits |

| <u>Flow Rate</u>                       |
|----------------------------------------|
| 01 Process Wastewater Batch 325.00 gpd |

Process Description

The process consists of compounding of dish wash detergents. The process includes mixing and blending of chemicals, which include sodium hydroxide, potassium hydroxide, sodium hypochlorite, sodium tri-polyphosphate, and other miscellaneous surfactants. Wastewater generated from washing the vessels is collected in a tank, adjusted for pH and treated with sodium thiosulfate prior to discharging into the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |         |          |
|---------------|------------------------------------------|---------------------|---------|----------|
| 27425         | Fresh-Pak, Inc                           | 7939 West Lafayette | Detroit | MI 48209 |

| <u>Permits</u> | <u>Raw Materials</u>  | <u>Limits</u>        |
|----------------|-----------------------|----------------------|
| 004111         | Fresh Vegetable       | 01 LOC. Local Limits |
|                | Fresh Fruits          | 02 LOC. Local Limits |
|                | Food grade detergents |                      |
|                | Quorum Yellow         |                      |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Process Wastewater        | Continuous | 55,000.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 400.00    | gpd |
| 02               | Sanitary Wastewater       | Continuous | 1,600.00  | gpd |
| 02               | Process Wastewater        | Continuous | 45,000.00 | gpd |

Process Description

The company is engaged in the business of fresh vegetable processing, packing and distribution. The process includes cutting, peeling, and washing of whole fruits and vegetables. The finished product is then inspected, packed, boxed and stored in the cooler before shipping to the customers.

The process wastewater is generated from vegetables/fruits cleaning, rinsing of process lines, equipment cleaning and floor washing. It has two (2) process lines from which wastewater after treatment is discharged into SL#1 & SL#2 respectively. The wastewater treatment consists of screening of large particles, grinding of vegetable particles and settling. The supernatant water is discharged to sewer system.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| 92614         | GST AutoLeather, Inc.                    | 31601 Industrial Road<br>Livonia MI 48150 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00692614IU4    | Hides, paint         | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |              |
|------------------|---------------------------|------------|--------------|
| 01               | Sanitary Wastewater       | Continuous | 440.00 gpd   |
| 01               | Process Wastewater        | Continuous | 1,700.00 gpd |
| 01               | Non-contact Cooling Water | Continuous | 100.00 gpd   |

Process Description

The hides are received from vendors, shaved to desired thickness to assure uniformity and subjected to various processes, which include:

- a. Retan: The hides are colored and fat liquors are added.
- b. Stretching: The hides are stretched to get rid of wrinkles and then dried in gas oven.
- c. Softening: The hides are put in mills for softening of fibers.
- d. Roll Finish; Base Coat: The hides are fed via a conveyor through a master cylinder. The base coat is applied and the hides are dried in gas oven.
- e. Emboss: The hides are fed between two rollers under heat and pressure and a texture (grain) is added to the leather.
- f. The stretching and softening processes are repeated.
- g. Spray Finish; Base/Color: The hides are fed via a conveyor through a spray machine. The base/ color coat is applied and the hides are dried in gas oven.
- h. Spray Finish; Top Coat: The hides are fed via a conveyor through a spray machine. Top coat is applied and hides are then dried in gas oven.
- i. Final inspection: The hides are inspected for color/grain/gloss/defects prior to shipment.

The wastewater generated from the retan process, paint spray line and washing of drums is directed to an equalization tank where it is adjusted for pH prior to discharge into public sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                    |
|---------------|------------------------------------------|---------------------------------------|
| 93625         | Garden City Hospital                     | 6245 Inkster Rd. Garden City MI 48135 |

| <u>Permits</u> | <u>Raw Materials</u>                                 | <u>Limits</u>        |
|----------------|------------------------------------------------------|----------------------|
| 00693625IU3    | patients care<br>X-ray<br>Food Service<br>Laboratory | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 28,220.00 | gpd |
| 01               | Process Wastewater        | Continuous | 22,302.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 3,000.00  | gpd |
| 01               | Boiler Blowdown           | Continuous | 500.00    | gpd |

Process Description

Operations in the facility consist of general/specialized health care services. Process wastewater is generated from patient care, x-ray services, kitchen/cafeteria and laboratories. Process wastewater from x-ray film developer and kitchen/cafeteria is only pretreated. Pretreatment in the facility consists of the following:

- Silver Recovery: The silver is recovered from spent fixers by ionic exchange method.
- Fats, oil and Grease (FOG) Removal: Wastewater from kitchen/cafeteria is passed through grease traps in order to reduce FOG.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                  |              |
|---------------|------------------------------------------|--------------------|------------------|--------------|
| 87848         | General Dynamics Land Systems            | 38500 Mound Road   | Sterling Heights | MI 483103200 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15187848IU2    |                      | 01 433.A.17a (PSNS) Metal Finishing |
|                |                      | 02 LOC. Local Limits                |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 02               | Sanitary Wastewater | None       | 25,000.00 | gpd |
| 02               | Process Wastewater  | Continuous | 2,700.00  | gpd |

Process Description

The process includes system integration, prototype building modification, painting, maintenance and testing. The prototype shop consists of water jet cutter tables with a three stage sedimentation tanks and a three stage parts preparation process bath. The effluent generated from combat vehicle maintenance area passes through an oil water separator and the two grease traps in the cafeteria contribute to the total wastewater from the facility. There is no effluent discharge from the metal finishing operation and the rinse water generated is hauled off site.

The process includes system integration, prototype building modification, painting, maintenance and testing. The prototype shop consists of water jet cutter tables with a three stage sedimentation tanks and a three stage parts preparation process bath. The effluent generated from combat vehicle maintenance area passes through an oil water separator and the two grease traps in the cafeteria contribute to the total wastewater from the facility. There is no effluent discharge from the metal finishing operation and the rinse water generated is hauled off site.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                               |
|---------------|------------------------------------------|--------------------------------------------------|
| 27318         | General Linen and Uniform Service        | 1016 E. Palmer Street<br>Detroit<br>MI 482112522 |

| <u>Permits</u> | <u>Raw Materials</u>                              | <u>Limits</u>        |
|----------------|---------------------------------------------------|----------------------|
| 00327318IU3    | uniforms and linens from hospital and restaurants | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 2,600.00  | gpd |
| 01               | Process Wastewater        | Continuous | 64,900.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 5,000.00  | gpd |

Process Description

The process involves sorting, laundering, drying, packaging and shipping. No dry cleaning is done at the facility. The process wastewater is generated from the washing operations. The wastewater from the washers is piped directly to the settling/pretreatment pit where the lint/rags are removed by screen after which the filtrate is piped to a system of heat exchangers. Other process streams from boiler blow downs, water softeners, air compressors and minimal amounts from ice machines, hot water tanks etc. are piped into a catch basin. The catch basin materials are also pumped into the settling pit and the adjoining heat exchanger system. The heat exchangers ensure that adequate temperatures are maintained throughout the operation which operates in a closed loop manner. Removal of lint/rags and the pH adjustment constitute the wastewater pretreatment system. The facility flow [with the exception of sanitary flow] is metered through the newly installed "flow proportional meter" and a weir tank. It is estimated that about 22% of the water supply to the facility is lost in evaporation.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                  |
|---------------|------------------------------------------|-----------------------------------------------------|
| 93969         | General Motors Company                   | 2500 East General Motors Boule Detroit MI 482112002 |

| <u>Permits</u> | <u>Raw Materials</u>                        | <u>Limits</u>                                               |
|----------------|---------------------------------------------|-------------------------------------------------------------|
| 15393969IU     | Automotive parts for assembly into vehicles | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |                |
|------------------|--------------------|------------|----------------|
| 01               | Process Wastewater | Batch      | 421,407.00 gpd |
| 01               | Other              | Continuous | 18,475.00 gpd  |

Process Description

The manufacturing process includes welding, soldering, grinding of parts for autobodies; phosphating, Elpo prime dip, painting spraying, wet sanding, application of deadeners and sealers and final assembly. Wastewater is generated mainly from the phosphating and Elpo prime dip processes, body washing, parts washing, floor scrubbing and non-contact cooling. All of the generated wastewater (except non-contact cooling water) undergoes chemical precipitation, settling, flocculation, clarification and neutralization before discharging to the City sewer system.

# Facility Name: Detroit Water & Sewerage

# NPDES Permit #: MI 0022802

| SIU ID | Significant Industrial User (SIU)   | SIU Address        |            |          |
|--------|-------------------------------------|--------------------|------------|----------|
| 93957  | General Motors LLC., Orion Assembly | 4555 Giddings Road | Lake Orion | MI 48359 |

| Permits      | Raw Materials                                                                                                                                                | Limits                                                      |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 157-93957-IU | Paints & Coatings, Metal pre-treatment<br>Chemicals,<br>Sealers, Adhesives, Solvents,<br>Automotive fluids,<br>Cleaning chemicals, Oils, Lubricants,<br>Coal | 01 LOC. Local Limits<br>02 433.A.15a (PSES) Metal Finishing |

| Flow Rate |                     |            |            |     |
|-----------|---------------------|------------|------------|-----|
| 01        | Sanitary Wastewater | Continuous | 26,560.00  | gpd |
| 01        | Process Wastewater  | Continuous | 143,068.00 | gpd |
| 01        | Stormwater/Rain     | Continuous | 7,600.00   | gpd |
| 02        | Process Wastewater  | Batch      | 150,668.00 | gpd |

## Process Description

The processes include welding, soldering, and grinding of automobile parts, alkaline cleaning, pretreatment (hexafluorozirconic acid coating - conversion coating) and elpo dip (electro deposition coating), oven heating, robotic sealing, sound deadener application and painting (prime, base and clear coat) of vehicle bodies. The paints used by the facility are both waterborne and solvent based. The facility's processes also include vehicle assembly and testing. Alkaline cleaning, pretreatment and electro deposition coating operations include several spray and emergent rinses. Wastewater generated is treated in batches in the WTP by oil skimming, plain and chemical clarification. The pretreatment process also includes pH adjustment, flocculation, settling, sludge thickening, conditioning and filtration.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>   | <u>SIU Address</u>       |                |                 |
|---------------|--------------------------------------------|--------------------------|----------------|-----------------|
| <b>93953</b>  | <b>General Motors LLC., Romulus Engine</b> | <b>36880 Ecorse Road</b> | <b>Romulus</b> | <b>MI 48174</b> |

| <u>Permits</u> | <u>Raw Materials</u>                                      | <u>Limits</u>        |
|----------------|-----------------------------------------------------------|----------------------|
| 00693953IU3    | Cast iron, Steel, Aluminum, Coolants<br>,Oils<br>Polymers | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Process Wastewater        | Batch      | 49,000.00 | gpd |
| 01               | Sanitary Wastewater       | Continuous | 24,000.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 82,000.00 | gpd |

Process Description

The process includes machining of engine components, blocks, heads, and cranks, from cast iron and aluminum castings. Coolants or oils are used for these machining activities. Parts are cleaned in hot parts washers using alkaline solution with rust inhibiting properties. Spent alkaline washer solution is pumped to the coolant system, which is eventually discharged to the Detroit Sewer after Pre-treatment.

Process wastewater is pumped into one of four 200,000-gallon treatment tanks at the waste treatment plant. Air is introduced for homogeneity. Polymer and alum are added if necessary and pH is adjusted if required. After allowing the batch to settle for oil-water separation, the oil layer is transferred to another tank for more oil-water separation. A Jar test is conducted to determine the optimum amount of chemicals to be added every time a batch is pre-treated. The process includes machining of engine components, blocks, heads, and cranks, from cast iron and aluminum castings. Coolants or oils are used for these machining activities. Parts are cleaned in hot parts washers using alkaline solution with rust inhibiting properties. Spent alkaline washer solution is pumped to the coolant system, which is eventually discharged to the Detroit Sewer after Pre-treatment.

Process wastewater is pumped into one of four 200,000-gallon treatment tanks at the waste treatment plant. Air is introduced for homogeneity. Polymer and alum are added if necessary and pH is adjusted if required. After allowing the batch to settle for oil-water separation, the oil layer is transferred to another tank for more oil-water separation. A Jar test is conducted to determine the optimum amount of chemicals to be added every time a batch is pre-treated.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>      |                |                     |
|---------------|------------------------------------------|-------------------------|----------------|---------------------|
| <b>27256</b>  | <b>Global Titanium</b>                   | <b>19300 Filer Road</b> | <b>Detroit</b> | <b>MI 482342881</b> |

| <u>Permits</u> | <u>Raw Materials</u>     | <u>Limits</u>                    |
|----------------|--------------------------|----------------------------------|
| 002078         | Titanium Alloy and scrap | 01 LOC. Local Limits             |
|                | Caustic Soda             | 01 421.AB.305m (PSES) Nonferrous |
|                | Polymer                  | Metals Manufacturing             |
|                |                          | 04 LOC. Local Limits             |

| <u>Flow Rate</u> |                       |            |           |     |
|------------------|-----------------------|------------|-----------|-----|
| 01               | Process Wastewater    | Continuous | 7,213.00  | gpd |
| 01               | Process Wastewater    | Continuous | 11,275.00 | gpd |
| 04               | Contact Cooling Water | Continuous | 1,331.00  | gpd |

Process Description

The recycling process primarily consists of crushing, cleaning, rinsing, drying, sorting, and packaging titanium filings. The facility pre-treats and discharges more than 25,000 gpd of pH neutralized process wastewater into DWSD sewer.

Pretreatment consists of: High pH soap solution which is pumped into a holding tank where the pH is adjusted using sulfuric acid. Solution is then discharged over an indexing filter media to remove solids and oils prior to discharge into the sewer

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| 94056         | Greenblendz Inc.                         | 4520 Glenmeade Lane Auburn Hills MI 48326 |

| <u>Permits</u> | <u>Raw Materials</u>                                              | <u>Limits</u>        |
|----------------|-------------------------------------------------------------------|----------------------|
| 00794056IU1    | Surfactants<br>Sodium Hydroxide<br>Deionized water<br>Citric acid | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |            |
|------------------|---------------------|------------|------------|
| 01               | Sanitary Wastewater | Continuous | 500.00 gpd |
| 01               | Process Wastewater  | Batch      | 600.00 gpd |

Process Description

The process consist of mixing and blending of various raw material such as surfactant, sodium hydroxide, citric acid with deionized water in mixing vessels to manufacture various soap, detergents, cleaning compounds and personal care items. Wastewater generated from washing of mixing/blending tanks and bucket. Its pH is adjusted prior to discharge into the sewer system.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                |
|---------------|------------------------------------------|---------------------------------------------------|
| 93624         | Grosse Pointe Farms Water Filtration P   | 29 Moross Road<br>Grosse Pointe Farm MI 482363161 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 002-93624-IU   |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                |
|---------------------------------|
| 01 Process Wastewater Batch gpd |

Process Description

The facility draws water from Lake St. Claire and treats it through coagulation, settling, gravity filtration, chlorination, fluoridation and ultraviolet disinfection. The process also includes sludge settling and filter backwash

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>           |
|---------------|------------------------------------------|------------------------------|
| 79136         | H & S Inspection Service, Inc.           | 422 Oliver Dr. Troy MI 48084 |

| <u>Permits</u> | <u>Raw Materials</u>  | <u>Limits</u>                       |
|----------------|-----------------------|-------------------------------------|
| 157-79136-IU   | Stainless steel parts | 01 LOC. Local Limits                |
|                |                       | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |              |
|------------------|--------------------|------------|--------------|
| 01               | Process Wastewater | Continuous | 3,379.00 gpd |

Process Description

Process includes magnetic particle inspection, fluorescent penetrant inspection, surface temper inspection, alkaline parts cleaning and passivation. In the fluorescent penetrant process, parts are immersed in penetrant and drained to recapture the penetrant. The parts are then rinsed with water, applied with developer and then inspected. In the passivating process, stainless steel parts are pre-cleaned using an ultrasonic alkaline cleaning system, rinsed with water, immersed in nitric acid solution and final rinsed. Wastewater from process rinsing operations is directly discharged into the sewer without pretreatment.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                |
|---------------|------------------------------------------|-----------------------------------|
| 93991         | HHI FormTech, LLC                        | 690 W Maple Road<br>Troy MI 48084 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                               |
|----------------|----------------------|-------------------------------------------------------------|
| 15793991IU2    | Steel parts          | 01 LOC. Local Limits<br>01 433.A.15a (PSES) Metal Finishing |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 41,613.00 gpd |

Process Description

Round steel bar stocks are cut, heat treated, shot blasted, coated with zinc phosphate and zinc stearate or polymer, and cold forged, depending on shape and property desired in the product.

The zinc phosphate process consists of alkaline cleaning, sulfuric acid pickling and zinc phosphate coating operations. Wastewater from phosphating line is treated by pH adjustment and mixing with polymer/electrolyte, and by clarification in a lamella settler prior to discharging into sewer.

The sludge from the settler is thickened and filtered where the filtrate is sent back to start of the treatment process. Filter cakes are dried and sent off-site for land-filling. Facility started operations in 1950.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>     |           |          |
|---------------|------------------------------------------|------------------------|-----------|----------|
| 92367         | HHI-FormTech LLC - Royal Oak             | 2727 West 14 Mile Road | Royal Oak | MI 48073 |

| <u>Permits</u> | <u>Raw Materials</u>   | <u>Limits</u>        |
|----------------|------------------------|----------------------|
| 00992367IU4    | steel billets and bars | 01 LOC. Local Limits |
|                |                        | 02 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 4,100.00  | gpd |
| 01               | Process Wastewater        | Continuous | 36.00     | gpd |
| 01               | Contact Cooling Water     | Continuous | 377.00    | gpd |
| 01               | Non-contact Cooling Water | Continuous | 6,837.00  | gpd |
| 02               | Sanitary Wastewater       | Continuous | 220.00    | gpd |
| 02               | Process Wastewater        | Continuous | 327.00    | gpd |
| 02               | Contact Cooling Water     | Continuous | 3,393.00  | gpd |
| 02               | Non-contact Cooling Water | Continuous | 61,538.00 | gpd |

Process Description

The process involves induction heating up to 21000 F and cutting of cold rolled, steel billets and bars. Heated parts are sheared and forged into automotive and industrial parts followed by final cooling involving contact and noncontact processes. The facility generates wastewater from the process operations, which include contact cooling, power washing and floor scrubbing. The process wastewater gets sewer discharged after pretreatments. The pretreatments include rope skimming and oil water separation.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                    |
|---------------|------------------------------------------|---------------------------------------|
| 27539         | Hajjar Plating Services, Inc.            | 38300 Van Born Rd. Wayne MI 481841551 |

| <u>Permits</u> | <u>Raw Materials</u>                                  | <u>Limits</u>                                                                                                                  |
|----------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 02627539IU2    | Automotive bumpers, caustic<br>electro-cleaning, acid | 01 LOC. Local Limits<br>01 413.A.14f (PSES) Electroplating<br><10,000 gpd<br>01 413.A.14b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u>                              |
|-----------------------------------------------|
| 01 Sanitary Wastewater Continuous 200.00 gpd  |
| 01 Process Wastewater Continuous 1,230.00 gpd |

Process Description

The process consists of bumper repair, chrome stripping, polishing and buffing, caustic pre-soaking, caustic electro-cleaning, acid cleaning, and nickel/chrome plating. Process wastewater generated from water rinsing is neutralized in an automated pH adjustment system before it is discharged to the sewer.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |         |          |
|---------------|------------------------------------------|--------------------|---------|----------|
| 96087         | Harper Hutzell Hospital, Inc.            | 3990 John R Street | Detroit | MI 48201 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00896087IU2    |                      | 01 LOC. Local Limits |
|                |                      | 02 LOC. Local Limits |
|                |                      | 03 LOC. Local Limits |
|                |                      | 04 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 29,166.00 | gpd |
| 01               | Process Wastewater        | Continuous | 48,269.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 466.00    | gpd |
| 02               | Sanitary Wastewater       | Continuous | 29,166.00 | gpd |
| 02               | Process Wastewater        | Continuous | 48,269.00 | gpd |
| 02               | Non-contact Cooling Water | Continuous | 466.00    | gpd |
| 03               | Sanitary Wastewater       | Continuous | 29,166.00 | gpd |
| 03               | Process Wastewater        | Continuous | 48,269.00 | gpd |
| 03               | Non-contact Cooling Water | Continuous | 466.00    | gpd |
| 04               | Sanitary Wastewater       | Continuous | 10,000.00 | gpd |
| 04               | Process Wastewater        | Continuous | 25,000.00 | gpd |

Process Description

The process wastewater is generated from patient care, laboratories, kitchen/cafeteria and housekeeping operations. The facility's wastewater from kitchen/cafeteria is passed through grease traps for removing grease and oil. Also, the facility adds enzymes to grease traps to dissolve grease after manually pumping out grease by a licensed hauler.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                              |
|---------------|------------------------------------------|-----------------------------------------------------------------|
| 27740         | Henkel Corporation                       | 32100 Stephenson Highway      Madison Heights      MI 480711096 |

| <u>Permits</u> | <u>Raw Materials</u>                           | <u>Limits</u>                                                                            |
|----------------|------------------------------------------------|------------------------------------------------------------------------------------------|
| 159006         | chemical compounds for formulating<br>cleaners | 01    LOC. Local Limits<br>01    433.A.15a (PSES) Metal Finishing<br>01    PHEN. Phenols |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 8,000.00  | gpd |
| 01               | Process Wastewater        | Continuous | 11,000.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 5,200.00  | gpd |

Process Description

The facility develops alkaline and acid-base cleaners used for surface treatment of metals and plastics. The process involves bench/pilot scale chemical coating operations used in the metal finishing industry. No manufacturing takes place at this facility. Wastewater generated is adjusted for pH before passing it through a process of chrome reduction followed by one of flocculation, precipitation and filtration.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                   |
|---------------|------------------------------------------|------------------------------------------------------|
| 27601         | Henry Ford Hospital                      | 2799 West Grand Boulevard      Detroit      MI 48202 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                                                 |
|----------------|----------------------|-------------------------------------------------------------------------------|
| 00827601IU     | Patients care        | 01    LOC. Local Limits<br>03    LOC. Local Limits<br>04    LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Sanitary Wastewater       | Continuous | 37,737.00  | gpd |
| 01               | Process Wastewater        | Continuous | 104,442.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 4,982.00   | gpd |
| 03               | Sanitary Wastewater       | Continuous | 83,601.00  | gpd |
| 03               | Process Wastewater        | Continuous | 224,731.00 | gpd |
| 03               | Non-contact Cooling Water | Continuous | 11,038.00  | gpd |
| 03               | Boiler Blowdown           | Continuous | 13,149.00  | gpd |
| 04               | Sanitary Wastewater       | Continuous | 36,162.00  | gpd |
| 04               | Process Wastewater        | Continuous | 97,208.00  | gpd |

Process Description

The facility's process consists of patient care services, X-ray film development, kitchen and cafeteria operations, morgue, laboratories, physical therapy and housekeeping.

The facility's pretreatment system consists of silver recovery units, grease traps and chemical neutralization

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                           |
|---------------|------------------------------------------|--------------------|---------------------------|
| 27172         | Henry Ford Macomb Hospital               | 15855 19 Mile Road | Clinton Township MI 48038 |

| <u>Permits</u> | <u>Raw Materials</u>                  | <u>Limits</u>        |
|----------------|---------------------------------------|----------------------|
| 001-27172-IU   | Hospital<br>Lab & Radiology chemicals | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 50,000.00 | gpd |
| 01               | Process Wastewater        | Continuous | 37,000.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 500.00    | gpd |
| 01               | Boiler Blowdown           | Continuous | 500.00    | gpd |

Process Description

The process wastewater generating operations are laboratory, kitchen, radiology, morgue, patient care and housekeeping.

The process wastewater generated from the kitchen is pretreated (grease separation), and that generated from the radiology is pretreated (silver recovery) prior to discharge continuously into the City sewer system. However, the process wastewater generated from the remaining sections is discharged continuously into the City sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| 93795         | Henry Ford West Bloomfield Hospital      | 6777 W. Maple<br>West Bloomfield MI 48322 |

| <u>Permits</u> | <u>Raw Materials</u>            | <u>Limits</u>                                |
|----------------|---------------------------------|----------------------------------------------|
| 00993795IU     | Lab Chemicals- General Hospital | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 12,500.00 | gpd |
| 01               | Boiler Blowdown     | Continuous | 212.00    | gpd |
| 01               | Process Wastewater  | Continuous | 56,540.00 | gpd |
| 02               | Sanitary Wastewater | Continuous | 12,500.00 | gpd |
| 02               | Process Wastewater  | Continuous | 56,540.00 | gpd |

Process Description

Wastewater is generated from patient care, clinical lab testing, housekeeping, Kitchen and cafeteria services. The wastewater from the kitchen and cafeteria is passed through grease traps to catch and remove FOG from the flow.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                       |
|---------------|------------------------------------------|------------------------------------------|
| 27581         | Honhart Mid-Nite Black Co.               | 501 Stephenson Highway Troy MI 480831118 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15727581IU3    | Caustic              | 01 LOC. Local Limits                |
|                |                      | 01 433.A.15a (PSES) Metal Finishing |
|                |                      | 01 PHEN. Phenols                    |

| <u>Flow Rate</u> |                     |            |              |
|------------------|---------------------|------------|--------------|
| 01               | Sanitary Wastewater | Continuous | 175.00 gpd   |
| 01               | Process Wastewater  | Continuous | 5,000.00 gpd |

#### Process Description

##### PROCESS DESCRIPTION

Parts are (a) cleaned in alkaline solution, (b) rinsed in water, (c) cleaned in acid solution (if needed), (d) rinsed (if needed), (e) black oxidized, (f) rinsed in cold water, (g) rinsed in hot water, and (h) finally dipped in water soluble oil. The process also includes tumbling of manufactured parts. Most of the parts are made of steel.

Wastewater is generated from the overflow rinses of the alkaline and/or acid cleaning and black oxidizing operations.

Process wastewater flows through a pH neutralization system prior to sewer discharge.

Company is in the process of confirming constant flow rate for time sampling.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 93968         | Houghton International, Inc.             | 9100 Freeland Avenue<br>Detroit<br>MI 48228 |

| <u>Permits</u> | <u>Raw Materials</u>                                                               | <u>Limits</u>        |
|----------------|------------------------------------------------------------------------------------|----------------------|
| 00593968IU1    | Detergents, surfactants, additives with petroleum lubrication based oils, polymers | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |              |
|------------------|---------------------|------------|--------------|
| 01               | Sanitary Wastewater | Continuous | 1,250.00 gpd |
| 01               | Process Wastewater  | Continuous | 5,968.00 gpd |
| 01               | Other               | Continuous | 8,158.00 gpd |
| 01               | Boiler Blowdown     | Continuous | 6,760.00 gpd |

Process Description

The process consists of mixing and blending of various types of detergents, surfactants and additives with petroleum lubrication based oils to produce coolants. The wastewater generated from cleaning of equipment, truck and floor is run through oil/water separator to remove floating oil. The oil free overflow from the separators flows by gravity into newly erected pretreatment system before discharging into the sewer system. The underground separator is bypassed from the new treatment system and is only used during rainy season to store water to avoid flooding of the treatment system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                           |
|---------------|------------------------------------------|----------------------------------------------|
| 27621         | Howard Finishing, LLC                    | 32565 Dequindre Madison Heights MI 480711520 |

| <u>Permits</u> | <u>Raw Materials</u>      | <u>Limits</u>                       |
|----------------|---------------------------|-------------------------------------|
| 02927621IU3    | auto parts from customers | 03 LOC. Local Limits                |
|                |                           | 03 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 03               | Sanitary Wastewater | Continuous | 4,300.00 gpd  |
| 03               | Process Wastewater  | Continuous | 37,000.00 gpd |

Process Description

The process operations are alkaline cleaning, pickling, phosphating and electro-deposition painting of steel parts. Phosphating uses zinc phosphate, and the paints used in the process are water-based. The process operations have associated rinses. Wastewater is generated from the rinsing stages associated with the process operations. The wastewater pretreatment includes equalization, neutralization, precipitation, flocculation, clarification, and filtration. Clarifier sludge is dewatered and the resulting filtrate is recycled through the pretreatment system.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |           |          |
|---------------|------------------------------------------|--------------------|-----------|----------|
| 93797         | Howard Finishing, LLC - Roseville        | 15765 Sturgeon     | Roseville | MI 48066 |

| <u>Permits</u> | <u>Raw Materials</u>         | <u>Limits</u>                      |
|----------------|------------------------------|------------------------------------|
| 02193797IU2    | Zn, Ni, Cr , acids & caustic | 01 LOC. Local Limits               |
|                |                              | 01 413.A.14g (PSES) Electroplating |
|                |                              | 01 413.E.54g (PSES) Electroplating |
|                |                              | 01 413.A.14c (PSES) Electroplating |
|                |                              | 01 413.E.54c (PSES) Electroplating |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 2,400.00  | gpd |
| 01               | Process Wastewater  | Continuous | 71,900.00 | gpd |

Process Description

## PROCESS DESCRIPTION

The facility has three lines:

1. Zinc plating line: parts are alkaline cleaned, rinsed, acid pickled with HCl, rinsed, zinc plated, rinsed, chromate converted, rinsed and dried.
2. Nickel/chrome plating line: parts are alkaline cleaned, rinsed, acid cleaned with H<sub>2</sub>SO<sub>4</sub>, nickel strike plated, rinsed, nickel plated and rinsed four times.
3. Chrome flash plating line: parts are alkaline cleaned, rinsed, chrome plated and rinsed four times.

The facility's pretreatment system involves pH adjustment, chrome reduction, flocculation and clarification.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                               |
|---------------|------------------------------------------|--------------------------------------------------|
| 27480         | Hughes Electronics Products Corp.        | 34467 Industrial Road<br>Livonia<br>MI 481501308 |

| <u>Permits</u> | <u>Raw Materials</u>   | <u>Limits</u>                                                                                                                                                                                                                                                    |
|----------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 02627480IU3    | Circuit boards, Metals | 01 LOC. Local Limits<br>01 413.H.84f (PSES) Electroplating<br><10,000 gpd<br>01 413.H.84b (PSES) Electroplating<br><10,000 gpd<br>02 LOC. Local Limits<br>02 413.H.84f (PSES) Electroplating<br><10,000 gpd<br>02 413.H.84b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u> |                    |            |            |
|------------------|--------------------|------------|------------|
| 01               | Process Wastewater | Batch      | 200.00 gpd |
| 02               | Process Wastewater | Continuous | 200.00 gpd |

Process Description

Processes consist of board shearing, drill, press, Cu deposition, rinsing, laminating the board with photo sensitive film, rinsing, imaging and developing, rinsing (SL#2). The boards are then electroplated with Cu & Sn, rinsed, then Cu & Sn are removed chemically, and rinsed. The boards are then coated with solder by dipping in a hot solder bath, rinsed, silk screened and board routed. The solder is then removed, and the boards are electroplated with Ni, and Au, and tested electrically. The solder solution consists of 63% Sn, and 37% pb.

The wastewater generated from the rinsing operations, except the rinse after imaging and developing, is pre-treated and discharged into the city sewer system through SL #1. The pretreatment system consists of pH adjustment, chemical addition for flocculation, settling, and filtration via filter press. The wastewater generated from imaging and developing is discharged into the sewer system through SL #2 without any pretreatment.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                 |
|---------------|------------------------------------------|----------------------------------------------------|
| 92314         | IDP Inc.                                 | 21300 West Eight Mile Road Southfield MI 480755638 |

| <u>Permits</u> | <u>Raw Materials</u>    | <u>Limits</u>                       |
|----------------|-------------------------|-------------------------------------|
| 15992314-IU    | Steel bars and tubing   | 01 LOC. Local Limits                |
|                | iron phosphate solution | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |            |
|------------------|---------------------|------------|------------|
| 01               | Sanitary Wastewater | Continuous | 680.00 gpd |
| 01               | Process Wastewater  | Continuous | 722.00 gpd |

Process Description

The process consists of the following operations:

- Cutting of steel bars and tubing which are welded together to make steel security doors.
- Cleaning of doors in an iron phosphate solution and rinsing with water in a three-stage washer.
- Powder coating and curing of door parts.
- Cleaning and painting of door frames.

Wastewater is generated from the rinsing of parts. The wastewater flows by gravity into a sump which settles out of solids. The supernatant is pumped into public sewers. The pretreatment section is used only when the facility has sufficient orders for painting during the course of the year.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                              |
|---------------|------------------------------------------|-----------------------------------------------------------------|
| 92264         | IHI Ionbond, L.L.C.                      | 1823 E. Whitcomb Avenue      Madison Heights      MI      48071 |

| <u>Permits</u> | <u>Raw Materials</u>      | <u>Limits</u>                                                                                                                          |
|----------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 159-92264-IU   | parts of customer's tools | 01    LOC. Local Limits<br>01    433.A.17a (PSNS) Metal Finishing<br>02    LOC. Local Limits<br>02    433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 01               | Process Wastewater        | Continuous | 5,367.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 50.00    | gpd |
| 02               | Process Wastewater        | Continuous | 3,807.00 | gpd |
| 02               | Non-contact Cooling Water | Continuous | 50.00    | gpd |

Process Description

The facility's process consists of alkaline cleaning, chemical etching and coating. In-coming parts are alkaline cleaned, degreased and rinsed; final rinsing uses de-ionized water. Some parts, because they are rusty or heat-treated, are dry blasted to remove rust and other stubborn residues from the surface. The parts are strip cleaned with hydrogen peroxide/ammonium hydrogendifluoride when they need recoating. Clean parts are blow dried with heated nitrogen and then placed on fixture and run through the CVD/PVD coating chambers for producing thin films of wear resistant coatings on the parts. Coating materials are metals or ceramic. Acidic fumes produced from the coating chambers are captured in caustic scrubbers, neutralized, and discharged into the sewer along with the alkaline cleaning/rinse wastewater from the process.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 27420         | Industrial Metal Coating                 | 6070 18 Mile Road Sterling Heights MI 48314 |

| <u>Permits</u> | <u>Raw Materials</u>       | <u>Limits</u>                       |
|----------------|----------------------------|-------------------------------------|
| 15127420IU     | Coating/Painting solutions | 01 LOC. Local Limits                |
|                | Caustic Soda               | 01 433.A.17a (PSNS) Metal Finishing |
|                | Polymer                    |                                     |
|                | automotive parts           |                                     |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 12,766.00 gpd |

Process Description

Steel parts are alkaline cleaned, rinsed, conditioned, zinc phosphated, rinsed with fresh water and then with deionized water, electro-coated, rinsed, baked, cooled, packed and shipped out. Some of the rinsing water is generated from the de-ionizing system or from a reverse osmosis system.

Process wastewater is generated from the rinsing operations stated above. The process wastewater is pretreated before discharge. The pretreatment system includes pH adjustment, flocculation, and filtration.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                             |
|---------------|------------------------------------------|------------------------------------------------|
| 27215         | Industrial Metal Finishing Company       | 6070 18 Mile Road<br>Sterling Heights MI 48314 |

| <u>Permits</u> | <u>Raw Materials</u>                                            | <u>Limits</u>        |
|----------------|-----------------------------------------------------------------|----------------------|
| 00127215IU1    | Deburring solutions<br>Caustic Soda<br>Acid<br>automotive parts | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                    |            |              |
|------------------|--------------------|------------|--------------|
| 01               | Process Wastewater | Continuous | 4,700.00 gpd |

Process Description

Steel parts are deburred in vibratory deburring machines, which contain alkaline cleaner, rust inhibitor and small ceramic stones. The wastewater generated from the deburring process undergoes oil/water separation and settling before discharge to the sewer.

Some parts are alkaline cleaned in parts washers. The process wastewater generated from the alkaline cleaning, also undergoes oil/water separation and settling before discharge to the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <b>SIU ID</b> | <b>Significant Industrial User (SIU)</b> | <b>SIU Address</b>           |                    |                 |
|---------------|------------------------------------------|------------------------------|--------------------|-----------------|
| <b>27504</b>  | <b>International Extrusions, Inc.</b>    | <b>32800 Industrial Road</b> | <b>Garden City</b> | <b>MI 48135</b> |

| <u>Permits</u> | <u>Raw Materials</u>                | <u>Limits</u>                       |
|----------------|-------------------------------------|-------------------------------------|
| 17627504IU3    | Alkaline and acidic cleaning agents | 01 LOC. Local Limits                |
|                | Gardoclean S5699, Permatreat 617 M  | 01 467.C.36c.Cleaning or Etching Ri |
|                | aluminum billets                    | (PSNS) Aluminum Forming             |
|                |                                     | 02 LOC. Local Limits                |
|                |                                     | 02 467.C.36c.Cleaning or Etching Ba |
|                |                                     | (PSNS) Aluminum Forming             |
|                |                                     | 03 LOC. Local Limits                |
|                |                                     | 03 467.C.36c.Cleaning or Etching Ba |
|                |                                     | (PSNS) Aluminum Forming             |
|                |                                     | 04 LOC. Local Limits                |
|                |                                     | 04 467.C.36c.Cleaning or Etching Ri |
|                |                                     | (PSNS) Aluminum Forming             |

| <u>Flow Rate</u> |                    |              |           |     |
|------------------|--------------------|--------------|-----------|-----|
| 01               | Process Wastewater | Continuous   | 11,072.00 | gpd |
| 02               | Process Wastewater | Intermittent |           | gpd |
| 03               | Process Wastewater | Batch        |           | gpd |
| 04               | Process Wastewater | Batch        |           | gpd |

Process Description

Aluminum extruded products are processed at the Painting section of the facility. The aluminum extrusions are surface treated prior to painting. The surface treatment includes alkaline cleaning, double rinsing and pre-coating/etching. Alkaline cleaning (Tank 1) double rinsing (Tanks 2 & 3) and pre-coating/etching (Tank 4) are carried out in four tanks in series. Facility uses Gardoclean S5661 in the chemical cleaning tank and Permatreat 617 M in the precoat/etching tank. Tanks 1 & 4 are completely closed loop system and tanks 2 & 3 have overflows. After pre-coating, parts are dried and painted in the painting section with powder paints.

The process wastewater consists of rinse tank overflow and spent bath solutions. The daily overflow from the rinse tanks is discharged continuously into the sewer system. Alkaline cleaning spent bath, etching/precoating spent bath will have to be discharged once every four years or on an emergency if the bath gets contaminated/saturated. with a separate authorization letter.

Aluminum extruded products are processed at the Painting section. Aluminum extrusions are surface treated prior to painting. The surface treatment is carried out in four (4) tanks in series (Tanks 1 - 4). The surface treatment includes acid cleaning (Tank 1), rinsing (Tank 2), rinsing (Tank 3) and pre-coating/etching (Tank 4). Rinse Tank 3 uses fresh water and the rinse overflow from Tank 3 is fed to Tank 2 for first rinsing of acid cleaned parts. Overflow from Tank 2 is discharged into sewer daily through a sump, flow meter and sampling location.

The facility uses Bulkleen® 690RT in the cleaning tank (Tank 1) and E-CLPS®2100HD in the pre-coat/etching tank (Tank 4). After pre-coating, parts are dried and powder painted in the Painting section.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |         |          |
|---------------|------------------------------------------|--------------------|---------|----------|
| 27462         | International Hardcoat Inc.              | 12400 Burt Road    | Detroit | MI 48228 |

| <u>Permits</u> | <u>Raw Materials</u>                                                                                                                                                         | <u>Limits</u>                                               |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 15527462IU2    | Alkaline solution, sulfuric acid, chromic acid, chromate, organic dye, inorganic dye, sodium dichromate solution nickel acetate, nickel fluoride, polymer, ammonium sulphate | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 62,000.00 gpd |

Process Description

The facility has four (4) process lines. The processes include sulfuric acid anodizing, hardcoat anodizing, aluminum and magnesium anodizing, chromate conversion coating, centerless grinding and mechanical finishing (media blasting).

The chemical processing operations include cleaning, deoxidizing, anodizing and optionally dyeing and sealing.

Wastewater is generated from rinsing at various points in the process including scrubbing of air with water and the accumulation of spent alkaline and acidic bath.

The process wastewater is treated on-site. The pretreatment operation consists of chrome reduction, polymer addition, flocculation, clarification, pH adjustment, filtration, and sludge drying.

These are the treatment steps: Metal bearing rinse waters enter WWTS at the Redox tank. The running rinse pH is reduced to a target of 2.4 and magnesium bisulfite is added according to the redox controller. The water flows to the neutralization tank where the pH is raised to 9.5 - 10.5. The rinseate flows to the 2nd neutralization/surge tank where the pH is controlled at 7.0 - 10.5. Polymer is added and the rinseate enters the lamella. Solids are precipitated and separated. The liquid portion of the rinseate flows out of the lamella into the post treatment tank (pH controlled 5.50 I 10.00). Effluent flows from the Post treatment into Polish tank (pH controlled 6.5 - 9.5). The system effluent flows into the plant discharge tank and into the sanitary sewer.



**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                       |
|---------------|------------------------------------------|------------------------------------------|
| 27461         | JSP International                        | 13889 W Chicago Road<br>Detroit MI 48228 |

| <u>Permits</u> | <u>Raw Materials</u>                         | <u>Limits</u>        |
|----------------|----------------------------------------------|----------------------|
| 005-27461-IU   | Polypropylene, CO2, Aluminum Oxide,<br>Water | 01 LOC. Local Limits |

| <u>Flow Rate</u>                               |
|------------------------------------------------|
| 01 Process Wastewater Continuous 52,648.00 gpd |

Process Description

The process consists of extrusion and cutting of polypropylene to make mini and micro pellets. The micro pellets are heated under pressure to make foams, which are dewatered, dried and shipped away as finished products. Wastewater is generated from the washing of equipment and the release of water from dewatering operation. The wastewater flow is passed through screen or filter to capture foams and pellets before discharging into public sewer.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |              |          |
|---------------|------------------------------------------|--------------------|--------------|----------|
| 92753         | Jabil                                    | 3800 Giddings Rd.  | Auburn Hills | MI 48326 |

| <u>Permits</u> | <u>Raw Materials</u>      | <u>Limits</u>        |
|----------------|---------------------------|----------------------|
| 00792753IU4    | circuit boards components | 01 LOC. Local Limits |
|                |                           | 02 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 01               | Process Wastewater        | Batch      | 1,285.00 | gpd |
| 02               | Process Wastewater        | Batch      | 400.00   | gpd |
| 02               | Non-contact Cooling Water | Continuous | 2,802.00 | gpd |

Process Description

The processes consist of the following: City water comes into the system when water is needed. The water runs through a set of beds - Primary (Lead), Secondary (CAG) and out to the floor. On the floor, the water is used in the water wash systems to clean the products. The water cascades and returns to the DI system. Hydrochloric acid and caustic soda are used to regenerate and to stabilize the pH where the system back flushes and before pumping to city sewer through SL# 1.

The production units are tested for operation and functionality using water as the testing agent. The water is mixed with a sterilizer and a detergent in the machine. Once the testing is complete, the wastewater is dumped to the city sewer through SL# 2.

The processes consist of the following: City water comes into the system when water is needed. The water runs through a set of beds - Primary (Lead), Secondary (CAG) and out to the floor. On the floor, the water is used in the water wash systems to clean the products. The water cascades and returns to the DI system. Hydrochloric acid and caustic soda are used to regenerate and to stabilize the pH where the system back flushes and before pumping to city sewer through SL# 1.

The production units are tested for operation and functionality using water as the testing agent. The water is mixed with a sterilizer and a detergent in the machine. Once the testing is complete, the wastewater is dumped to the city sewer through SL# 2.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>       |                |                 |
|---------------|------------------------------------------|--------------------------|----------------|-----------------|
| <b>27608</b>  | <b>John D. Dingell VA Medical Center</b> | <b>4646 John R. Road</b> | <b>Detroit</b> | <b>MI 48201</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                                        |
|----------------|----------------------|----------------------------------------------------------------------|
| 00827608IU3    | Patients Care        | 01 LOC. Local Limits<br>02 LOC. Local Limits<br>03 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 18,667.00 | gpd |
| 01               | Process Wastewater        | Continuous | 11,081.00 | gpd |
| 02               | Sanitary Wastewater       | Continuous | 18,667.00 | gpd |
| 02               | Process Wastewater        | Continuous | 7,837.00  | gpd |
| 02               | Non-contact Cooling Water | Continuous | 3,000.00  | gpd |
| 02               | Boiler Blowdown           | Continuous | 3,500.00  | gpd |
| 03               | Sanitary Wastewater       | Continuous | 18,667.00 | gpd |
| 03               | Process Wastewater        | Continuous | 11,081.00 | gpd |

Process Description

Facility's process operations consist of energy center, kitchens, medical laboratories, health research laboratories, morgue, non-digital film processing, physical therapy, inpatient care, outpatient care and housekeeping. The process operations also include dental and eye care clinics.

The facility operates 7 chiller closed-loop system evaporator units each containing approximately 500 gallons of water with rust inhibitor. The chiller system requires annual maintenance for which the evaporator units require draining followed by water cleaning and flushing. The maintenance is performed during winter. The wastewater generated usually contains low levels of copper and iron which is discharged into the sewer via MH #2.

In the Radiology Department, some patients are administered with doses of barium sulfate suspension; any excess of barium sulfate doses that the patients cannot drink are discarded off into the drain.

The hematology process uses a Sysmex XN Equipment (new) which produces about 11 gallons per day of waste, which is discharged into the sewer.

The facility's process includes mechanical washing of patient transportation equipment such as wheelchairs and stretchers. The facility is using a new Aqua Phase Washer for this process. It generates approximately 30 gallons per day of wastewater, which is discharged into the sewer via MH #2.

The facility's process generates waste formalin from the medical lab which is neutralized and then disposed of in the sewer drain. The facility also maintains a sewer discharge log for its formalin disposal showing the quantity, residual ppm and pH of the discharges. Waste xylene from the lab is reused via a recovery process. The facility also maintains a xylene recovery log showing the quantity and purity of xylene recovered.

The facility's pretreatment systems include amalgam separators for dental chairs wastewater, grease traps for the kitchen wastewater, ES 2300 oil/water separator for compressor condensates and silver trap canister for research lab x-ray film processor. The pretreatment also includes limestone sumps to neutralize the acidic research animal cage wash and laboratory wastewaters.

The medical lab ethanol waste is hauled off-site for treatment/disposal. The facility's sterilizer equipment which uses ethylene oxide has no sewer discharge.

The facility has energy recovery equipment which operates on a closed-loop glycol (coolant) system for absorbing heat from the air. During routine maintenance, the coolant is removed and properly disposed at an off-site facility. The equipment flush and rinse wastewater are also hauled off-site for treatment/disposal.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| SIU ID | Significant Industrial User (SIU) | SIU Address                         |
|--------|-----------------------------------|-------------------------------------|
| 27243  | K & F Electronics, Inc.           | 33041 Groesbeck Hwy Fraser MI 48026 |

| Permits     | Raw Materials      | Limits                              |
|-------------|--------------------|-------------------------------------|
| 15127243IU2 | Copper clad sheets | 01 LOC. Local Limits                |
|             | Plating Solutions  | 01 433.A.17a (PSNS) Metal Finishing |
|             | Alkaline Cleaner   |                                     |
|             | Acid               |                                     |
|             | Caustic Soda       |                                     |

| Flow Rate |                           |            |              |
|-----------|---------------------------|------------|--------------|
| 01        | Process Wastewater        | Continuous | 8,700.00 gpd |
| 01        | Non-contact Cooling Water | Continuous | 100.00 gpd   |

#### Process Description

Copper clad sheets are cut into boards, drilled, deburred, alkaline cleaned twice, rinsed twice, electro-less plated with copper and rinsed twice. The image of the desired circuit is put on the boards, alkaline cleaned, rinsed, electro-plated with copper and tin, rinsed and etched. The boards are then screened using ink, sorted, packaged and shipped. The generated process wastewater is pre-treated before discharge to the sewer. The process wastewater is pumped to three 40-gallon tanks. The first tank holds the tin-plating rinses, the second tank holds the copper-plating rinses and the third tank holds the non-plating rinses and cooling water. Contents of the first and second tanks are pH adjusted, sent through ion exchange columns for metal removal and then discharged into the sewer after pH adjustment. The contents for the third tank is neutralized and discharged into the sewer through the sampling location. The company itself regenerates ion exchange resin used in pretreatment system. Wastewater generated from resin regeneration is passed through an electrowinning unit and then discharged into sewer after pH adjustment. Once a month about 200 gallons of wastewater is discharged into sewer from resin regeneration operation.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                         |
|---------------|------------------------------------------|--------------------------------------------|
| 27741         | K. C. Jones Plating Co.                  | 321 W. 10 Mile Rd. Hazel Park MI 480301136 |

| <u>Permits</u> | <u>Raw Materials</u>              | <u>Limits</u>                                               |
|----------------|-----------------------------------|-------------------------------------------------------------|
| 02927741IU2    | metal parts supplied by customers | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |              |           |     |
|------------------|---------------------|--------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous   | 1,500.00  | gpd |
| 01               | Process Wastewater  | Continuous   | 78,950.00 | gpd |
| 01               | Other               | Intermittent | 1,500.00  | gpd |
| 01               | Boiler Blowdown     | Intermittent | 60.00     | gpd |

Process Description

The process consists of alkaline cleaning, acid etching, electroplating of zinc and bronze; electroless plating of nickel; chromating, nitro carborizing and drying of metal parts.

Wastewater generated from rinsing of parts with water at different stages of the process, is treated by a process that involves cyanide destruction, chromium reduction, pH adjustment, metal precipitation and separation.

The process consists of alkaline cleaning, acid etching, electroplating of zinc and bronze; electroless plating of nickel; chromating, nitro carborizing and drying of metal parts.

Wastewater generated from rinsing of parts with water at different stages of the process, is treated by a process that involves cyanide destruction, chromium reduction, pH adjustment, metal precipitation and separation.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                              |
|---------------|------------------------------------------|-----------------------------------------------------------------|
| <b>91531</b>  | <b>Kar's Nuts Products</b>               | <b>1200 E. Fourteen Road      Madison Heights    MI   48071</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>           |
|----------------|----------------------|-------------------------|
| 00991531IU     | raw nuts             | 01    LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |                 |
|------------------|---------------------|------------|-----------------|
| 01               | Sanitary Wastewater | Continuous | 1,400.00    gpd |
| 01               | Process Wastewater  | Continuous | 2,173.00    gpd |

Process Description

Process involves roasting, mixing, and packing of edible nuts, mainly peanuts and cashews. Fresh nuts and candies are also mixed and packaged when required. Process wastewater generated from cleaning of equipment, is passed through wire screen to remove solids prior to discharge into public sewers.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 27422         | Kenwal Steel Company                     | 8223 W. Warren Avenue Dearborn MI 48126 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                      |
|----------------|----------------------|----------------------------------------------------|
| 03427422IU2    | steel coil           | 01 LOC. Local Limits                               |
|                | Hydrochloric Acid    | 01 420.I.96b.4 (PSNS) Iron and Steel Manufacturing |
|                | Caustic Soda         |                                                    |
|                | Polymer              | 01 420.I.96b.2 (PSNS) Iron and Steel Manufacturing |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 22,734.00 gpd |

Process Description

The process involves receiving coiled steel sheet, storage, uncoiling, flattening, and shearing (head & tail). The flattened steel sheet is passed through scale breaker, pickled with Hydrochloric Acid in four (4) stage counter current, semi continuous pickler, rinsed with water in five (5) stage cascade rinse, dried with hot air, coated with oil and then recoiled.

The wastewater generated from rinsing operation is discharged to the Detroit City Sewer after treatment. The wastewater treatment system consists of neutralization, sludge settling, clarification and filtration. Spent pickling acid and clarifier bottom solids (sludge) are shipped off-site for treatment and disposal

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                             |
|---------------|------------------------------------------|------------------------------------------------|
| 96821         | Kingfa Science & Technology (USA), In    | 47440 Michigan Ave., Suite 100 Canton MI 48188 |

| <u>Permits</u> | <u>Raw Materials</u>                       | <u>Limits</u>        |
|----------------|--------------------------------------------|----------------------|
| 246-96821-IU   | Resins, plastics polymers and glass fibers | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 805.00   | gpd |
| 01               | Process Wastewater        | Continuous | 8,640.00 | gpd |
| 01               | Contact Cooling Water     | Batch      | 930.00   | gpd |
| 01               | Non-contact Cooling Water | Continuous | 5,280.00 | gpd |

Process Description

The manufacturing process consists of compounding and/or treating semi-finished products (resins, plastics, polymers and glass fibers) to produce plastic pellets for shipment to other manufacturers. This process doesn't include the manufacturing or processing of raw materials.

The facility has four (4) production plastic vacuum extrusion lines and two (2) plastic vacuum extrusion research and development lines. The molten polymer mixture is vacuum extruded to give the desired shape, cooled, cut into pellets and then packaged for distribution or sale. The plastic extrusion lines use both contact and non-contact cooling water. The extruded polymers from production plastic vacuum extrusion lines and research and development lines are cooled by contact cooling water.

Water ring vacuum pumps are used in the production extrusion processes. The water ring vacuum extrusion pumps contact cooling water is used to provide a water ring seal and contact cooling. Oil vacuum pumps are used in the research and development extrusion lines, no water is used to operate these vacuum pumps. Only contact cooling water is used to cool the extruded plastic and the noncontact cooling to cool the research and development extrusion lines.

The non-contact cooling water used in production plastic vacuum extrusion lines, research and development lines and a minimal amount of air compressor water condensate is discharged directly into the sewer system.

The process wastewater generating operations are plastic contact cooling water, extrusion vacuum pump seal water and contact cooling water.

The process wastewater is treated by passing it through screens to remove plastic pellets from the wastewater prior to discharge into the sewer system.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |         |          |
|---------------|------------------------------------------|--------------------|---------|----------|
| 27282         | Koenig Fuel & Supply Co.-Plt 1           | 500 E. 7 Mile Road | Detroit | MI 48203 |

| <u>Permits</u> | <u>Raw Materials</u>                             | <u>Limits</u>        |
|----------------|--------------------------------------------------|----------------------|
| 00227282IU2    | cement, aggregates ( sand, gravel,) acid, solids | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |            |
|------------------|---------------------|------------|------------|
| 01               | Sanitary Wastewater | Continuous | 700.00 gpd |
| 01               | Process Wastewater  | Batch      | 500.00 gal |

Process Description

The facility manufactures ready mixed concrete from natural sand, gravel, crushed limestone, water and cement, and trucks the concrete to the customer sites. The process wastewater is generated from washing/rinsing of the concrete making and trucking equipment.

This wastewater (rain too) is collected in two (2) large settling basins with consecutive flow for solids settling. The clean water in the settling basins is generally reused for dust control on site.

During discharging, the clean basin water is pumped into a holding tank (500 gallons), where the pH is adjusted through the automatic pH neutralization setup system. After the pH reading is stable, the tank water is manually pumped into the sampling pit.

The sampling pit is a solid catch sump that collects sanitary and the rainwater in south side of the process field, which is considered as process wastewater too. The mixed plant wastewater in the sampling pit overflows into the sewer

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                               |
|---------------|------------------------------------------|--------------------------------------------------|
| 27443         | Kolene Corporation - Plant #1            | 12890 Westwood Street<br>Detroit<br>MI 482233435 |

| <u>Permits</u> | <u>Raw Materials</u>                                         | <u>Limits</u>        |
|----------------|--------------------------------------------------------------|----------------------|
| 00527443IU1    | Alkaline solution, nitriding salt,<br>quenching oil,<br>acid | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |            |
|------------------|---------------------|------------|------------|
| 01               | Sanitary Wastewater | Continuous | 400.00 gpd |
| 01               | Process Wastewater  | Batch      | 140.00 gpd |

Process Description

The process consists of the following:

- \* Molten Salt Bath Nitriding - metal parts are alkaline cleaned, preheated, dipped in nitriding bath, rinsed with water and dipped in oil occasionally.
- \* Molten Salt Bath Cleaning - metal parts for cleaning are dipped in molten salt bath, rinsed with water and brightened with acid if needed.
- \* Pump Cleaning - pump parts are cleaned by soaking in water.

Wastewater overflows from the various rinse tanks are monitored for pH control prior to discharge into the public sewer. Accumulated salt bath waste is batch treated in a separate neutralization tank for heavy metals as needed. The neutralized solution is allowed to settle and discharged into the public sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>           |                |                 |
|---------------|------------------------------------------|------------------------------|----------------|-----------------|
| <b>85367</b>  | <b>Kolene Corporation - Plant #2</b>     | <b>12880 Westwood Street</b> | <b>Detroit</b> | <b>MI 48223</b> |

| <u>Permits</u> | <u>Raw Materials</u>         | <u>Limits</u>        |
|----------------|------------------------------|----------------------|
| 00585367IU4    | Organic fluids, parts, water | 01 LOC. Local Limits |
|                |                              | 01 PHEN. Phenols     |

| <u>Flow Rate</u> |                               |            |          |     |
|------------------|-------------------------------|------------|----------|-----|
| 01               | Air Pollution Control Wastew. | Continuous | 100.00   | gpd |
| 01               | Sanitary Wastewater           | Continuous | 92.00    | gpd |
| 01               | Process Wastewater            | Continuous | 3,100.00 | gpd |

Process Description

Stripping process involves the removal of cured paint from miscellaneous nonferrous and plastic parts, using organic fluid. After cleaning, the parts are rinsed with water to remove any residual materials. All water rinse tanks are continuously monitored for pH and are adjusted by addition of acid under control of pH probe and acid metering pumps. To minimize the potential to dissolve metallic zinc from select parts during water rinsing operation, pH control set point is increased to pH 8 from pH 7.

Molten salt bath cleaning - cast iron parts for cleaning are dipped in molten salt, rinsed with water and brightened with acid if needed. Rinse waters are accumulated and pH adjusted in a dual compartment neutralizing tank. One compartment is accumulating rinse water for pH adjustment while the second treated compartment is trickle discharged at a rate of about 1.2 gallons per minute over an eight hour period. Any solids which may precipitate as a result of pH adjustment are allowed to settle out to the bottom of the tank. The settled solids are removed periodically from the tank and hauled away by a licensed industrial waste firm for proper disposal.

An air scrubber connected to the molten salt bath cleaning equipment removes any alkaline mist carryover from the air exhaust stream which occurs when the hot salt-wetted castings are immersed in the quench / rinse waters. The continuous overflow from the air scrubber sump tank is 5 gallons per hour.

The pH adjusted wastewaters from both operations and air scrubber process wastewater are accumulated in an in-ground sump tank, which then discharges to the sewer system. Solids that may settle out in the bottom of the sump are periodically removed from the sump and hauled away by a licensed industrial waste firm for proper disposal.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |           |          |
|---------------|------------------------------------------|--------------------|-----------|----------|
| 27273         | Kowalski Sausage Co. Inc.                | 2270 Holbrook      | Hamtramck | MI 48212 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00227273IU1    | Raw meat/Beef        | 01 LOC. Local Limits |
|                | Spices               | 02 LOC. Local Limits |
|                | Washing soap         | 03 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 1,500.00  | gpd |
| 01               | Process Wastewater  | Continuous | 17,600.00 | gpd |
| 02               | Process Wastewater  | Continuous | 2,200.00  | gpd |
| 03               | Process Wastewater  | Continuous | 2,200.00  | gpd |

Process Description

The process at Kowalski sausage incorporates mixing, chopping, grinding, stuffing with several spice ingredients and subsequent cooking, cooling and shipping of the products. Wastewater is generated from floor, utensil, and equipment washing.

80% of the process wastewater originates from the "Meat Processing, Grinding, Cleaning and Washing Area". The wastewater generated here goes into a large tank in the basement where FOG is vacuumed off and the effluent passes through SL#1 to the sewer.

10% of the process wastewater generated from the "Smoked Meat Wash Room" passes through FOG separating tank to SL#2. Similarly 10% of the process wastewater generated from the "Meat Stuffing Process Room" passes through FOG separating tank to SL#3. The resulting FOG is hauled off site and the effluent discharged to the sewer.

# Facility Name: Detroit Water & Sewerage

# NPDES Permit #: MI 0022802

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |         |          |
|---------------|------------------------------------------|--------------------|---------|----------|
| 27463         | Lustre Laundry - Detroit                 | 9100 Central       | Detroit | MI 48204 |

| <u>Permits</u> | <u>Raw Materials</u>                            | <u>Limits</u>        |
|----------------|-------------------------------------------------|----------------------|
| 00527463IU1    | Detergent, Bleach, Sour and Sodium Hypochlorite | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Sanitary Wastewater | Continuous | 300.00   | gpd |
| 01               | Process Wastewater  | Continuous | 8,770.00 | gpd |
| 01               | Boiler Blowdown     | Continuous | 100.00   | gpd |

## Process Description

The process consists of washing, drying, and pressing of linens received from commercial establishments. The process wastewater is generated from the washing operation which is run through a set of screens to remove lint prior to discharge into the public sewers.

| <u>Permits</u> | <u>Raw Materials</u>                            | <u>Limits</u>        |
|----------------|-------------------------------------------------|----------------------|
| 00527463IU1    | Detergent, Bleach, Sour and Sodium Hypochlorite | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Sanitary Wastewater | Continuous | 300.00   | gpd |
| 01               | Process Wastewater  | Continuous | 8,770.00 | gpd |
| 01               | Boiler Blowdown     | Continuous | 100.00   | gpd |

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# Facility Name: Detroit Water & Sewerage

# NPDES Permit #: MI 0022802

| SIU ID | Significant Industrial User (SIU) | SIU Address                                |
|--------|-----------------------------------|--------------------------------------------|
| 27248  | MNP Corporation                   | 44225 Utica Road Sterling Heights MI 48317 |

| Permits      | Raw Materials                                  | Limits                                             |
|--------------|------------------------------------------------|----------------------------------------------------|
| 151-27248-IU | Polymer,                                       | 03 LOC. Local Limits                               |
|              | Carbon steel, Acid, alkaline, zinc, phosphate, | 03 420.I.95a.5 (PSES) Iron and Steel Manufacturing |
|              |                                                | 03 420.I.95a.1 (PSES) Iron and Steel Manufacturing |
|              |                                                | 03 433.A.15a (PSES) Metal Finishing                |

| Flow Rate |                               |            |           |     |
|-----------|-------------------------------|------------|-----------|-----|
| 03        | Sanitary Wastewater           | Continuous | 8,920.00  | gpd |
| 03        | Process Wastewater            | Continuous | 80,119.00 | gpd |
| 03        | Boiler Blowdown               | Batch      | 2,700.00  | gpd |
| 03        | Air Pollution Control Wastew. | Continuous | 900.00    | gpd |
| 03        | Other                         | Continuous | 4,104.00  | gpd |

## Process Description

The facility has several processes. Some are no water involved, such as manufacturing-machining process, drawing to diameter, cold heading and thread rolling, Annealing of steel (oil processing), heat-treating of fasteners.

The water involved process is Coil coating and metal finishing line. Through this line, the steel coils are first pickled with sulfuric acid, water (power) rinsed, alkaline neutralized, then the coils may undergo zinc phosphate coating, lube or lime coating. The zinc phosphating operations are followed by rinsing and neutralizing.

The facility's average production rate (both clean & coat=567,721 pounds per day and Pre-Pickle = 272,067 pounds per day) is total 839,788 pounds of products per day, which is daily acid pickled.

The process wastewater is generated from the rinsing operations after

" the acid pickling;

" the zinc phosphating, and also is generated from

" the acid fume scrubbers.

The process wastewater from acid pickling and from zinc phosphating are collected separately in the ground sumps, then combined with process wastewater from Fume scrubber in a equalization collection tank. The combined process wastewater is treated through pH adjustment, polymer treating for clarification, and sludge filtration. The treated water is discharged with monitoring of pH and zinc levels.

NOTE: See comments on Draft permit in General>Docs Tab

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NOTE: See comments on Draft permit in General>Docs Tab

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>        |                 |                     |
|---------------|------------------------------------------|---------------------------|-----------------|---------------------|
| <b>27625</b>  | <b>MacDermid, Inc.</b>                   | <b>1221 Farrow Avenue</b> | <b>Ferndale</b> | <b>MI 482201959</b> |

| <u>Permits</u> | <u>Raw Materials</u>                             | <u>Limits</u>        |
|----------------|--------------------------------------------------|----------------------|
| 15927625IU     | various chemicals (acids, bases and surfactants) | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                               |            |          |     |
|------------------|-------------------------------|------------|----------|-----|
| 01               | Non-contact Cooling Water     | Batch      | 849.00   | gpd |
| 01               | Sanitary Wastewater           | Continuous | 353.00   | gpd |
| 01               | Process Wastewater            | Batch      | 3,050.00 | gpd |
| 01               | Other                         | Batch      | 156.00   | gpd |
| 01               | Boiler Blowdown               | Batch      | 1,393.00 | gpd |
| 01               | Air Pollution Control Wastew. | Batch      | 3,443.00 | gpd |
| 01               | Stormwater/Rain               | Batch      | 1,735.00 | gpd |

Process Description

The process consists of the following operations:

- i) Dry Mixing operation in which some dry raw materials are mixed in various blenders.
- ii) General Liquids operation in which a combination of dry and liquid materials derived mainly from inorganic metal salts are mixed in solution of either acid or base in water with occasional dose of organic materials.
- iii) Laboratory services which include electroless and electrolytic plating operation being techniques used to test various products for performance.
- iv) Ancillary operations including heating, cooling and air quality control which in effect constitute support systems for the above operations.

Process wastewater is generated from rinsing blenders, mixing tanks, and cleaning of floors. Boiler condensate and blow-down, rinse water from laboratory and non-contact cooling water, air conditioning unit condensate and air scrubbers also contribute to wastewater generated. All wastewater generated from inside the facility except those connected with the plating operation in the laboratory, is pumped directly into any of four batch treatment tanks. Wastewater flow from the air scrubber and the tote storage storm water is directed into a 12,500 gallon-sump from where it is dispatched into any of four batch treatment tanks. The treatment involves chrome reduction, neutralization, cyanide destruction, pH adjustment and settling followed by filtration, prior to discharge into public sewers.

Spent electrolytic bath solutions including wastewater generated from rinsing laboratory bench scale plating vessels with water, are collected and stored in different containers of various sizes ranging from five to 15 gallons. The use of different containers is to sort out different batch solutions and to keep them separate from one another. A combined volume of about 80 gallons of these plating wastes is drummed and hauled away by EQ Industrial Services once every two months to Michigan Disposal Treatment in Belleville, Michigan for outside treatment and eventual disposal.

VP - author

## Facility Name: Detroit Water &amp; Sewerage

NPDES Permit #: MI 0022802

| SIU ID | Significant Industrial User (SIU) | SIU Address         |         |          |
|--------|-----------------------------------|---------------------|---------|----------|
| 27370  | Marathon Petroleum Company, LP    | 1300 S. Fort Street | Detroit | MI 48217 |

| Permits     | Raw Materials       | Limits                                                               |
|-------------|---------------------|----------------------------------------------------------------------|
| 07427370IU1 | Petroleum crude oil | 01 LOC. Local Limits                                                 |
|             | Caustic Soda        | 01 419.B.27b (PSNS) Petroleum Refining<br>(Fac.-specific limits TBD) |
|             | Sulfuric Acid       | 01 419.B.27a (PSNS) Petroleum Refining                               |
|             | Polymer             | 01 419.B.25 (PSES) Petroleum Refining                                |
|             |                     | 01 PHEN. Phenols                                                     |
|             |                     | 02 LOC. Local Limits                                                 |
|             |                     | 02 419.B.25 (PSES) Petroleum Refining                                |
|             |                     | 03 LOC. Local Limits                                                 |
|             |                     | 03 419.B.25 (PSES) Petroleum Refining                                |
|             |                     | 04 LOC. Local Limits                                                 |
|             |                     | 04 419.B.25 (PSES) Petroleum Refining                                |
|             |                     | 05 LOC. Local Limits                                                 |
|             |                     | 05 419.B.25 (PSES) Petroleum Refining                                |
|             |                     | 06 LOC. Local Limits                                                 |
|             |                     | 06 419.B.25 (PSES) Petroleum Refining                                |
|             |                     | 07 LOC. Local Limits                                                 |
|             |                     | 07 419.B.25 (PSES) Petroleum Refining                                |
|             |                     | 08 LOC. Local Limits                                                 |
|             |                     | 08 419.B.25 (PSES) Petroleum Refining                                |
|             |                     | 09 LOC. Local Limits                                                 |
|             |                     | 09 419.B.25 (PSES) Petroleum Refining                                |
|             |                     | 10 LOC. Local Limits                                                 |
|             |                     | 10 419.B.27a (PSNS) Petroleum Refining                               |
|             |                     | 10 PHEN. Phenols                                                     |
|             |                     | 11 LOC. Local Limits                                                 |
|             |                     | 11 419.B.27b (PSNS) Petroleum Refining<br>(Fac.-specific limits TBD) |
|             |                     | 11 419.B.27a (PSNS) Petroleum Refining                               |
|             |                     | 11 419.B.25 (PSES) Petroleum Refining                                |
|             |                     | 11 PHEN. Phenols                                                     |

| Flow Rate |                    |              |              |     |
|-----------|--------------------|--------------|--------------|-----|
| 01        | Process Wastewater | Continuous   | 2,414,400.00 | gpd |
| 02        | Process Wastewater | Intermittent | 26,949.00    | gpd |
| 10        | Process Wastewater | Batch        | 27,500.00    | gpd |
| 10        | Process Wastewater | Continuous   | 72,000.00    | gpd |
| 10        | Stormwater/Rain    | Continuous   | 72,000.00    | gpd |
| 11        | Process Wastewater | Continuous   | 2,441,349.00 | gpd |

Process Description

The facility refines crude oil into petroleum products. This process includes distillation, hydrotreating, platforming, catalytic cracking, alkylation, sulfur recovery and delayed coking.

Process wastewater is generated from petroleum refining, boiler/cooling tower blowdown, stormwater runoff, tank hydrotest and pipeline hydrotests. Process wastewater from existing refinery and newly installed Delayed Coker area are combined together in the refinery wastewater treatment plant. The treated wastewater is continuously discharged through sampling location into the sewer.

The first phase of wastewater treatment impacts desalter effluent water and water draws from storage tanks. Water from storage tank water draws is collected in Tank 507 then processed through the Benzene Flash Column along with desalter effluent water (see attached Wastewater Treatment Process Overview diagram). The wastewater stream from the Benzene Flash Column flows to the Desalter Effluent Pre-Treatment (DEPT) System where initial solid and oil separation occurs. The first section of the DEPT is the API separator (29T44). As water flows through the API separator, the oil is skimmed and is directed to a recovered oil tank (29T47).



Sludge at the bottom of the API is conveyed and pumped to the sludge tank (29T12). Wastewater effluent from the API then flows to the DEPT feed tank (29T42) then to the reactor tank (29T48) where wastewater is chemically treated (ferric chloride, polymer and 50 baume caustic) to prepare it for further separation of solids and pH adjustment. The clarifiers (29T50A/B) receive the chemically treated wastewater from the reactors. The clarifiers allow for further solids settling and overflow to the refinery sewer for further treatment. Sludge in the clarifiers is collected off the bottom by a rake and is pumped to 29T12.

Second phase of treatment addresses the remaining refinery sewer system and further provides treatment of the DEPT system effluent. The refinery sewer system consists of process and storm water, collected from the refinery process units and tank farms. This water enters the unit through the refinery sewer system and flows to tanks 29T32/33 for storage and equalization before entering the forebay of the API separator. The forebay has equipment for skimming oil from the top of the wastewater. The skimmed oil is then transferred to Tanks 29T40/41 where any water that may have been skimmed off with the oil is allowed to settle. The oil is transferred to the refinery slop Tanks 5T23/508 where it is charged to the Crude/Vacuum Unit for reprocessing. The water that settles in Tanks 29T40/41 is returned into the Wastewater Treatment Plant (WWTP).

Water exiting the forebay flows into the east and west API separator cells. The API cells are equipped with oil skimming equipment. The oil skimmed from the waste water in the API cells is also directed to Tanks 29T40/41. Sludge is periodically removed from the API cells and transferred to 29T12.

The water leaving the API cells enters a Lift station where chemicals are added to the water that allow for further separation in the Induced Gas Flotation (IGF) Units. The water is then pumped from the lift station to the two IGFs. Each IGF is capable of processing wastewater at a rate of 1,600 gpm. Each IGF can be operated independently or simultaneously depending on processing capacity needs.

The IGF process begins by providing pressurized water to the inlet of a venture-type eductor. Water passing through the eductor creates a vacuum at the gas suction port of the eductor, and nitrogen is induced into the water stream. The gas/water mixture passes through a dispersing mechanism where very small gas bubbles are formed. The bubbles attach to the oil and solid particles in the water. The stream then enters the riser section of the separation vessel where the gas and oil/solid particles agglomerate. Excess gas is released from the water stream at the liquid surface and is recycled back to the eductor. Clean water is withdrawn from the bottoms of the separation vessel and pumped to the inlet of the MBR system.

Material (float) skimmed from the IGF Units is pumped to the decanters. This float material is then pumped to the DEPT feed tank for further processing and removal from the system in the DEPT clarifiers. Water drained from the bottom of the decanters is directed back to the forebay of the API.

IGF effluent is screened prior to entering the Wet Surface Air Cooler (WSAC) where it is cooled in a closed cooling tower unit. The WSAC effluent is routed to the Membrane Biological Reactor (MBR) splitter box, where it flows by gravity to three parallel bioreactor trains. In each biological train, the wastewater is first mixed in an anoxic zone and then aerated in an aerobic zone before being sent through ultrafilter membranes for solids removal. The mixture of biomass and IGF effluent, mixed liquor, are combined in a common effluent channel and then flow through four parallel membrane tanks. The membrane tanks contain cassettes of membrane modules. The effluent from the membrane tanks, or permeate, is drawn through the membranes by pumps for water quality monitoring and final discharge. The microbial biomass separated from the wastewater in the membrane tanks is recirculated to the head of the MBR anoxic tanks.

The sludge tank (29T12) provides temporary storage for sludge and oily material until it can be processed in the centrifuge. The centrifuge processes the sludge and oily material mixture and separates it into recovered oil, water and solids. The recovered oil is routed back to the Crude Unit slop oil tanks (5T23/508). The clean water is routed back to the APT forebay and solids are sent off for disposal. The MBR will be utilizing its own centrifuge which will pull from the thickener tanks (3304/3305). These thickener tanks receive material from the bioreactor blowers, the splitter box, and the foam/scum pumps. Clean water from the centrifuge is returned to the MBR wet well and biosolids are sent off site for disposal.

When the flow of waste water to the WWTP exceeds the desired processing rates, the excess water is pumped into Tank 29T79 for temporary storage. The water in Tank 29T79 is processed as desired through the WWTP when capacity is available.

With the implementation of MBR, Marathon Petroleum Company will begin treating tank hydrotest water through the refinery wastewater treatment plant with other process wastewater and will be discharged through sampling location.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>            |                |                     |
|---------------|------------------------------------------|-------------------------------|----------------|---------------------|
| <b>27514</b>  | <b>McGean-Rohco, Incorporated</b>        | <b>38521 Schoolcraft Road</b> | <b>Livonia</b> | <b>MI 481501031</b> |

| <u>Permits</u> | <u>Raw Materials</u>                           | <u>Limits</u>        |
|----------------|------------------------------------------------|----------------------|
| 00627514IU1    | different kinds of dry and/or liquid chemicals | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 01               | Process Wastewater        | Batch      | 2,701.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 300.00   | gpd |
| 01               | Sanitary Wastewater       | Continuous | 420.00   | gpd |

Process Description

Process consists of blending of different chemicals, quality testing and packaging. Blending is done in two different areas. In the liquid blending area, different types of liquid chemicals are blended in stainless steel mix tanks and plastic mix tanks. In the solids blending area, different types of powdered chemicals are blended in stainless steel ribbon blenders. Blending vessels are washed each time a different type of chemical is made.

Process wastewater is generated from the washing of blending vessels and from cleaning of floors. Pretreatment consists of chrome reduction, pH adjustment, flocculation (if needed), settling, decanting, and sludge, which is filter pressed. Filtrate from the filter press is discharged into the City sewer through the sampling location. Non-contact cooling water and a small amount of process wastewater generated from the washing of detergent mixing vessels are discharged through the sampling location without pretreatment. Out of the 5,400 gpd of total water consumption, the facility consumes about 2,300 gpd when making new chemicals via blending.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                           |
|---------------|------------------------------------------|----------------------------------------------|
| 27515         | McNichols Polishing & Anodizing, Inc     | 12139 Woodbine Redford Township MI 482392417 |

| <u>Permits</u> | <u>Raw Materials</u>    | <u>Limits</u>                                     |
|----------------|-------------------------|---------------------------------------------------|
| 02627515IU2    | aluminum parts/products | 01 LOC. Local Limits                              |
|                |                         | 01 413.D.44f (PSES) Electroplating<br><10,000 gpd |
|                |                         | 01 413.D.44b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u> |                    |                       |
|------------------|--------------------|-----------------------|
| 01               | Process Wastewater | Continuous 765.00 gpd |

Process Description

Process consists of alkaline cleaning, rinsing, and caustic etching. The parts are then dipped in dilute phosphoric acid, rinsed, deoxidized with nitric acid, anodized in dilute sulfuric acid, rinsed, colored with different dyes, rinsed again, and sealed. The process wastewater generated from rinsing at various stages is pretreated prior to discharge into the Detroit Sewer System.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 96350         | Merlin Entertainments - Sea Life Michig  | 4316 Baldwin Road Auburn Hills MI 48326 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00796350IU1    |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                         |
|------------------------------------------|
| 01 Process Wastewater Batch 1,600.00 gpd |

Process Description

The facility operates a 150,000 gallon closed, artificial sea water system with other smaller life support systems for freshwater and marine fishes and invertebrates for the aquarium display. The facility's process consists of (1) creation of seawater from freshwater and dry salt mix, and using to top off the displays to maintain the living collection of aquatics animals, and 2) routine tank cleaning, water changes and backwash of high pressure sand filters. The high pressure sand filters are used for recirculation of the artificial seawater. The sand filters are backwashed with freshwater usually every other day. Beside the display room, the facility's operation also includes a life support system room (LSS), a food preparation room, a water quality testing lab and a fish quarantine room. The facility's wastewater is generated from backwashing filters, tank cleaning and water changing, and washing of food preparation room. The wastewater generated from the process gets collected in the wastewater vault situated in the LSS room and sewer discharged as batches.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 91541         | Metal Improvement Com, LLC./ Part of     | 14830 23 Mile Road Shelby Township MI 48315 |

| <u>Permits</u> | <u>Raw Materials</u>               | <u>Limits</u>                       |
|----------------|------------------------------------|-------------------------------------|
| 15191541IU2    | alkaline cleaners, solvents, acids | 01 LOC. Local Limits                |
|                | phosphates, automotive components  | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u>                              |
|-----------------------------------------------|
| 01 Process Wastewater Continuous 4,035.00 gpd |

Process Description

The facility has two (2) process lines:

(1) Iron Phosphating: Parts are iron phosphated, rinsed, sealed, spray coated, cured, packed and shipped out. The process wastewater generated from the rinse operation is discharged at the sample location without any pretreatment. However, spent iron phosphate solution is hauled offsite.

(2) Zinc Phosphating: Parts are alkaline cleaned, rinsed, some parts are acid etched, rinsed, zinc phosphated, rinsed, sealed with anti rust chemicals, either dip coated or spray coated, cured, packed and shipped out. The process wastewater is generated from the rinse operations and spent alkaline cleaner, acid etch solution and spent zinc phosphate solutions. All the generated process wastewater from this line is pretreated before discharge into the City sewer system.

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(1) Iron Phosphating: Parts are iron phosphated, rinsed, sealed, spray coated, cured, packed and shipped out. The process wastewater generated from the rinse operation is discharged at the sample location without any pretreatment. However, spent iron phosphate solution is hauled offsite.

(2) Zinc Phosphating: Parts are alkaline cleaned, rinsed, some parts are acid etched, rinsed, zinc phosphated, rinsed, sealed with anti rust chemicals, either dip coated or spray coated, cured, packed and shipped out. The process wastewater is generated from the rinse operations and spent alkaline cleaner, acid etch solution and spent zinc phosphate solutions. All the generated process wastewater from this line is pretreated before discharge into the City sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                               |
|---------------|------------------------------------------|--------------------------------------------------|
| 27468         | Metropolitan Detroit Area Hospital Serv  | 4645 Oakman Boulevard<br>Detroit<br>MI 482042025 |

| <u>Permits</u> | <u>Raw Materials</u>                           | <u>Limits</u>                                |
|----------------|------------------------------------------------|----------------------------------------------|
| 005029         | Detergents; linens and garments from Hospitals | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 60,933.00 gpd |
| 02               | Process Wastewater | Continuous | 60,933.00 gpd |

Process Description

The process consists of sorting, washing, drying, ironing, and folding of linens and garments. Wastewater generated during the process of washing, is discharged into public sewer without pretreatment.

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**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 95435         | Miba HydraMechanica Corp.                | 6515 Cobb Dr. Sterling Heights MI 48312 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15195435IU1    |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |              |
|------------------|--------------------|------------|--------------|
| 01               | Process Wastewater | Continuous | 1,100.00 gpd |

Process Description

Process consists of degreasing and sulfuric acid etching of steel core to remove top layer that provide clean, active surfaces for the gluing application that is a part of the friction material bonding process. The acid etch system is a 4 stage process that degreases, rinses, etches and rinses the parts. Parts are then transported to gluing/adhesive station and then dried in an oven.

Process wastewater is generated from degreasing, etching and rinsing process. Pretreatment of process wastewater involves pH adjustment, flocculation, clarification, filtration and final pH adjustment.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                |
|---------------|------------------------------------------|---------------------------------------------------|
| <b>27516</b>  | <b>Michigan Dairy</b>                    | <b>29601 Industrial Road Livonia MI 481502012</b> |

| <u>Permits</u> | <u>Raw Materials</u>          | <u>Limits</u>        |
|----------------|-------------------------------|----------------------|
| 006-27516-IU   | Milk, Fruit drink Concentrate | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |                |
|------------------|---------------------------|------------|----------------|
| 01               | Sanitary Wastewater       | Continuous | 2,800.00 gpd   |
| 01               | Process Wastewater        | Continuous | 209,100.00 gpd |
| 01               | Non-contact Cooling Water | Continuous | 1,600.00 gpd   |
| 01               | Boiler Blowdown           | Continuous | 1,000.00 gpd   |

Process Description

Raw milk is pasteurized, packed, and shipped. Cream is separated from raw milk to produce skim milk. Cottage cheese, yogurt, and sour cream are made by mixing milk, cream, sugar, and other ingredients. Fruit drinks are made by diluting concentrates with water and then pasteurizing them. The process wastewater generated from cleaning the floor and the dairy equipment is discharged without pretreatment into public sewers



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>   |            |          |
|---------------|------------------------------------------|----------------------|------------|----------|
| 96038         | Michigan Plating LLC                     | 21733 Dequindre Road | Hazel Park | MI 48030 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                     |
|----------------|----------------------|---------------------------------------------------|
| 02996038IU1    |                      | 01 LOC. Local Limits                              |
|                |                      | 01 413.A.14f (PSES) Electroplating<br><10,000 gpd |
|                |                      | 01 413.A.14b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u> |                    |       |            |
|------------------|--------------------|-------|------------|
| 01               | Process Wastewater | Batch | 388.00 gpd |

Process Description

The process consists of cleaning of metal parts with caustic cleaners, acid etching, and rinsing with water. The clean parts are dipped in rust preventive, subjected to electroplating (zinc or cadmium) followed by post treatment (chromating and color dyeing) if necessary. The treated parts are then rinsed, dried and readied for shipment.

Process wastewater generated during various periods of rinsing is collected for a two-stage treatment as follows:

Process wastewater is collected into 2 pits, Pit 1 and Pit 2. Pit 1 is a collection/ storage pit. When Pit 2 has 800-1200 gallons, Hypochlorite is added until all cyanide is removed. Bisulfite is added for chrome destruction. Calcium+ Ferric Chloride is added. A mixer is running during the entire treatment process. Once the processer wastewater has been treated a pH adjustment is made by adding Sulfuric Acid or Caustic Soda. After the pH is adjusted, the water is pumped to a polymer tank. A flocking agent is added and the water is mixed with an in tank mixer. Precipitation metals settle and the over flow goes into the clarifier. Then into the city sewer system. The filter press is ran whenever water is discharged. All water from the filter press goes back into the collection tank.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>   | <u>SIU Address</u>          |               |                 |
|---------------|--------------------------------------------|-----------------------------|---------------|-----------------|
| <b>85094</b>  | <b>Michigan Production Machining, Inc.</b> | <b>16700 - 23 Mile Road</b> | <b>Macomb</b> | <b>MI 48044</b> |

| <u>Permits</u> | <u>Raw Materials</u>                                                 | <u>Limits</u>        |
|----------------|----------------------------------------------------------------------|----------------------|
| 001108         | and cleaners<br>ferrous and non ferrous forgings &<br>castings, oils | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Sanitary Wastewater | Continuous | 4,200.00 | gpd |
| 01               | Process Wastewater  | Continuous | 1,177.00 | gpd |

Process Description

The following process operations are carried out:

- (1) Machining, milling, turning, grinding and broaching of the automotive parts.
- (2) Tumbling of the automotive parts: The Company has one tumbler. Parts are tumbled using stone media. In February 2007, the Company has added a settling tray and the wastewater generated from tumbler is passed through this tray into the settling sump.
- (3) Induction Hardening: The Company has four (4) units. After hardening, parts are cooled by water spray quench. Quench water is a closed loop system. Quench water is cooled in a heat exchanger and recycled. City water is used to make up for the evaporation loss in the quenching operation.
- (4) Destructive testing (Microstructure evaluation): After induction hardening, six spindles per day are etched in the lab using a 4 to 8 % solution of Nitric Acid and Alcohol in a small plastic container. Then rinsed with water in another plastic container. The rinse water is neutralized, collected in a waste storage tank and hauled offsite to Usher Oil with other oily wastewater.
- (5) Part washing: Few specific parts are washed in a part washer using solution of Benzene and Benzo(a)pyrene. Safety Kleen, Inc. maintains this part washer and the spent solution. There is no discharge into the City sewer system from this process.
- (6) Floor cleaning: Floor is cleaned using Floor Scrubber and Mop. The wastewater generated is discharged through the floor drain into the City sewer system. Floor drain has a screen filter.

The process wastewater generated from operation (2) and (6) passes through a 12' deep solid removal/separation grit chamber and discharges into the City sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 27339         | Michigan Waste Energy, Inc.              | 5700 Russell Avenue<br>Detroit MI 482113801 |

| <u>Permits</u> | <u>Raw Materials</u>                       | <u>Limits</u>        |
|----------------|--------------------------------------------|----------------------|
| 00327339IU2    | municipal solid waste: refuse derived fuel | 01 LOC. Local Limits |

| <u>Flow Rate</u>                |
|---------------------------------|
| 01 Process Wastewater Batch gpd |

Process Description

Municipal solid waste from the City of Detroit is brought to site where ferrous metal is removed and the remaining solid waste is burned in boilers to produce steam and electricity (Refuge derived fuel). Steam sold to outside customers is estimated at about 705,584 gallons per day ; evaporation losses [after process operations] are estimated at about 622,000 gallons per day.

Wastewater generated goes into a neutralization basin where pH is adjusted using either caustic soda or acid, before discharging into DWSD sewer. The flow from the demineralizer and outflow from neutralization basin into the discharge line is batch; the overall discharge from the facility into the POTW system is continuous.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                       |
|---------------|------------------------------------------|----------------------------------------------------------|
| 27141         | Michigan.com                             | 6200 Metro Parkway Highway Sterling Heights MI 483127903 |

| <u>Permits</u> | <u>Raw Materials</u>                                                      | <u>Limits</u>        |
|----------------|---------------------------------------------------------------------------|----------------------|
| 00127141IU2    | water/solvent mixture<br>Fountain solution<br>ink<br>Caustic Soda<br>Acid | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 16,000.00 | gpd |
| 01               | Process Wastewater        | Continuous | 800.00    | gpd |
| 01               | Non-contact Cooling Water | Continuous | 2,000.00  | gpd |
| 01               | Boiler Blowdown           | Continuous | 70.00     | gpd |

Process Description

Computer images are transferred from the main building to the CPT (Computer To Plate) room. Digital images are transferred to Polaris Processor (CPT machine) which receives the images and automatically transfer them via laser beams onto an aluminum plate that is covered with polymer. The plate is preheated, then it goes to the developer section to dissolve the polymer that did not have the image, and then it is sprayed with hot water to clean the image. The plates then get cooled using coolants and then post washed using a water/replenisher mixture that washes the developer and any left over debris off the plate. The plate is then coated with a "gum" liquid chemical, which acts as a protective coating to the image on the plate. The plate is then taken to the press operation.

The coolants and the post washing solution are recycled. The process wastewater generated from the sprayed hot water and from the spent developer solution is neutralized prior to discharge into the City of Detroit sewer system.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>        |                  |                 |
|---------------|------------------------------------------|---------------------------|------------------|-----------------|
| <b>91461</b>  | <b>Microphoto, Inc. - Roseville</b>      | <b>30499 Edison Drive</b> | <b>Roseville</b> | <b>MI 48066</b> |

| <u>Permits</u> | <u>Raw Materials</u>                | <u>Limits</u>                       |
|----------------|-------------------------------------|-------------------------------------|
| 15191461IU2    | Metal sheets                        | 01 LOC. Local Limits                |
|                | Etching chemicals (Ferric chloride) | 01 433.A.17a (PSNS) Metal Finishing |
|                | Hydrochloric Acid                   |                                     |
|                | Caustic Soda                        |                                     |

| <u>Flow Rate</u> |                    |       |              |
|------------------|--------------------|-------|--------------|
| 01               | Process Wastewater | Batch | 2,788.00 gpd |

Process Description

The metal sheets (cold rolled steel, stainless steel, aluminum, brass and copper) are chemically etched. The Company has two etching units using ferric chloride and hydrochloric acid. Wastewater is generated from rinses after the etching process. The wastewater pretreatment system consists of pH adjustment, clarification and filtration.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                         |
|---------------|------------------------------------------|--------------------------------------------|
| 86738         | Midwest Wire Products, Inc. (formerly N  | 790 Woodward Heights Ferndale MI 482201488 |

| <u>Permits</u> | <u>Raw Materials</u>                    | <u>Limits</u>                                               |
|----------------|-----------------------------------------|-------------------------------------------------------------|
| 15986738IU4    | in-coming parts, iron phosphate coating | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |            |
|------------------|---------------------|------------|------------|
| 01               | Sanitary Wastewater | Continuous | 102.00 gpd |
| 01               | Process Wastewater  | Continuous | 390.00 gpd |

Process Description

The process involves loading of in-coming parts into a self-contained spray washer for cleaning, rinsing and drying. The cleaned parts are then passed through iron phosphate coating and drying stages followed by application of polymeric powder on parts. The powdered parts are then oven-cured and air-cooled, ready for packaging and shipment as finished products.

The wastewater generated from the spray washer tanks, is adjusted for pH and allowed to settle out solids before discharge into public sewers. The facility discharges batch based on wastewtaer level in the holding tank Pump starts when level reaches maximum and stops when it reaches to minimum. Therefore, it is considered as continuous discharge instead of batch discharge

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>    |         |          |
|---------------|------------------------------------------|-----------------------|---------|----------|
| 95381         | Minnie Marie Bakers, Inc                 | 12301 Farmington Road | Livonia | MI 48150 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00695381IU1    |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 4,000.00  | gpd |
| 01               | Process Wastewater        | Continuous | 48,734.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 7,780.00  | gpd |
| 01               | Boiler Blowdown           | Continuous | 100.00    | gpd |

Process Description

The process involves mixing and blending of various ingredients, such as flour, sugar, baking powder, shortening, milk and eggs followed by baking in ovens to produce final baked products. Process wastewater is generated from washing of pots, pans, utensils, racks, mixing and blending equipments and floor washing. Process wastewater is passed through grease traps prior to discharge into the city sewer.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>   | <u>SIU Address</u>       |                |                     |
|---------------|--------------------------------------------|--------------------------|----------------|---------------------|
| <b>27444</b>  | <b>Mr. Uniform &amp; Mat Rentals, Inc.</b> | <b>18500 Fitzpatrick</b> | <b>Detroit</b> | <b>MI 482281450</b> |

| <u>Permits</u> | <u>Raw Materials</u>   | <u>Limits</u>        |
|----------------|------------------------|----------------------|
| 00527444IU2    | Mats, Rugs, Detergents | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                    |            |              |
|------------------|--------------------|------------|--------------|
| 01               | Process Wastewater | Continuous | 3,471.00 gpd |
| 01               | Boiler Blowdown    | Continuous | 200.00 gpd   |

Process Description

The process consists of washing and drying of floor mats, dust mops and towels. The total wash load is approximately 5000 lbs. per day. Washing uses soaps and water, and the wastewater generated during washing is discharged into the sewer after two (2) stages of physical settling taking place in the in-ground pits.

The process consists of washing and drying of floor mats, dust mops and towels. The total wash load is approximately 5000 lbs. per day. Washing uses soaps and water, and the wastewater generated during washing is discharged into the sewer after two (2) stages of physical settling taking place in the in-ground pits.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>        |             |                 |
|---------------|------------------------------------------|---------------------------|-------------|-----------------|
| <b>27578</b>  | <b>ND Industries, Inc</b>                | <b>1893 Barrett Drive</b> | <b>Troy</b> | <b>MI 48084</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 24727578IU     | Epoxy resin          | 01 LOC. Local Limits |
|                | Formalin             |                      |
|                | Acids                |                      |
|                | Bases                |                      |
|                | Melamine             |                      |
|                | Urea                 |                      |

| <u>Flow Rate</u> |                           |            |        |     |
|------------------|---------------------------|------------|--------|-----|
| 01               | Sanitary Wastewater       | Continuous | 580.00 | gpd |
| 01               | Process Wastewater        | Continuous | 54.00  | gpd |
| 01               | Non-contact Cooling Water | Continuous | 3.00   | gpd |

Process Description

## Caps Making:

Blending and reacting of chemical raw materials to make a microencapsulated epoxy resin called microcaps. Rinse water from the microcaps making process is prior to discharge into the sewer system.

## Microspheres and Adhesives Blending:

Mixing and blending of chemical raw materials to manufacture threadlockers and sealants, retaining compounds, and gasketing materials. Once blended, products are transferred to various size containers, for sale to customers. Any chemical waste generated from the blending process is hauled off-site for proper disposal. Mixing vessels and blades (used to blend adhesive and sealant products) are washed periodically and filtered prior to discharge into the sewer system. Wastewater generated from non-contact heating water is filtered prior to discharge into the sewer system.

Wastewater generated from the compressor is passed through oil & water separator and then filtered prior to discharge into the sewer system.

## Floor Washing:

Wastewater generated from floor washing is collected in drums and hauled off-site for proper disposal.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 92836         | NJT Enterprises, LLC                     | 42400 Merrill Rd. Sterling Heights MI 48314 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 24192836IU     | Plastic              | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                    |              |               |
|------------------|--------------------|--------------|---------------|
| 01               | Process Wastewater | Continuous   | 11,300.00 gpd |
| 01               | Process Wastewater | Intermittent | gpd           |

Process Description

PROCESS DESCRIPTION

Plastic pellets are heated and formed into the required shapes of the automotive parts. These parts are washed, rinsed, followed by reverse osmosis rinse, dried, spray painted and dried again. The spray painting is conducted in painting booths using robots. In the booth, there is a water curtain to trap the excessive paint suspended in the air.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                  |
|---------------|------------------------------------------|-----------------------------------------------------|
| 84481         | National Research Company                | 55911 Gratiot Avenue<br>Chesterfield Towns MI 48051 |

| <u>Permits</u> | <u>Raw Materials</u>                                                               | <u>Limits</u>        |
|----------------|------------------------------------------------------------------------------------|----------------------|
| 00184481IU2    | scrap metal alloy diamond products<br>hydrofluoric acid, caustic soda, nitric acid | 01 LOC. Local Limits |

| <u>Flow Rate</u>                         |
|------------------------------------------|
| 01 Process Wastewater Batch 6,000.00 gpd |

Process Description

The facility receives scrapped ferrous alloy products/tools (drill bits, gears and segments of saw) containing industrial grade diamonds. The facility extracts diamonds by bathing the ferrous alloy scrapped products / tools in a mixture of nitric acid and hydrofluoric acid until the metal is dissolved. The recovered diamonds from the acid solution are washed and processed in the finishing lab.

The generated process wastewater (spent acid solution, water from the flume scrubber and floor cleaning) is pretreated for pH adjustment, flocculation, settling and filtration prior to discharge into the City sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                         |
|---------------|------------------------------------------|--------------------------------------------|
| 96563         | Northeast Water Treatment Plant of GL    | 11000 East 8 Mile Road<br>Detroit MI 48205 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 002-96563-IU   |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                                  |
|---------------------------------------------------|
| 01 Process Wastewater Continuous 3,550,000.00 gpd |

Process Description

The process involves pumping off the water from top of four sediment basins with total capacity of 32 million gallons, chambers and channels and water that leaks into chambers and channels during sludge removal work. Sludge processing will include dewatering of sludge with mobile Belt Filter Presses and Centrifuges. Polymer will be used to condition sludge. All water/filtrate will be discharged into sewer through sampling box. Filter cake will be dried on site on a cement dike and then hauled to landfill.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                  |
|---------------|------------------------------------------|-------------------------------------|
| 27570         | Oakland Heights Development, Inc.        | 2350 Brown Rd Auburn Hills MI 48326 |

| <u>Permits</u> | <u>Raw Materials</u>       | <u>Limits</u>        |
|----------------|----------------------------|----------------------|
| 70727570IU2    | Landfill wastes - Leachate | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 200.00 gpd    |
| 01               | Process Wastewater  | Continuous | 20,033.00 gpd |

Process Description

Commercial and household non-hazardous trashes are hauled in, compressed, covered and compacted with earth (soil). Facility has total six wells and leachate and gas extracted from the wells. Most of the landfill collected gas (mostly methane gas) goes to GM Orion Assembly Plant, located a short distance north of the landfill. It also uses enclosed flaring to maintain burning of the gases on site

Process wastewater generation is from the leachate extraction process. Leachate is collected by means of pipelines distributed along collection points throughout the landfill bottom for its different cells. The landfill leachate collected by all cells gets (except phase 1) directly discharged into the sanitary sewer. The landfill leachate collected from cell phase 1 is passed through activated carbon bed (tank filled with activated carbon) prior to discharge into the sewer system. The used oil is hauled off the site. Sanitary waste is discharged into to the city sewer system directly (bypassing the sampling location).

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>             |                 |                 |
|---------------|------------------------------------------|--------------------------------|-----------------|-----------------|
| <b>27400</b>  | <b>Oakwood Hospital - Dearborn</b>       | <b>18101 Oakwood Boulevard</b> | <b>Dearborn</b> | <b>MI 48124</b> |

| <u>Permits</u> | <u>Raw Materials</u>             | <u>Limits</u>        |
|----------------|----------------------------------|----------------------|
| 00427400IU2    | Hospital waste                   | 01 LOC. Local Limits |
|                | Cooking oil                      | 02 LOC. Local Limits |
|                | Pathological Laboratory Chemical |                      |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 24,000.00 | gpd |
| 01               | Process Wastewater        | Continuous | 78,800.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 22,200.00 | gpd |
| 01               | Boiler Blowdown           | Continuous | 5,000.00  | gpd |
| 02               | Sanitary Wastewater       | Continuous | 40,000.00 | gpd |
| 02               | Process Wastewater        | Continuous | 31,000.00 | gpd |

Process Description

The facility is engaged in both general and specialized health care services. The wastewater is generated from patient care, housekeeping, kitchen, cafeteria, morgue, laboratory and general house keeping.

Grease is separated from the kitchen wastewater, prior to discharge into city sewer. All other wastewater is discharged into the city sewer without pretreatment.

The facility is engaged in both general and specialized health care services. The wastewater is generated from patient care, housekeeping, kitchen, cafeteria, morgue, laboratory and general house keeping.

Grease is separated from the kitchen wastewater, prior to discharge into city sewer. All other wastewater is discharged into the city sewer without pretreatment.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |       |              |
|---------------|------------------------------------------|---------------------|-------|--------------|
| 27473         | Oakwood Hospital - Wayne                 | 33155 Annapolis Rd. | Wayne | MI 481842493 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00627473IU     | A hospital           | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Boiler Blowdown           | Continuous | 2,700.00  | gpd |
| 01               | Sanitary Wastewater       | Continuous | 24,000.00 | gpd |
| 01               | Process Wastewater        | Continuous | 12,660.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 12,000.00 | gpd |

Process Description

The facility generates process wastewater from patient care, x-ray services, laboratories and kitchen/cafeteria. Wastewater generated from the x-ray services contains silver. The silver bearing wastewater and wastewater from the kitchen/cafeteria are pretreated prior to discharge into the sewer.

The silver bearing wastewater is treated for silver recovery by (i) Electrolytic Silver Recovery and by ii) Metallic Replacement.

i) Electrolytic Silver Recovery: The silver is recovered from silver-bearing wastewater by electroplating the silver on a cathode. A controlled direct electrical current is passed between two (2) electrodes suspended in the silver bearing wastewater. Silver is deposited on the cathode in the form of pure silver plate. The cathodes are removed periodically, and the silver is stripped off for sale.

ii) Metallic Replacement: The equipment consists of a plastic container packed with steel wool. Silver is recovered when the silver-bearing wastewater flows through it making contact with the steel wool. In a process of ion exchange, solid silver is released at the bottom or gets deposited on the steel wool. When silver is no longer effectively removed by the system, the resulting silver bearing sludge is sent to a refiner (AgHog, Inc.).

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>         | <u>SIU Address</u>     |             |                 |
|---------------|--------------------------------------------------|------------------------|-------------|-----------------|
| <b>94766</b>  | <b>Ovonix Battery Co., Inc.- An affiliate of</b> | <b>1414 Combermere</b> | <b>Troy</b> | <b>MI 48084</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 237-94766-IU   |                      | 01 LOC. Local Limits |
|                |                      | 02 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 01               | Process Wastewater        | Continuous | 1,577.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 509.00   | gpd |

Process Description

The facility utilizes two precipitation reactors for the production of metal hydroxides. Sulfates of nickel, cobalt and manganese are mixed with ammonium hydroxide, sodium hydroxide and deionized water. A slurry of metal hydroxides and sodium sulfate solution is formed. The metal hydroxides are filtered, washed with deionized water and dried. The waste filter solution and wash water are collected, and allowed for settling and recovery of remaining metal hydroxides. The liquid portion is hauled off-site with other wastewater that are generated from employee eye wash, and floor and equipment washing.

The facility has process wastewater that is generated from its ammonia scrubber operation. This wastewater is neutralized and discharged into the sewer. It has also wastewater generated from non-contact cooling, boiler blowdown and RO water production. These wastestreams are nonregulated and directly discharged into the sewer.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                           |
|---------------|------------------------------------------|----------------------------------------------|
| <b>96731</b>  | <b>PSB Credit Services, Inc.</b>         | <b>561 Collier Rd. Auburn Hills MI 48326</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 707-96731-IU   |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                               |
|------------------------------------------------|
| 01 Process Wastewater Continuous 31,244.00 gpd |

Process Description

The facility's process is extracting leachates from the landfill by its collection system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                    |
|---------------|------------------------------------------|---------------------------------------|
| 27520         | Packaging Corporation of America         | 936 Sheldon Road<br>Plymouth MI 48187 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00627520U2     | paper and starch     | 02 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 02               | Sanitary Wastewater       | Continuous | 2,500.00  | gpd |
| 02               | Non-contact Cooling Water | Continuous | 3,000.00  | gpd |
| 02               | Boiler Blowdown           | Continuous | 300.00    | gpd |
| 02               | Process Wastewater        | Continuous | 34,978.00 | gpd |

Process Description

The corrugated shipping containers are made by applying the starch solution on the paperboards. The starch is prepared on site, and the paperboards are received in rolls. The paperboards get cut, folded into desired shape, and then prints are added. The starch works as a gluing agent at high temperature. The boxes are either joined by the gluing agent or by stapling them based on the customer's preference. The printing process takes place via the onilox rolls and the ink system. This system gets rinsed every time the ink color is changed, which occur about ten times per day.

The process wastewater from the stated rinsing goes through a filter system to remove the suspended material, and then it gets discharged to the sewer system. The corrugators get washed once every day and the process wastewater gets discharged to the sewer without pre-treatment. Also some process wastewater is generated from washing the two boilers the facility possesses.

# Facility Name: Detroit Water & Sewerage

# NPDES Permit #: MI 0022802

| SIU ID | Significant Industrial User (SIU) | SIU Address                         |
|--------|-----------------------------------|-------------------------------------|
| 93124  | Par Sterile Products, LLC         | 870 Parkdale Rd. Rochester MI 48307 |

| Permits     | Raw Materials     | Limits                            |
|-------------|-------------------|-----------------------------------|
| 18793124IU5 | Methyl alcohol    | 01 LOC. Local Limits              |
|             | ethyl alcohol     | 01 439.D.46 (PSES) Pharmaceutical |
|             | Benzyl alcohol    | Manufacturing                     |
|             | Propylene glycol  |                                   |
|             | Chloro butanol    |                                   |
|             | acetic acid       |                                   |
|             | hydrochloric acid |                                   |
|             | sodium hydroxide  |                                   |

| Flow Rate |                           |            |            |     |
|-----------|---------------------------|------------|------------|-----|
| 01        | Sanitary Wastewater       | Continuous | 8,600.00   | gpd |
| 01        | Process Wastewater        | Continuous | 22,800.00  | gpd |
| 01        | Non-contact Cooling Water | Continuous | 120,000.00 | gpd |
| 01        | Other                     | Continuous | 88,900.00  | gpd |
| 01        | Boiler Blowdown           | Continuous | 500.00     | gpd |

## Process Description

Sterile Products - Sterile Product manufacturing takes place in Building 100. It is primarily a 128,000 sq. ft building and houses, filling, inspection, packaging, warehousing, and chemical weighing and dispensing facility. The processes include compounding, formulating, filling, inspection and packaging of small volumes of parenteral products. The principal chemical constituents of these products include ethyl alcohol, benzyl alcohol, phenol, mercury, acetic acid, hydrochloric acid, sodium hydroxide, propylene glycol, epinephrine, Hydrocortisone acetate, chlorobutanol, polysorbate-80, sucrose, sodium chloride, estradiol valerate, castor oil, sesame oil and active ingredients (proteins). Ethylene oxide and isopropyl alcohol are used for equipment sterilization.

Manufacturing includes the washing, cleaning, and sanitation of tanks, containers, and equipment used to manufacture the products. Acids, caustics, detergents, isopropyl alcohol and water alone or in various combinations are used. These include washers and Clean-In-Place (CIP) systems. All wastewater is discharged into the sanitary sewer.

Product materials at various stages of production may be rejected as off-specification products and are prepared for disposal. The product/raw material that is containing methyl alcohol, ethyl alcohol, benzyl alcohol, acetic acid, hydrochloric acid, sodium hydroxide, propylene glycol, chlorobutanol, polysorbate-80, sucrose and sodium chloride may be disposed to the sanitary sewer after preparation.

QLT manufacturing - Formulation of proteins for QLT photo-therapeutics takes place in the first floor of 32,430 sq. ft building 8. There is no process discharge from this building.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>    |         |          |
|---------------|------------------------------------------|-----------------------|---------|----------|
| 96671         | Park Metallurgical Corporation - Plant # | 6100 Vancouver Avenue | Detroit | MI 48204 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00596671IU1    | Various salt powders | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                               |            |        |     |
|------------------|-------------------------------|------------|--------|-----|
| 01               | Sanitary Wastewater           | Continuous | 160.00 | gpd |
| 01               | Process Wastewater            | Batch      | 300.00 | gpd |
| 01               | Air Pollution Control Wastew. | Continuous | 934.00 | gpd |

Process Description

The facility has six (6) process lines as follows:

Zinc Plating Lines #1, 3 & 6 (Barrel & Rack): Parts undergo alkaline cleaning, rinsing, acid etching using hydrochloric acid, rinsing, zinc plating, rinsing, chromate conversion coating (trivalent & hexavalent) and rinsing.

Copper plating Line #2 (Barrel): Parts undergo alkaline cleaning, rinsing, acid etching using hydrochloric acid, rinsing, copper plating, rinsing and sealing.

Zinc Phosphating Line #4 (Rack): Parts undergo alkaline cleaning, rinsing, acid etching using hydrochloric acid, rinsing, zinc phosphating, rinsing and rust inhibitor oil and /or sealer application.

Alodine Conversion Coating & Passivation Line #5 (Rack):

- Alodine Conversion Coating (Chromate on Aluminum): Parts undergo alkaline cleaning (aluminum soak cleaner), rinsing, acid etching using nitric acid, rinsing, Alodine conversion coating and rinsing.
- Passivation (Removal of impurities such as iron, copper, lead from the surface of the stainless steel alloys): Parts undergo alkaline cleaner (iron soak cleaner), rinsing, passivating using nitric acid and rinsing.

The process wastewater generated from rinse operations, spent alkaline cleaner, spent hydrochloric acid, spent nitric acid, spent chromate and spent zinc phosphating solutions is pretreated via cyanide destruction (only post copper plating rinse wastewater undergo cyanide destruction), chrome reduction, neutralization, flocculation, clarification and filtration prior to discharge into the sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>      | <u>SIU Address</u>        |                  |                 |
|---------------|-----------------------------------------------|---------------------------|------------------|-----------------|
| <b>94507</b>  | <b>Parkdale Pharmaceuticals, Inc./ Pfizer</b> | <b>1200 Parkdale Road</b> | <b>Rochester</b> | <b>MI 48307</b> |

| <u>Permits</u> | <u>Raw Materials</u>         | <u>Limits</u>                                   |
|----------------|------------------------------|-------------------------------------------------|
| 18794507IU2    | Sterile, Injectable products | 01 LOC. Local Limits                            |
|                | Gel conmpounding             | 01 439.D.47 (PSNS) Pharmaceutical Manufacturing |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 1,080.00  | gpd |
| 01               | Process Wastewater  | Continuous | 3,188.00  | gpd |
| 01               | Other               | Continuous | 16,027.00 | gpd |
| 01               | Boiler Blowdown     | Continuous | 360.00    | gpd |

Process Description

The active ingredients used in the manufacturing process are Penicillin materials. The penicillin is manufactured as a batch process. One batch of penicillin is manufactured every two weeks. Each batch will use approximately 95 gallons of water. The penicillin is formulated into sterile, injectable products. The manufacturing process includes:

- i) Gel Compounding - all excipients needed for gel compounding are mixed with Water For Injection (WFI) to form a gel, which is pressure transferred into the formulation tank by using compressed air.
- ii) Powder Transfer Pots - penicillin received in powder form is either dispensed directly in powder transfer pots, or micronized using nitrogen pressure and dispensed into the powder transfer pots for storage prior to formulation.
- iii) Formulation - the contents of each pot are transferred into the formulation tank by attaching the transfer pot to the formulation tank.
- iv) Filling and Inspection - sterile formulated penicillin is filled into syringe barrels, inspected and packaged.

The facility discharges process wastewater from the following sources:

- i) Waste Tank - Facility cleans the gel tank, formulation tank and the filling line using hot distilled water, which is re-collected in the waste tank. Wastewater from powder pots cleaning, small parts washer and equipment cleaning waste sump also gets collected in the waste tank. The waste tank is an overflow design so all incoming waste immediately displaces to drain an amount equal to the incoming flow. A direct contact waste quench system is used downstream for cooling down the discharge.
- ii) Steam Sterilization - Facility has two sterilizing units out of which one unit is currently being used for equipment sterilization. The wastewater is directly discharged to the sewer.
- iii) Laboratory - Wastewater from the laboratory glassware cleaning and rinsing gets directly discharged into the sewer.
- iv) Distilled Water Skid - Flush water from the Distilled Water Skid/RO system is directly discharged into the sewer.

No wastewater discharge from cooling tower (only evaporative loss and freshwater is used for make up).

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 27348         | Pepsi Bottling Group L.L.C.              | 1555 Mack Avenue<br>Detroit<br>MI 48207 |

| <u>Permits</u> | <u>Raw Materials</u>               | <u>Limits</u>                                |
|----------------|------------------------------------|----------------------------------------------|
| 00327348IU3    | Fresh water and sugar concentrates | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |            |     |
|------------------|---------------------|------------|------------|-----|
| 01               | Sanitary Wastewater | Continuous | 8,600.00   | gpd |
| 01               | Process Wastewater  | Continuous | 123,200.00 | gpd |
| 02               | Sanitary Wastewater | Continuous | 9,000.00   | gpd |
| 02               | Process Wastewater  | Continuous | 299,554.00 | gpd |
| 02               | Process Wastewater  | Continuous | 30.00      | gpd |

Process Description

The process consists of the mixing of concentrate and high fructose corn syrup, water and carbonate. Mixture is bottled and shipped. Out of specification product, damaged product and truck washing wastewater is part of the wastewater discharged to the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                           |
|---------------|------------------------------------------|----------------------------------------------|
| 27447         | Perfection Industries, Inc.              | 18571 Weaver Road<br>Detroit<br>MI 482281158 |

| <u>Permits</u> | <u>Raw Materials</u>            | <u>Limits</u>                                                                                                                                                                                                                            |
|----------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 02527447IU     | metal parts, Alkaline, HCl acid | 01 LOC. Local Limits<br>01 413.A.14f (PSES) Electroplating<br><10,000 gpd<br>01 413.D.44f (PSES) Electroplating<br><10,000 gpd<br>01 413.A.14b (PSES) Electroplating<br><10,000 gpd<br>01 413.E.54b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u> |                     |            |            |
|------------------|---------------------|------------|------------|
| 01               | Sanitary Wastewater | Continuous | 375.00 gpd |
| 01               | Process Wastewater  | Batch      | 805.00 gpd |

Process Description

Black oxide coating process consists of alkaline cleaning, rinsing, HCl etching, rinsing, black oxide coating, rinsing, and oil application.

Hard chrome plating process consists of MEK cleaning, masking, chrome plating, rinsing, and demasking. The rinse water is returned to chrome tank to make-up for water lost to evaporation.

The process also includes passivating of some parts with nitric acid followed by hot rinsing in steam condensate.

Wastewater generated from the rinsing that follows the black oxide coating, is directed to a treatment tank where it is adjusted for pH prior to discharge into the sewer system

# Facility Name: Detroit Water & Sewerage

# NPDES Permit #: MI 0022802

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |         |          |
|---------------|------------------------------------------|---------------------|---------|----------|
| 27284         | Permawick Company                        | 5319 E. Outer Drive | Detroit | MI 48234 |

| <u>Permits</u> | <u>Raw Materials</u>                     | <u>Limits</u>        |
|----------------|------------------------------------------|----------------------|
| 00227284IU2    | Lubricating grease                       | 01 LOC. Local Limits |
|                | Synthetic oil                            | 02 LOC. Local Limits |
|                | Cellulose and cotton based type material |                      |

| <u>Flow Rate</u> |                               |            |          |     |
|------------------|-------------------------------|------------|----------|-----|
| 01               | Sanitary Wastewater           | Continuous | 120.00   | gpd |
| 01               | Air Pollution Control Wastew. | Continuous | 2,000.00 | gpd |

## Process Description

Rolls of paper (cellulose based materials) are shredded into 3 micron wide, 6 centimeters long strand. The shredded material is mixed with synthetic oil and the combination becomes lubricated wick used in electric motors.

Pretreatment is allowing the Wastewater generated during washing down of the shredded paper dust with water and allowing slurry to dry and hauled to landfill by Veolia Environmental.

Rolls of paper (cellulose based materials) are shredded into 3 micron wide, 6 centimeters long strand. The shredded material is mixed with synthetic oil and the combination becomes lubricated wick used in electric motors.

Pretreatment is allowing the Wastewater generated during washing down of the shredded paper dust with water and allowing slurry to dry and hauled to landfill by Veolia Environmental.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                           |
|---------------|------------------------------------------|----------------------------------------------|
| 27737         | Personal Uniform Service, Inc.           | 10100 Capital Avenue<br>Oak Park<br>MI 48237 |

| <u>Permits</u> | <u>Raw Materials</u>                                 | <u>Limits</u>        |
|----------------|------------------------------------------------------|----------------------|
| 00927737IU     | Uniforms, mats, shop towels, linen,<br>coats, aprons | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |              |
|------------------|---------------------|------------|--------------|
| 01               | Sanitary Wastewater | Continuous | 120.00 gpd   |
| 01               | Process Wastewater  | Batch      | 1,513.00 gpd |

Process Description

The process consists of washing, drying, sorting and folding of uniforms, shop towels linens and coveralls. The laundered items are then grouped and packaged for delivery to customers.

Process wastewater generated from washing operation is directed into trenches and allowed to flow through a sediment retention pit equipped with screen filter baskets to remove lint and other suspended particles prior to discharge into public sewers.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                         |
|---------------|------------------------------------------|--------------------|-------------------------|
| 90694         | Pine Tree Acres, Inc.                    | 36600 29 Mile Road | Lenox Township MI 48048 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 701-90694-IU   |                      | 01 LOC. Local Limits |
|                |                      | 01 PHEN. Phenols     |

| <u>Flow Rate</u> |                     |            |            |     |
|------------------|---------------------|------------|------------|-----|
| 01               | Sanitary Wastewater | Continuous | 360.00     | gpd |
| 01               | Process Wastewater  | Continuous | 100,000.00 | gpd |
| 01               | Sanitary Wastewater | Continuous | 600.00     | gpd |
| 01               | Process Wastewater  | Continuous | 60,255.00  | gpd |

Process Description

The facility operates a non-hazardous, municipal solid waste landfill accepting 5,000 - 6,000 tons daily from commercial, industrial and residential customers. PTA consists of 266 active acres currently with another 95 acres of unconstructed, future landfill area (see attached map). PTA projects 26 years of site life at the current waste acceptance rate.

The facility also operates power plants and an associated gas treatment plant for hydrogen sulfide removal, based on the technologies of converting landfill gas to fuel. The plants utilize the recovered landfill gas to fuel engines to generate electricity.

Process wastewater (leachate) is generated as the storm water percolates through the landfill solid waste. The leachate is collected in the base of PTA lined cells and is pumped through a perimeter force main and ultimately stored and discharged from 400,000 gallons and 44,000 gallons aboveground tank, seven days per week and 24 hours per day. PTA has MDEQ approval to recirculate the leachate as per Section 9(ee) of its Operating License. However, the current operating procedure involves only recirculating leachate during periods of tank or system maintenance, troubleshooting, and repair. The 274 gpd average recirculation rate is based on an estimated 100,000 gallons annual recirculation rate divided by 365 operating days.

Landfill gas condensate is collected from PTA's gas collection and control system. This gas condensate is routed to PTA's aboveground leachate storage tanks. Landfill gas condensate is considered "leachate" per MDEQ Solid Waste Part 115 rules. PTA analytical demonstrates that there are no significant differences in landfill gas condensate and leachate. The daily volume of landfill gas condensate generated is 1,000 - 2,000 gallons, on average, which is only 2 - 4% of the total effluent discharged. As of late 2014, PTA has segregated landfill gas condensate from its leachate. This voluntary action was taken in response to a nuisance odor concern regarding gas condensate discharged into the Lenox Township sewer system.

Process wastewater from PTA's landfill gas treatment (hydrogen-sulfide removal) is also segregated currently from PTA's leachate. This process wastewater from PTA's thiopaq plant typically consists of:

| COMPOUND                                                                                             | Weight % |
|------------------------------------------------------------------------------------------------------|----------|
| Water                                                                                                | 90       |
| Bicarbonate (HCO <sub>3</sub> )                                                                      | 4        |
| Sodium (Na)                                                                                          | 3        |
| Sulfate (SO <sub>4</sub> )                                                                           | 2        |
| Thiosulfate (S <sub>2</sub> O <sub>3</sub> ), Carbonate (CO <sub>3</sub> ), and elemental Sulfur (S) | 1        |

Thiopaq process wastewater is low volume about (1,000 - 1,500 gpd) relative to PTA's leachate generation. For this reason, as well as the nonhazardous constituents, thiopaq process wastewater is approved by MDEQ to be commingled with PTA's leachate. Due to the concern over nuisance odors in Lenox Township's sewer, thiopaq wastewater is typically recirculated back into the landfill. During periods of tank or other system maintenance, thiopaq wastewater and landfill gas condensate are commingled with PTA's leachate when discharged into the sewer system.

Landfill gas condensate and thiopaq wastewaters flows are not metered separately from landfill leachate. Therefore, flow rates are estimates. The 55 gpd average sewer discharge is based on an estimated 20,000 gallons annual discharge divided by 365 operating days. The typical operating procedure involves recirculating these wastewaters back into the landfill. Currently, landfill gas condensate and thiopaq wastewaters are only discharged to the sewer during periods of tank or system maintenance, troubleshooting, and repair.

In 2017, PTA plans to enclose the existing equipment wash pad adjacent to the maintenance garage. The new wash bay's process wastewater will drain initially to an oil/water separator. The treated wastewater will drain to the 44,000 or 400,000 gallon aboveground holding tanks and commingle with leachate.

The facility uses pond water for landfill road traffic dust suppression. Pond water is pumped into and applied via tankers trucks. The quantity used is variable and it depends on weather.

Offices and shop sanitary wastewater currently is not discharged into the sewer system, the facility has a septic tank. In the future, the facility is planning to discharge the sanitary wastewater (about 600 gpd) into the sewer system.

The collected process wastewater is finally discharged into the city (Lenox Township) sewer system without pretreatment except that the future plan is to pass the equipment wash process wastewater through an oil water separator prior to discharge. The wastewater discharge is measured by a flow meter (totalizer).

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                           |
|---------------|------------------------------------------|--------------------------------------------------------------|
| 27626         | Plating Specialties, Inc.                | 1675 E. Ten Mile Road      Madison Heights      MI 480714219 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                                                                                                                                                                              |
|----------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 029013         | Metal parts          | 01 LOC. Local Limits<br>01 413.A.14g (PSES) Electroplating<br>01 413.G.74g (PSES) Electroplating<br>01 413.A.14b (PSES) Electroplating<br><10,000 gpd<br>01 413.G.74b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u> |                           |            |              |
|------------------|---------------------------|------------|--------------|
| 01               | Process Wastewater        | Continuous | 8,700.00 gpd |
| 01               | Sanitary Wastewater       | Continuous | 375.00 gpd   |
| 01               | Non-contact Cooling Water | Continuous | 500.00 gpd   |
| 01               | Boiler Blowdown           | Continuous | 100.00 gpd   |

Process Description

The process involves alkaline cleaning, rinsing, activating with acid, rinsing, chromating, electroless plating of nickel, passivation, plating of zinc, cadmium, copper, silver and tin, and/or plating of nickel and sulfamate nickel, rinsing and drying. The wastewater is generated from the rinse stages during alkaline cleaning, activating with acid, and electroplating operations. The pretreatment of wastewater consists of collection, chrome reduction, cyanide destruction, pH adjustment, precipitation, clarification and filtration

OE - author

# Facility Name: Detroit Water & Sewerage

# NPDES Permit #: MI 0022802

| SIU ID | Significant Industrial User (SIU) | SIU Address    |          |              |
|--------|-----------------------------------|----------------|----------|--------------|
| 27530  | Plymouth Plating Works, Inc.      | 42200 Joy Road | Plymouth | MI 481704636 |

| Permits     | Raw Materials                 | Limits                             |
|-------------|-------------------------------|------------------------------------|
| 02627530IU3 | Automotive and aircraft parts | 01 LOC. Local Limits               |
|             |                               | 01 413.A.14g (PSES) Electroplating |
|             |                               | 01 413.E.54g (PSES) Electroplating |
|             |                               | 01 413.A.14c (PSES) Electroplating |
|             |                               | 01 413.E.54c (PSES) Electroplating |

| Flow Rate |                     |            |           |     |
|-----------|---------------------|------------|-----------|-----|
| 01        | Sanitary Wastewater | Continuous | 160.00    | gpd |
| 01        | Process Wastewater  | Continuous | 10,443.00 | gpd |
| 01        | Sanitary Wastewater | Continuous | 140.00    | gpd |
| 01        | Process Wastewater  | Continuous | 11,990.00 | gpd |
| 01        | Boiler Blowdown     | Continuous | 100.00    | gpd |

## Process Description

The facility has rack lines and barrel lines to conduct zinc, cadmium, zinc-cobalt electroplating, zinc phosphating, coating, and passivation of auto and aircraft parts. The operations include soak cleaning, electro cleaning, rinsing, acid pickling, electroplating, zinc phosphating, dye with organic colors, alkaline degreasing, passivation, and chromating for color conversion to clear, yellow, or black.

The process wastewater is generated from the rinsing steps. The cyanide-bearing wastewater generated from the rinsing steps after the electroplating operations is collected in a cyanide sump. The chrome-bearing wastewater from the rinsing steps after the chromating operations is collected in a chrome sump. The wastewater generated from the rinsing steps after the cleaning, pickling, and acid zinc plating operations is collected in an acid/alkali sump. Dead rinse wastewater is used to replenish the plating tanks. Cyanide is destructed in a 3-stage cyanide destruction system by adding sodium hypochlorite solution (bleach) under basic condition (pH 10.5 to 11.0 units). Concentrated spent acid is bled into the chrome sump to adjust pH to 2.5 units. The chrome-bearing wastewater is passed through a column containing iron pellets where hexavalent chromium is reduced to trivalent chromium.

The pretreatment system includes neutralization, cyanide-destruction, coagulation, flocculation, settling, filtration, and tri-cab treatment system, and sludge thickener via filter press. The generated sludge is filter pressed and hauled off as a hazardous solid waste. The sanitary and boiler blowdown are discharged through the sampling location along with the pre-treated process wastewater. The dilution factor is less than 2% and the combined wastestream formula will not apply.

OS - author

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>       |             |                 |
|---------------|------------------------------------------|--------------------------|-------------|-----------------|
| <b>91936</b>  | <b>Power Vac of Michigan, Inc.</b>       | <b>44300 Grand River</b> | <b>Novi</b> | <b>MI 48375</b> |

| <u>Permits</u> | <u>Raw Materials</u>                     | <u>Limits</u>        |
|----------------|------------------------------------------|----------------------|
| 009-91936-IU   | Liquid wastes, sludge from settling pits | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Sanitary Wastewater | Continuous | 300.00   | gpd |
| 01               | Process Wastewater  | Continuous | 1,952.00 | gpd |

Process Description

The facility receives liquid waste and sludge from catch basins and car wash settling pits into its premises for dewatering. Process wastewater lodged in the dewatering pit is processed through a grit chamber equipped with two (2) compartments. Wastewater flows from the first compartment into the second compartment and thence through an oil/water separator. The treated wastewater, now oil-free discharges into the public sewers. Solids recovered from the dewatering pit are hauled away for eventual disposal at a landfill.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                          |
|---------------|------------------------------------------|--------------------|--------------------------|
| 96850         | Premier Plating, LLC                     | 32370 Howard       | Madison Heights MI 48071 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 159-96850-IU   |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |       |              |
|------------------|--------------------|-------|--------------|
| 01               | Process Wastewater | Batch | 1,000.00 gal |

Process Description

The process consists of pretreatment, plating and heat treatment of parts (yokes).

Pretreatment:

Pretreatment mainly is the chemical treatment for the removal of all soils from the surface in a series of tanks/baths. The following steps are involved:

1. Soak Cleaning: This step involves immersion of parts in alkaline cleaning solution to remove lubricants that were used during the manufacturing of the yokes.
2. Rinsing with water
3. Descaling: This step involves full immersion in permanganate descaling solution to remove rust and scale.
4. Rinsing with water
5. Activation: Dipping in acid solution to completely remove oxidation and activate the surface of the yokes for plating.
6. Rinsing with water
7. Carbon Removal: This is a combination of chemical & mechanical action. It consists of immersion of parts in a mild cleaner enhanced with mechanical agitation and ultrasonic transducers to remove all traces of loose carbon from the surface of the yokes.
8. Rinsing with water.

Plating:

The yokes (parts) are plated in an electroless nickel plating process at a pH of 4.9 to 5.4, and temperature 185 to 195 °F. Special fixtures are used to provide free access of the plating solution to ensure complete even coverage. After plating, the parts are rinsed thoroughly and dried.

Heat Treatment:

After plating, the parts are transferred to an oven and heat treated to precipitation harden the electroless nickel coating.

Finally there is also a supplementary process set-up for stripping the excess nickel from the totes/racks used to transport the slip yokes (parts) through the production line.

Wastewater for discharge is generated from all rinsing operations, and electroless nickel solution & totes/racks scrubber solution from concentration holding tank (2000 gal). It is collected into an equalization tank (2400 gal) and pretreated in 1000 gal batch treatment tank.

Wastewater undergoes pH adjustment, metals precipitation, polymer addition, sludge settling, filtration, and final pH adjustment prior to sewer discharge, 1-2 batches/day. Sludge is filtered in filter press and solids are hauled offsite.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                     |
|---------------|------------------------------------------|----------------------------------------|
| <b>94054</b>  | <b>Production Spring LLC</b>             | <b>1151 Allen Rd<br/>Troy MI 48083</b> |

| <u>Permits</u> | <u>Raw Materials</u>                    | <u>Limits</u>        |
|----------------|-----------------------------------------|----------------------|
| 00794054IU1    | Carbon steel, stainless steel, aluminum | 01 LOC. Local Limits |

| <u>Flow Rate</u>                      |
|---------------------------------------|
| 01 Process Wastewater Batch 55.00 gal |

Process Description

Process involves forming of carbon steel, stainless steel and aluminum material utilizing Torin and Nilson fourslide machines, tumbling of carbon steel parts with ceramic tumbling media and their assembly with purchased plastic and rubber components. Process wastewater is generated from tumbling operation. Process wastewater after passing through 100 micron sock filter is collected in a drum and discharged in batches along with mop water after passing through two 5-micron canister filters, to the sewer system.



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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                             |
|---------------|------------------------------------------|------------------------------------------------|
| 93165         | Providence Park Hospital                 | 47601 Grand River Ave.      Novi      MI 48374 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                      |
|----------------|----------------------|----------------------------------------------------|
| 00993165IU3    | patient care         | 01    LOC. Local Limits<br>02    LOC. Local Limits |

| <u>Flow Rate</u> |                           |                                  |
|------------------|---------------------------|----------------------------------|
| 01               | Sanitary Wastewater       | Continuous      3,000.00    gpd  |
| 01               | Process Wastewater        | Continuous      8,342.00    gpd  |
| 01               | Boiler Blowdown           | Continuous      15.00    gpd     |
| 02               | Sanitary Wastewater       | Continuous      24,000.00    gpd |
| 02               | Process Wastewater        | Continuous      10,027.00    gpd |
| 02               | Non-contact Cooling Water | Continuous      30.00    gpd     |
| 02               | Boiler Blowdown           | Continuous      15.00    gpd     |

Process Description

The facility generates process wastewater from patient care, clinical lab testing, housekeeping, and kitchen. Wastewater from the kitchen is sewer discharged via a grease trap. The grease trap is 12' in diameter and 17' in depth. The grease trap is regularly serviced by an outside company. Ethanol and formalin wastes generated from lab testing get collected in separate waste containers and are shipped off-site for treatment/disposal. The facility uses well water for noncontact cooling system. Approximately 5,000 gallons of wastewater is discharged to the sanitary sewer from the system during blow-down, which occurs two times a year.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>   |         |              |
|---------------|------------------------------------------|----------------------|---------|--------------|
| 27448         | Quaker Chemical Corporation              | 14301 Birwood Avenue | Detroit | MI 482382207 |

| <u>Permits</u> | <u>Raw Materials</u>                            | <u>Limits</u>                                |
|----------------|-------------------------------------------------|----------------------------------------------|
| 005-27448-IU   | Various chemicals, animal, veg. and mineral oil | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                               |            |           |     |
|------------------|-------------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater           | Continuous | 640.00    | gpd |
| 01               | Boiler Blowdown               | Continuous | 1,000.00  | gpd |
| 01               | Air Pollution Control Wastew. | Continuous | 21,600.00 | gpd |
| 01               | Process Wastewater            | Batch      | 8,200.00  | gpd |
| 01               | Non-contact Cooling Water     | Continuous | 34,785.00 | gpd |
| 01               | Stormwater/Rain               | Continuous | 15,380.00 | gpd |
| 02               | Sanitary Wastewater           | Continuous | 465.00    | gpd |
| 02               | Process Wastewater            | Batch      | 7,500.00  | gpd |
| 02               | Non-contact Cooling Water     | Continuous | 27,000.00 | gpd |
| 02               | Boiler Blowdown               | Batch      | 1,000.00  | gpd |

Process Description

The process consists of esterification of glycol with fatty acids and blending/mixing of the product with other chemicals according to certain formulas specified by customers. Oils of animal, vegetable and mineral types are also used in the blending/mixing process. The blending occurs in blending kettles of different sizes. Water and additives could be added depending on the formula. There are about 15 blending kettles with sizes that range from 15 gallons to up 10,000 gallons. These kettles are sometimes rinsed clean for the next batch.

The process wastewater generated from stripping of water molecules during esterification, rinsing of process tanks, totes/bins and floor scrubber. The pretreatment system consists of oil/water/solids separation in treatment tanks using heat, pH adjustment and polymer addition for flocculation. The process wastewater generated from the air scrubbers passes through pH adjustment if the pH is less than 5.0 or greater than 11.5. However, if the pH is within 5.0 to 11.5, the generated wastewater is discharged directly to the sewer without treatment through the sampling location. Wastewater generated from non-contact cooling water is discharged directly into public sewers without any treatment.

The company has three (3) oil/water separators that are located outside the facility. The storm water goes through the corrugated plate oil/water separators. The wastewater effluent from these oil/water separators is mixed with other sources of wastewater prior to discharge to the sewer system. Waste oil effluent from the three (3) oil/water separators is sent to a collection and recycling tank.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>         |                |                 |
|---------------|------------------------------------------|----------------------------|----------------|-----------------|
| <b>27385</b>  | <b>Quala Services, LLC.</b>              | <b>130 S. Green Street</b> | <b>Detroit</b> | <b>MI 48209</b> |

| <u>Permits</u> | <u>Raw Materials</u>             | <u>Limits</u>                      |
|----------------|----------------------------------|------------------------------------|
| 564001         | Polymers and Flocculation agents | 01 LOC. Local Limits               |
|                | Caustic Soda (NaOH)              | 01 442.A.15a (PSES) Transportation |
|                | Detergent solutions              | Equipment Cleaning                 |
|                | Soap solutions                   | 01 PHEN. Phenols                   |

| <u>Flow Rate</u> |                    |       |              |
|------------------|--------------------|-------|--------------|
| 01               | Process Wastewater | Batch | 8,000.00 gpd |

Process Description

The processes performed at the facility include: i) draining containers and collecting residual chemicals at the wash bay, ii) cleaning the interior of the truck containers with steam, caustic soda or other detergent solutions, and iii) rinsing with water. The exterior of the container is washed with soap and water. The wastewater generated from the cleaning of tankers is pretreated prior to discharge to the city sewer. The pretreatment operation performed at the facility includes oil/water separation in a collection pit, pH adjustment/neutralization, flocculation and gravity settling. The wastewater portion is batch discharged to the sewer system and sludge portion is hauled off site. The facility implements a Heel Management Program designed to remove heel, prior to cleaning.

TA - author

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>       |                 |                 |
|---------------|------------------------------------------|--------------------------|-----------------|-----------------|
| <b>91623</b>  | <b>R &amp; D Enterprises</b>             | <b>46900 Port Street</b> | <b>Plymouth</b> | <b>MI 48170</b> |

| <u>Permits</u> | <u>Raw Materials</u>         | <u>Limits</u>                       |
|----------------|------------------------------|-------------------------------------|
| 15691623IU2    | Tubings, castings, stampings | 01 LOC. Local Limits                |
|                |                              | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |       |            |
|------------------|--------------------|-------|------------|
| 01               | Process Wastewater | Batch | 150.00 gpd |

Process Description

Parts such as tubing (Copper and copper-Nickel alloy), castings (brass), sheet metal (stainless steel), formed fittings (Copper), and stampings (Copper) are processed through the following steps:

- i) Cutting, machining and drilling: Smaller inner tubes and large outer tubes (shell) are cut, end plates are punched, shells are drilled, outer caps (separator and nuts) are machined, inner tubes are bundled into end plates and then inserted into shell.
- ii) Assembling by brazing, soldering and welding: Stainless steel parts are assembled by welding and other parts are assembled by brazing and soldering.
- iii) Chemical etching (acid cleaning): In order to remove oxide film formed during brazing, parts are dipped in phosphoric acid bath. During this process some of the basis material is etched away.
- iv) Rinsing: Parts are rinsed by countercurrent rinsing techniques in three tanks.
- v) Leak testing: Compressed air filled parts are submerged in water to detect leaks if any.

Process wastewater is generated from acid cleaning, rinsing, brazing and leak testing.

Contact cooling water from brazing operation is reused several times and then treated in batches with other process wastewater. The pretreatment operation consists of lime addition, pH adjustment to 9-10 units by adding caustic soda, coagulation, overnight settling, filtration of supernatant in sand bag and filtration of sludge through filter press. Filtrate from sand filtration unit is discharged into the city sewer through the sampling box and filtrate from sludge filter press is routed back into the treatment tank.

Spent acid is stored in fifty-five (55) gallons drum awaiting treatment. About 110 gallons of spent acid is treated every year and discharged with other process wastewater. Twenty (20) gallons of spent acid is mixed with other process wastewater at a time for treatment purpose.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                     |
|---------------|------------------------------------------|----------------------------------------|
| 96607         | RJL Equity Holdings, LLC                 | 4430 Lapeer Road Auburn Hills MI 48326 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 70796607IU1    |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                 |
|----------------------------------|
| 01 Other Continuous 6,000.00 gpd |

Process Description

The facility is a closed landfill where leachate drains from buried solid wastes to the public sewer system via a leachate collection system. The facility discharges leachate into the sewer system through its MYCELX advanced Oil/PCB water treatment system, which is provided with a series of high efficiency filter media cartridges for filtration; the polypropylene filter cartridges are infused with a special polymer compound (MYCELX) that actively bonds to hydrocarbons. Storm runoffs from the facility get collected separate and discharged into the Clinton River.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |         |          |
|---------------|------------------------------------------|---------------------|---------|----------|
| 96311         | RT Holdings of Ohio, LLC                 | 530 S. Rouge Street | Detroit | MI 48217 |

| <u>Permits</u> | <u>Raw Materials</u>        | <u>Limits</u>                                  |
|----------------|-----------------------------|------------------------------------------------|
| 91496311IU1    | Non Hazardous used oil      | 01 LOC. Local Limits                           |
|                | Recycled petroleum products | 01 PHEN. Phenols                               |
|                |                             | 01 437.B.25 (PSES) Centralized Waste Treatment |
|                |                             | 02 SP.TTO.Purg Org Special Discharge           |
|                |                             | 02 SP.TTO.Extract Special Discharge            |
|                |                             | 02 SP.TTO.Pest PCB Special Discharge           |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Process Wastewater  | Continuous | 5,000.00  | gpd |
| 02               | Ground Water        | Continuous | 4,000.00  | gpd |
| 02               | Sanitary Wastewater | Continuous | 100.00    | gpd |
| 02               | Process Wastewater  | Batch      | 10,000.00 | gpd |

Process Description

The facility receives non-hazardous oily waste, recovers oil and discharge pretreated wastewater into the sewer through flow meter and sampling flume. The facility also generates process wastewater from the house keeping of the facility.

Upon arrival, the inbound non-hazardous oily waste is first tested for pH, percentage of oil & water, and flash point if necessary. If the wastestream is acceptable, it is then off-loaded to one of eight tanks from T1 through T8. A treatability test is also performed in the laboratory. Tanks T1 to T8 are 10,000 gallon each. After allowing the contents of the tanks to settle for up to 48 hours, the oil phase is transferred to tanks T12 or T13 for future sale.

The water phase, is pumped to one of another tank from T1 to T8 for pH adjustment, chemical precipitation, flocculation and settling. The facility uses sodium hydroxide, ferric chloride, sulfuric acid and a polymer for the above treatment. Once settling is complete, the water portion is discharged into the sewer through flow meter and sampling location. The solids are combined and allowed further dewatering through settling prior to hauling away.

Accumulated stormwater in the large pit and tank dike area is pumped directly into the sewer. Waste sludge is allowed further dewatering in pits prior to haul offsite for disposal.

The facility's sampling location #2 (SL#2) is used for monitoring untreated groundwater discharge from its groundwater well. Company has not discharged groundwater into the city sewer since December 8, 2013

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| SIU ID | Significant Industrial User (SIU) | SIU Address                                   |
|--------|-----------------------------------|-----------------------------------------------|
| 27401  | Rayco Plating, Inc.               | 10023 West Fort Street<br>Detroit<br>MI 48209 |

| Permits    | Raw Materials            | Limits                              |
|------------|--------------------------|-------------------------------------|
| 15427401IU | Steel and Brass hardware | 01 LOC. Local Limits                |
|            | Plating Solutions        | 01 433.A.17a (PSNS) Metal Finishing |
|            | Caustic cleaner          |                                     |
|            | Acid                     |                                     |

| Flow Rate |                     |            |          |     |
|-----------|---------------------|------------|----------|-----|
| 01        | Sanitary Wastewater | Continuous | 120.00   | gpd |
| 01        | Process Wastewater  | Continuous | 1,130.00 | gpd |
| 01        | Boiler Blowdown     | Continuous | 20.00    | gpd |

#### Process Description

Steel and brass hardware products are consecutively racked, alkaline cleaned, rinsed, electro-cleaned, rinsed, acid cleaned, rinsed, nickel electroplated, rinsed, chrome electroplated, rinsed, inspected and packaged for shipping.

Process wastewater is generated from water rinses and alkaline, acid, and electro-cleaning processes. The process wastewater and spent solutions are treated on-site prior to discharge to sewer. The treatment operations consist of chrome reduction, neutralization, polymer flocculation/settling, clarification, and filtration. About 2,000 pounds per year of filter cake sludge is hauled offsite by Valley City Environmental Services, Inc. to Agmet Metals, Inc. Boiler blowdown wastewater is treated and discharged with process wastewater. Since blowdown wastewater is insignificant (1.8 % of process wastewater), dilution formula is not applied.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                   |
|---------------|------------------------------------------|--------------------------------------|
| 81065         | Remacon Compressors, Inc.                | 7939 McGraw St. Detroit MI 482102156 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                      |
|----------------|----------------------|------------------------------------|
| 02481065IU     | Compressor Parts     | 01 LOC. Local Limits               |
|                | Alkaline Cleaner     | 01 413.F.64f (PSES) Electroplating |
|                | Paint Stripper       | <10,000 gpd                        |
|                | Hydrochloric Acid    | 01 413.F.64b (PSES) Electroplating |
|                |                      | <10,000 gpd                        |

| <u>Flow Rate</u>                      |
|---------------------------------------|
| 01 Process Wastewater Batch 60.00 gpd |

Process Description

Different parts of compressors such as Crankshaft, Pistons and Valves are taken apart from casing. Parts are repaired using various process such as honing, grinding and sand blasting. Casing and some parts are then washed in hot bath tank (160oF to 180oF) using hot vat stripper which removes paint, dirt and rust. After rinsing parts are dipped in Hydrochloric Acid tank (50%) which etched away oxides and basic metal. After etching parts are dipped in soda ash tank to neutralize acid. Parts are then spray rinsed and then dipped in anti-rust and then blown air dried. Air dried parts are spray painted in gray and black colors in paint booth. Parts are assembled and leak testing are performed using nitrogen and soapy solution. Process wastewater is generated from rinsing and is collected into a discharge tank which is discharged without any treatment.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| 27168         | Richcoat, L.L.C.                         | 40573 Brentwood Sterling Heights MI 48310 |

| <u>Permits</u> | <u>Raw Materials</u>             | <u>Limits</u>                                               |
|----------------|----------------------------------|-------------------------------------------------------------|
| 15127168IU     | Sulfuric acid, alkaline cleaners | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                               |            |           |     |
|------------------|-------------------------------|------------|-----------|-----|
| 01               | Process Wastewater            | Continuous | 12,900.00 | gpd |
| 01               | Air Pollution Control Wastew. | Continuous | 125.00    | gpd |
| 01               | Sanitary Wastewater           | Continuous | 275.00    | gpd |
| 01               | Non-contact Cooling Water     | Continuous | 60.00     | gpd |

Process Description

The parts are alkaline cleaned, anodized using sulfuric acid, then rinsed, and dried. The facility added a new anodizing line in January of 2005. The process wastewater which is generated from the rinsing operations and air pollution control is pH adjusted before discharge.

The parts are alkaline cleaned, anodized using sulfuric acid, then rinsed, and dried. The facility added a new anodizing line in January of 2005. The process wastewater which is generated from the rinsing operations and air pollution control is pH adjusted before discharge.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| 81172         | Richter Precision, Inc. - Plant #1       | 21427 Carlo Dr. Clinton Township MI 48038 |

| <u>Permits</u> | <u>Raw Materials</u>                      | <u>Limits</u>                                               |
|----------------|-------------------------------------------|-------------------------------------------------------------|
| 00181172IU2    | Alkaline cleaner, phosphoric acid, metals | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u>                                       |
|--------------------------------------------------------|
| 01 Other Continuous 50.00 gpd                          |
| 01 Air Pollution Control Wastew. Continuous 960.00 gpd |
| 01 Process Wastewater Continuous 2,200.00 gpd          |

Process Description

Parts are heat treated, cleaned in degreaser, some rusty parts are cleaned with mild Phosphoric Acid and rinsed. All parts are alkaline cleaned, de-ionized water rinsed, dried, wiped with methanol and then coated with PVD and CVD.

Some parts are reprocessed which involves stripping using stripping solution. There is no wastewater generated from this process. The spent stripping solution is hauled off-site.

The process wastewater is generated from the rinsing operations stated above, and from the air scrubbers. The facility treats the air scrubber wastewater by pH adjustment. The facility has closed loop non-contact cooling water system.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>  | <u>SIU Address</u>       |               |                 |
|---------------|-------------------------------------------|--------------------------|---------------|-----------------|
| <b>96812</b>  | <b>Richter Precision, Inc. - Plant #2</b> | <b>34270 Riviera Dr.</b> | <b>Fraser</b> | <b>MI 48026</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 001-96812-IU   |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>       |            |        |     |
|------------------------|------------|--------|-----|
| 01 Sanitary Wastewater | Continuous | 160.00 | gpd |
| 01 Process Wastewater  | Batch      | 20.00  | gpd |

Process Description

1) Currently the company has the following processes:

a) Nitriding Process: Customer tools are alkaline cleaned, rinsed with deionized water and blown dry. Tools sometimes are media blasted prior to cleaning to remove any surface contamination like rust from the tools. At this facility, the nitriding process is conducted by using anhydrous ammonia as a donor gas. As the ammonia comes in contact with the heated parts, it decomposes into nitrogen and hydrogen. The nitrogen diffuses into the steel and the hydrogen burns off through the natural gas burner. The result provides an improved surface hardness to the tools.

b) Metal Oxide-Chemical Vapor Deposition (MO-CVD) Process: Customer tools that undergo this process are alkaline cleaned; deionized water rinsed and are also submerged in a deionized water tank, then blown dry. This coating process is a special process and is specific to only one customer. It is a two part coating process that will prevent slug buildup on the inside of the customer tools. The tools are placed into a Chemical Vapor Deposition (CVD) reactor and heated to a specific temperature. Tantalum ethoxide enters the heated chamber as a vapor and adds a thin film to the inner diameter of the tools. Once cooled, the inside of the tools are then sprayed with a platinum and acetone mixture and then baked out in an oven at a specific temperature and time.

2) Operations at plant #2 that commenced in December 2016 are as follows:

a) Boronizing Process: Customer tools that undergo this process are alkaline cleaned, deionized water rinsed and then blown dry. Then a coating of Boron paste is applied to specific areas of the tools by using a paint brush and is allowed to dry. Tools are then loaded into the chamber, heated and baked to a specific temperature/time. This process improves and provides a better surface hardness to the tools. Finally, the tools are media blasted and packaged.

b) Chemical Vapor Deposition (CVD) Process: Customer tools that undergo this process are alkaline cleaned, deionized water rinsed and blown dry. Some tools if required are polished prior to cleaning to improve the tool

surface finish. Tools are then loaded in the reactor and heated to specific temperatures/times. Various gases are introduced during the process which include titanium tetrachloride, nitrogen, hydrogen and methane. Once this process is complete, the tools now have an increased wear resistance and tool life. Due to the high temperatures of this process, the tools are then moved to the heat treat area where the tools are heat treated back to the customer specifications. Most tools are polished prior to shipping.

c) Vacuum Heat Treating Process: Customer tools that undergo this process are either raw uncoated steel which is only heat treated at this facility, or tools that Richter Precision, Inc. – Plant #1 & #2 has already coated. Only uncoated tools are alkaline cleaned, deionized water rinsed and then are blown dry. Raw uncoated and coated parts are loaded into the vacuum furnace and heated to specific temperatures for a specific time to meet the required specifications of the customers. Tools are heat treated on a batch basis according to the material and required tool hardness.

The process wastewater generating operations are deionized water rinses after alkaline cleaning from all the above listed processes. The facility has a closed loop non-contact cooling water system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                |
|---------------|------------------------------------------|-----------------------------------|
| 27512         | Ringmasters Manufacturing, L.L.C         | 36502 Van Born Rd. Wayne MI 48184 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00627512IU1    | Bar or ingots        | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 1,240.00 gpd  |
| 01               | Process Wastewater  | Continuous | 10,549.00 gpd |

Process Description

Process consists of: 1) Cutting of bars or ingots into blocks, 2) Heating of blocks to forging temperature of approximately 2300 °F, 3) Forging of blocks into preform, 4) Rolling of preform into rings, 5) Heat treatment of rings (if needed), 6) Machining and 7) Inspection and Shipping.

Process wastewater is generated from the direct cooling of ring mill tools. Contact cooling water is collected in collection pits and then passed through oil/water separators to remove oil prior to discharge into the city sewer. Spent coolant and oily sludge from oil/water separators are hauled off-site.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>    |           |          |
|---------------|------------------------------------------|-----------------------|-----------|----------|
| 96847         | Roak Brewing Company, LLC                | 330 E. Lincoln Avenue | Royal Oak | MI 48067 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 009-96847-IU   | Grains, yeast        | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Sanitary Wastewater | Continuous | 720.00   | gpd |
| 01               | Process Wastewater  | Batch      | 1,800.00 | gpd |
| 01               | Other               | Continuous | 391.00   | gpd |
| 01               | Boiler Blowdown     | Batch      | 1.00     | gpd |

Process Description

The brewery processes are as follows: The boil kettle is recirculated with water through the heat exchanger and knock-out hosing rig to sterilize the heat exchanger and hosing rig. Brewing grains from the dry storage area in the warehouse are brought into the mill room and milled. The milled grains are transported via closed chain transport to the grist case in the brewery. The milled grains are then mixed with water in the mash tun to initiate the enzymatic reactions that break the starch down to complex sugars. After the starch has been converted, the wort is transferred to the boil kettle. Post transfer, the remaining spent grains are pumped out of the building to a trailer owned and operated by a local farmer. The mash tun is then rinsed with cold water. The wort in the boil kettle is brought to a boil and hops and other food products are added as required. After the boil is complete, the wort is pumped to the whirlpool where hops and other food products are added as required. The boil kettle is then rinsed with water. The whirlpool utilizes centrifugal fluid mechanics via a tangential inlet port to separate remaining coagulated proteins from the wort. The wort is then pumped through the heat exchanger into a fermentation vessel. The heat exchanger is cooled in two (2) stages with water at stage one (1) and glycol at stage two (2) (non-contact cooling system). The noncontact cooling water post the heat exchanger is recaptured in the hot tank for reuse in both the mashing process and general cleaning. After transfer to the fermentation vessel is complete, the heat exchanger and whirlpool are rinsed with water. At the end of a brew cycle, the boil kettle, heat exchanger, and knock-out hose rig are cleaned in place with water, dilute NaOH, and then rinsed with water.

At the end of a brew week, the mash tun is rinsed with water, cleaned in place with dilute NaOH, burst rinsed with water, cleaned in place with dilute nitric/phosphoric acid blend, and burst rinsed with water. The boil kettle is cleaned in place with dilute nitric/phosphoric acid blend, and burst rinsed with water. The whirlpool, heat exchanger, and knock-out rig are rinsed with water, cleaned in place with dilute NaOH, burst rinsed with water, cleaned in place with dilute nitric/phosphoric acid blend, and burst rinsed with water.

Prior to transferring wort into a fermentation vessel, the vessel is sanitized with dilute peracetic acid. Yeast is added in-line with flowing oxygen during the transfer from the whirlpool to the fermentation vessel. Hops or other food products are added as required into the fermentation vessel along with the fermenting wort. Post fermentation, the beer is chilled to 32 °F and put under pressure to cause solids to drop out of solution and collect in the cone. After a period of time, the beer is transferred via a racking arm to a bright tank. After the fermentation vessel is emptied, it is rinsed with water and cleaned in place with dilute NaOH, burst rinsed with water, and cleaned in place with dilute nitric/phosphoric acid, and finally burst rinsed with water.

Prior to receiving a transfer from a fermentation vessel, the bright tank is sanitized with dilute peracetic acid and filled with CO<sub>2</sub>. Once a bright tank is filled with beer, it is pressurized via flowing CO<sub>2</sub> until the desired amount of CO<sub>2</sub> has dissolved in the beer. The product then moves to packaging. Once the bright tank is emptied, it is degassed of CO<sub>2</sub>, rinsed with water, and cleaned in place with dilute NaOCl, and then rinsed for the final time with water.

Pre-bottling, the equipment and feed lines are rinsed with dilute peracetic acid. The finished product is then sent to the bottling line. During operation, bottles are actively rinsed with water and dilute peracetic acid. After bottling, the system is cleaned with water and dilute NaOCl. Infrequently, the system is cleaned in place with dilute NaOH, rinsed with water, cleaned in place with dilute nitric/phosphoric acid blend, and then rinsed with water. Out-of-specifications beer produced from the bottling operation are discharged to a holding tank.

Kegs to be filled with product are emptied of any remaining product, rinsed with water, cleaned in place with dilute NaOH, rinsed with water, rinsed with dilute peracetic acid, and pressurized with CO<sub>2</sub>.

The company also have a pilot brewhouse and cellar that follows all of the above procedures.

General equipment that are used and assembled during any process are soaked in a dilute phosphoric/dodecylbenzenesulfonic acid blend. The general equipment to be cleaned are also soaked in a NaOCl solution. The general equipment used may also be sanitized in a dilute iodine solution.

The floor and stainless steel surfaces are scrubbed with either of the previously mentioned dilute solutions. Barrels are sometimes rinsed with water. The boiler is blown down to clear rust buildup a few times a day. The sinks provide general rinse water. AC fan in the warehouse cold storage area generates non-contact condensate wastewater. The final products are kept in cold storage in a cooled room next to the bottling hall.

The process wastewater generating operations are as follows:

- a) Dilute NaOH wastewater is generated when the following are cleaned in place: Mash tun, boil kettle, whirlpool, heat exchanger, knock-out hosing rig, fermentation vessel, bottling line, associated feed lines and kegs.
- b) Dilute phosphoric/nitric acid blend wastewater is generated when the following are cleaned in place: Mash tun, boil kettle, whirlpool, heat exchanger, knock-out hosing rig, fermentation vessel, bottling line and associated feed lines.
- c) Dilute NaOCl wastewater is generated when the following are cleaned in place: Bright tank, general parts to be cleaned, floors and stainless steel surfaces.
- d) Dilute peracetic acid wastewater is generated when the following are sanitized in place: Fermentation vessel, bright tank, bottling line and keg.
- e) Dilute phosphoric/dodecylbenzenesulfonic acid blend wastewater is generated when the following are to be assembled for use: General equipment, floors and stainless steel surfaces. Dilute iodine wastewater is generated when general equipment is sanitized.

The establishment contains a kitchen and retail taproom that generates wastewater that is directly discharged into the sewer system from washing and cleaning of general food equipment. The kitchen has a grease trap.

The wastewater generated from the brewery cleaning and washing operations accumulates in a holding tank. Prior to discharge of the holding tank, wastewater is monitored and treated by pH adjustment. A grab sample is taken from the holding tank and the pH is tested via a Milwaukee MI 150 pH probe with Automatic Temperature Compensation (ATC). If pH adjustment is required, it will be adjusted accordingly with either dilute NaOH or dilute nitric/phosphoric acid blend. After the pH adjustment (greater than 5 but less than 11). The wastewater is then batch discharged into the sewer system.

In addition, the bottom layer solid organic material in the fermentation vessels will be separated and disposed offsite with the spent grain waste. This will be done to lower the Biological Oxygen Demand (BOD) values to below 7,500. The combined solid waste will be handled by a third party for composting or animal feed.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 27189         | Roberts & Son Black Oxide Specialist, I  | 30665 Edison Drive<br>Roseville<br>MI 48066 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15127189IU     | Steel Parts          | 01 LOC. Local Limits                |
|                | Alkaline cleaner     | 01 433.A.17a (PSNS) Metal Finishing |
|                | Etching Solutions    |                                     |
|                | Oxidizing solutions  |                                     |
|                | Dip oils             |                                     |

| <u>Flow Rate</u> |                    |            |              |
|------------------|--------------------|------------|--------------|
| 01               | Process Wastewater | Continuous | 3,100.00 gpd |

Process Description

The steel parts are alkaline cleaned, rinsed, acid etched, rinsed, black oxidized and oil applied. The wastewater is generated by rinsing after alkaline cleaning, acid etching, and black oxidizing.

The wastewater undergoes pH adjustment, sand filtration and carbon adsorption before discharge to the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>             |             |                 |
|---------------|------------------------------------------|--------------------------------|-------------|-----------------|
| <b>92616</b>  | <b>SAT Plating, LLC.</b>                 | <b>1837 Thunderbird Street</b> | <b>Troy</b> | <b>MI 48084</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15792616IU1    | Sulfur dioxide       | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Sanitary Wastewater | Continuous | 300.00   | gpd |
| 01               | Process Wastewater  | Batch      | 9,000.00 | gpd |

Process Description**PROCESS DESCRIPTION**

The processes consist of:

**A. Surface Activation:**

The facility carries out this process to increase adhesion on plastic parts surface through chemical bonding. The parts are exposed to sulfur trioxide (SO<sub>3</sub>), neutralized with ammonia (NH<sub>3</sub>) and water in a sulfonation chamber and then, it is rinsed.

**B. Plastics Plating:**

As per specification requirements, some of the activated plastic parts are chrome, nickel and copper plated.

- a) Chrome Etching: The plastic parts are chrome etched with chromic acid to prepare the surface for plating and then, it is rinsed.
- b) Activator: Initiates activation for further preparation of plastic to receive plating and then, it is rinsed.
- c) Reducer: Reacts chemically with the activator steps to further prepare the plastic parts to receive plating and then, it is rinsed.
- d) Electroless nickel plating: Deposit thin layer of nickel plating to achieve initial plating adhesion to plastic parts and then, it is rinsed.
- e) Electroless copper plating: Deposit thin layer of copper plating to plastic parts and then, it is rinsed.
- f) Electrolytic bright acid copper plating: Deposit additional copper plating by electrolytic process and then, it is rinsed.
- g) Electrolytic nickel plating: Deposit additional nickel plating by electrolytic process and then, it is rinsed.
- h) Electrolytic chrome plating: Deposit the decorative chrome plating layer by electrolytic process and then, it is rinsed.

**C. Pilot Plant (Plating on Plastics):**

The facility conducts pilot scale chrome, nickel and copper plating of plastics as part of its R & D operation.

Various waste sources are collected throughout the facility into the following tanks: acid, alkaline, chrome, nickel and copper plating solution rinse waste tanks.

- a) Acid and alkaline rinses are combined in a controlled manner to the acid/alkaline equalization tank.
  - b) Chrome rinses are transferred to the chrome treatment tank for chrome reduction by sulfuric acid.
  - c) The nickel and copper plating solution (or chelated) rinses are combined in the collection tank. Chelators are removed in the treatment tank, where metals are dropped from the solution using, calcium hydroxide, sulfuric acid and ferric chloride (as the coagulant).
  - d) Wastewater from the acid/alkaline equalization tank, chrome reduction tank, and nickel and copper treatment tank are combined into a neutralization tank for further treatment (clarify what is the final treatment to adjust pH to approximately 5-6, using sulfuric acid and sodium hydroxide. Coagulant is also used).
  - e) Resultant wastewater from the neutralization tank is pumped for further treatment into the 2nd neutralization tank for the pH adjustment to approximately 9.5-10 using sulfuric acid and sodium hydroxide and then, it is pumped into the clarifier to allow heavy metals sedimentation.
  - f) The wastewater from the clarifier is discharged into the city sewer system through the sampling tank.
  - g) The sludge is passed through the filter press and is hauled off-site to treatment facility.
- The filtrate is returned to the acid/alkaline equalization tank.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>     |        |          |
|---------------|------------------------------------------|------------------------|--------|----------|
| 82418         | Sauk Trail Hills Development, Inc.       | 5011 South Lilley Road | Canton | MI 48188 |

| <u>Permits</u> | <u>Raw Materials</u>                                                              | <u>Limits</u>        |
|----------------|-----------------------------------------------------------------------------------|----------------------|
| 70682418IU     | residential and commercial general(NH<br>solid waste<br>from US and Canada cities | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 35,000.00 gpd |

Process Description

Non-hazardous solid waste from household, commercial and industrial sites from USA and Canada cities is brought to the facility in trucks. The solid waste is dumped into the disposal cell until disposal cell is completely filled up. The solid waste is then compacted and covered with a layer of cover. The company has maintenance shop at the site to maintain their equipments.

Process wastewater is generated from landfill leachate and maintenance shop. The leachate from the buried solid waste is collected in a 300,000 gallons capacity storage tank through a leachate collection system (at present from eleven wells), where solids (if any) are allowed to settle prior to pump into the sewer system. Wastewater generated from maintenance shop is passed through an oil/water separator before its discharge into the sewer system.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                    |
|---------------|------------------------------------------|-------------------------------------------------------|
| 27167         | Selfridge Air National Guard Base        | 127 WG/CE 28890 Selfridge Ave Selfridge ANGB MI 48045 |

| <u>Permits</u> | <u>Raw Materials</u>                                                                                                       | <u>Limits</u>        |
|----------------|----------------------------------------------------------------------------------------------------------------------------|----------------------|
| 00127167IU2    | Aircraft and vehicle fuel, lubricants, paints, hydraulic fluids, solvents, anti freeze, deicer, aqueous fire fighting foam | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 99,000.00 | gpd |
| 01               | Process Wastewater  | Continuous | 11,857.00 | gpd |

Process Description

The operations carried out are as follows:

- (i) Aircraft maintenance: Includes repair of electrical systems, hydraulic systems, fuel systems, brake and wheel maintenance, body repair, painting and washing;
- (ii) Vehicle maintenance: Includes oil changes, lubrication, repair of heating, A/C system, repair of electrical systems, hydraulic systems, fuel systems, brake and wheel maintenance, body repair, painting and washing;
- (iii) Repair and maintenance of aircraft support equipment: Includes brake and tire maintenance, repair of electrical and fuel systems, body repair, painting and washing;
- (iv) Aircraft hanger maintenance: Includes floor washing and general maintenance;
- (v) Heavy equipment and floor washing;
- (vi) Laundry; The facility has six (6) laundry shops;
- (vii) Part washing using industrial part washer;
- (viii) Film development for medical and non-destructive inspection laboratories.
- (ix) Purification of water using Reverse Osmosis (R.O.) unit. Intake water from the lake is purified in the R. O. unit and return into the lake. The Company has NPDES permit. Only periodical back flush is discharged into the City sewer system.

The process wastewater generated from the washing operations (aircrafts, vehicles, floors, parts) is pretreated (oil/water separation); that generated from dental clinic is pretreated (cyclonic filter with amalgam collector); that generated from the film development operation is pretreated (silver recovery) prior to discharge continuously into City sewer system. However, process wastewater generated from periodical back flushing of the filters in R. O. unit is discharged into the City sewer system without any pretreatment.

The waste water is also generated from (a) sanitizing the air conditioning cooling towers in buildings 325 & 328 twice a year as a result of Legionnaires Disease in 2010 with a maximum discharge volume of six hundred (600) gallons per batch from each of the cooling towers and (b) boiler blow down daily and annually with a total maximum volume of three thousand one hundred (3,100) gallons from the boilers in buildings 1416, 15 & 24.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |                                |
|---------------|------------------------------------------|--------------------|--------------------------------|
| 27251         | Selfridge Plating, Inc.                  | 42081 Irwin Road   | Harrison Township MI 480453410 |

| <u>Permits</u> | <u>Raw Materials</u>                                                                      | <u>Limits</u>                                                                                                                                                                                                      |
|----------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 021011         | alkaline cleaners, acids, anodes,<br>cyanides,<br>brighteners, aircraft & aerospace parts | 01 LOC. Local Limits<br>01 413.A.14g (PSES) Electroplating<br>01 413.A.14c (PSES) Electroplating<br>01 413.D.44c (PSES) Electroplating<br>01 413.E.54c (PSES) Electroplating<br>01 413.G.74c (PSES) Electroplating |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater | Continuous | 700.00    | gpd |
| 01               | Process Wastewater  | Continuous | 15,300.00 | gpd |

Process Description

The facility's process lines include anodizing, black oxidizing, zinc phosphating, electroless plating and electroplating (chrome, copper, cadmium, and zinc).

In each line, the parts are alkaline cleaned, rinsed, acid etched, rinsed and plated. The wastewater is generated from the rinse operation in each process line. The wastewater generated from the anodizing and black oxidizing operation is discharged into the City sewer system without any pretreatment. However, that generated from the remaining process lines (zinc phosphating, copper, chrome, and cadmium) is pretreated prior to discharge into the City sewer system. The pretreatment involves pH adjustment, cyanide destruction, neutralization, flocculation, clarification and filtration. The rinse waster from Inter Granulation Oxidation (IGO) process line is hauled off site.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>  | <u>SIU Address</u>   |              |          |
|---------------|-------------------------------------------|----------------------|--------------|----------|
| 27176         | Selfridge Plating, Inc. - Technologies Di | 56851 Gratiot Avenue | Chesterfield | MI 48051 |

| <u>Permits</u> | <u>Raw Materials</u>                                                                                       | <u>Limits</u>                                               |
|----------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 15127176IU3    | alkaline cleaners, acids, cyanides,<br>nickel sulfate<br>automotive, military and aerospace<br>components, | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |              |
|------------------|---------------------|------------|--------------|
| 01               | Sanitary Wastewater | None       | 160.00 gpd   |
| 01               | Process Wastewater  | Continuous | 4,910.00 gpd |

Process Description

The facility had seven (7) active process lines: Line 1 is Silver Plating line, Line 2 is Alkaline Zinc Plating, Line 4 Zinc Phosphate line, Line 5 is Tin Plating line, Line 6 is Black Oxidizing line, Line 7 is Electroless Nickel Strip line, Line 8 is Electroless Nickel Plating line. Line 3 is off line and not used.

The operation for each of the lines includes alkaline cleaning and rinse, acid stripping and rinse, respective plating and rinses.

Process wastewater is generated from the rinse operation in each process lines. However, there will be no discharge of process wastewater from Electroless Nickel Strip line because the rinses are dead rinse.

This process wastewater is treated on site through cyanide destruction, neutralization, flocculation, clarification and filtration prior to discharge into the sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                           |
|---------------|------------------------------------------|----------------------------------------------|
| 96078         | Sinai Grace Hospital, Inc.               | 6071 West Outer Drive<br>Detroit<br>MI 48235 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00596078IU1    |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |                |
|------------------|---------------------------|------------|----------------|
| 01               | Sanitary Wastewater       | Continuous | 60,000.00 gpd  |
| 01               | Process Wastewater        | Continuous | 142,104.00 gpd |
| 01               | Non-contact Cooling Water | Continuous | 6,500.00 gpd   |
| 01               | Boiler Blowdown           | Continuous | 4,000.00 gpd   |

Process Description

Wastewater is generated from cafeteria/kitchen, clinical laboratory, housekeeping, sterilizing, non-contact water and boiler blowdown. Wastewater generated from cafeteria/kitchen is passed through the grease traps (chemically treated) to recover grease.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 94478         | South Macomb Disposal Authority          | 21290 - 24 Mile Road<br>Macomb MI 48042 |

| <u>Permits</u> | <u>Raw Materials</u>         | <u>Limits</u>        |
|----------------|------------------------------|----------------------|
| 701-94478-IU   | Leachate, anti foaming agent | 01 LOC. Local Limits |

| <u>Flow Rate</u>                               |
|------------------------------------------------|
| 01 Process Wastewater Continuous 69,928.00 gpd |

Process Description

The facility performs leachate and contaminated groundwater remediation for the covered/sealed and inactive landfill site to comply with MDEQ limitations on groundwater. The site operates a collection system of leachate and contaminated groundwater and pumps the collected wastewater through a pretreatment unit (clarifier) and discharged into the sewer system.

The wastewater is collected in various sumps and pumped into the clarifier through a level and time actuated pumps. Antifoaming agent and bacterial culture for bacteria/bugs are added and air is diffused into the clarifier. Overflow from the clarifier is metered and discharged into the sewer system. The operation and maintenance of the treatment system is verified twice per week by field personnel. Parameters monitored are effluent pH and wastewater discharge flow rates. An interlock system shuts off feed pumps in case of any abnormality.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                       |
|---------------|------------------------------------------|------------------------------------------|
| 94089         | Southeastern Oakland County Resourc      | 1741 School Rd. Rochester Hills MI 48309 |

| <u>Permits</u> | <u>Raw Materials</u>         | <u>Limits</u>        |
|----------------|------------------------------|----------------------|
| 70794089IU1    | Grass, leaves and wood chips | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 11,300.00 gpd |
| 01               | Ground Water       | Continuous | 26,100.00 gpd |

Process Description

The facility consists of three (3) non hazard closed landfill sites which were closed 15 years apart, with last one closed about 10 years ago. Leachate is generated from buried trees, inert ash, and other solid material in the landfill. The leachate gets combined with groundwater coming from other areas of landfill and discharged continuously to the sewer system without any pretreatment. No sanitary wastewater is discharged from the facility.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>     |                          |
|---------------|------------------------------------------|------------------------|--------------------------|
| 96552         | SprayTek Inc. - Madison Heights          | 32451 North Avis Drive | Madison Heights MI 48071 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 159-96552-IU   |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |       |
|------------------|--------------------|-------|
| 01               | Process Wastewater | Batch |
|                  |                    | gpd   |

Process Description

SprayTek – Madison Heights pretreats metal parts by means of a multistage wash line, which provides necessary cleaning and surface preparations required for painting metal parts. This is the metal parts pretreatment process consisting of the following: a) Cleaning - Parts are cleaned in alkaline cleaner; b) Rinsing - Parts are rinsed in two stages with city water; c) Conditioning - A conditioner is used to promote the formation of zinc phosphate; d) Phosphating - Parts are coated with zinc phosphate at 120-130 F; e) City water rinse; f) Sealing - Parts are sealed with a non-chrome sealer; g) Rinse - Deionized water or city water rinse; h) Drying.

The facility generates process wastewater from the operations of alkaline cleaning, conditioning, phosphating, and sealing. Rinse tank overflows are pumped into rinse transfer station T1; the zinc phosphate solution into T2 and the alkaline cleaner, conditioner, and sealer solutions into T3.

The wastewater is transferred from the general rinse equalization tank T1 to neutralization tank N1 where pH is adjusted to 9 and cationic polymer is added. The wastewater is then sent to neutralization tank N2 where the pH is lowered to 7 Calcium chloride is added to aid metal precipitation and anionic polymer is added to enhance the solid liquid separation. Wastewater is then sent to the Lamella clarifier. Overflow from the clarifier flows by gravity to the final effluent monitoring tank T10. The solid flocculent from the clarifier is transferred to the sludge thickening tank T7. Clear supernatant is sent from the sludge thickener tank to the filtrate acid wash tank and from there back to the general rinse equalization tank T1. Solids from the sludge thickener tank T7 are sent to the filter press. Filter cake is air dried and hauled off-site as a non-hazardous solid waste. Spent acid and alkaline dumps are sent to the spent dumps batch tank T5 where the pH is adjusted, polymers are added, metals precipitate, and solids settle. The solids are then sent to the sludge thickener; the clear supernatant can either be sent to the final effluent tank or back into the general rinse equalization tank.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>      |                 |                 |
|---------------|------------------------------------------|-------------------------|-----------------|-----------------|
| <b>91552</b>  | <b>SprayTek, Inc.</b>                    | <b>2535 Wolcott St.</b> | <b>Ferndale</b> | <b>MI 48220</b> |

| <u>Permits</u> | <u>Raw Materials</u>                               | <u>Limits</u>                                               |
|----------------|----------------------------------------------------|-------------------------------------------------------------|
| 15991552IU3    | Zinc phosphateSealing agent, Alkali cleaner, Paint | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |        |     |
|------------------|---------------------|------------|--------|-----|
| 01               | Sanitary Wastewater | Continuous | 500.00 | gpd |
| 01               | Process Wastewater  | Batch      | 236.00 | gpd |

Process Description

Process can be divided into two (2) distinct sections as follows:

a. Pretreatment: The pretreatment section is where the metal surface is cleaned and phosphated to prepare the part for painting. Cleaning and phosphating are essential in achieving the desired quality of coating. Miscellaneous metal parts undergo the following stages in the pretreatment section:

1. Cleaning: Parts are cleaned in alkaline cleaner
2. Rinsing: Parts are rinsed in two (2) stages with city water
3. Conditioning: FIXODINE ® ZL conditioner is used in this step
4. Phosphating: Parts are coated with Zn-phosphate at 1200F
5. City water rinse
6. Sealing: Parts are sealed with non-chrome sealer
7. Drying

b) Painting: Leaving the pretreatment system, parts enter into one of the following paint stations:

1. Dip/Spin booth: Parts are placed in metal baskets and coated with solvent-based paint by the dip spin method. The excess coating is then spun off before parts are sent to the curing oven. After curing, parts are air cooled and then unloaded.
2. Excess paint is flashed off in the flash-off tunnel. Parts are cured in an oven, air cooled, and then unloaded.

Process wastewater is generated from alkaline cleaning, water rinsing, conditioning, phosphating, and sealing. Overflow from the rinse tanks continuously flow into rinse transfer station S1. Once in every six months, 1,000 gallons of spent alkaline cleaner, 500 gallons of conditioner, 350 gallons of sealer, and 1,000 gallons of Zn-Phosphate solution are dumped into spent dumps holding tank T2 for treatment and discharge purposes.

Wastewater is transferred from station S1 to general rinse equalization tank T1 and then to neutralization tank N1 where the pH is adjusted to nine (9) units after which cationic polymer is added. Wastewater from tank N1 is sent to neutralization tank N2 where the pH is lowered to seven (7) units and calcium chloride is added to aid metal precipitation, and anionic polymer is added to enhance the solid/liquid separation. Wastewater is then sent to a Lamella clarifier. Overflow from the clarifier flows by gravity to the final effluent monitoring tank T8 where the pH is monitored continuously and adjusted if necessary. Once in every two weeks, 200 gallons of sludge from the clarifier is transferred to a sludge thickener. Clear supernatant is sent to filtrate return acid wash tank T7 and sludge to the filter press. Filtrate from the filter press is sent to tank T7 and then transferred to the rinse equalization tank for further treatment. Filter cake is air dried and hauled off-site as a hazardous solid waste.

Spent solution from spent dumps holding tank T2 is treated in batch treatment tank T3 by pH adjustment, metal precipitation, flocculation, and settling. Based on pollutant contents of clear supernatant, it is either sent to the final effluent tank for discharge or bleed slowly into the rinse water equalization tank for further treatment. The sludge portion is sent to sludge thickener for treatment. Hazardous waste generated from spray booth cleaning is hauled off-site.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| 96562         | Springwells Water Treatment Plant of G   | 8300 West Warren Avenue Dearborn MI 48126 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| **4-96562-IU   |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                                  |
|---------------------------------------------------|
| 01 Process Wastewater Continuous 3,550,000.00 gpd |

Process Description

The process involves pumping off the water from top of four sediment basins and four flocc basins, chambers and channels. Sludge processing will include dewatering of sludge through mobile belt filter presses and centrifuges. Polymer will be used to condition the sludge. All water/filtrate will be discharged into the sewer through the sampling box. Filter cake will be dried on site on a cement dike and then hauled to landfill.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                           |
|---------------|------------------------------------------|----------------------------------------------|
| 27289         | St. John Hospital & Medical Center       | 22101 Moross Road<br>Detroit<br>MI 482362114 |

| <u>Permits</u> | <u>Raw Materials</u>          | <u>Limits</u>                                |
|----------------|-------------------------------|----------------------------------------------|
| 00227289IU2    | X-Film, Xylene, lab chemicals | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 68,100.00 gpd |
| 02               | Process Wastewater | Continuous | 65,000.00 gpd |

Process Description

The hospital provides general health care services to both in-patients and outpatients. The processes with wastewater generation at the hospital includes but not limited to:

1. Radiology, X-rays, and other forms of imaging,
2. Food services in Kitchen/Cafeteria,
3. Morgue, and
4. Laboratories (such as Microbiology, Toxicology, Bacteriology, Pathology, and Histology, etc.)

Some process wastewater is treated on site. One unit of silver recovery on X-ray film processors is used to remove silver; grease traps on kitchen drains are for removal of oil/grease, which is hauled away; and plaster traps is for catching suspended solids from the wastewater.

The hospital recycles used xylen through distillation and carries out recovery procedure for lab chemicals.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>      |            |          |
|---------------|------------------------------------------|-------------------------|------------|----------|
| 27723         | St. John Providence Hospital             | 16001 W. Nine Mile Road | Southfield | MI 48075 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                                        |
|----------------|----------------------|----------------------------------------------------------------------|
| 00927723IU4    | patient care         | 01 LOC. Local Limits<br>02 LOC. Local Limits<br>03 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |           |     |
|------------------|---------------------|------------|-----------|-----|
| 01               | Process Wastewater  | Continuous | 28,452.00 | gpd |
| 01               | Sanitary Wastewater | Continuous | 15,425.00 | gpd |
| 01               | Boiler Blowdown     | Continuous | 600.00    | gpd |
| 02               | Process Wastewater  | Continuous | 28,452.00 | gpd |
| 02               | Sanitary Wastewater | Continuous | 15,425.00 | gpd |
| 03               | Process Wastewater  | Continuous | 29,452.00 | gpd |
| 03               | Sanitary Wastewater | Continuous | 15,425.00 | gpd |

Process Description

Process wastewater is generated mainly from patient care and kitchen/cafeteria. A minimal amount of wastewater from morgue and physical therapy also is discharged as needed. Wastewater from the cafeteria/kitchen services is passed through grease traps to remove grease and discharged into the sewer system at SL#3 through a lift station.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 27728         | St. John Providence Macomb Oakland       | 27351 Dequindre<br>Madison Heights MI 48071 |

| <u>Permits</u> | <u>Raw Materials</u>                             | <u>Limits</u>        |
|----------------|--------------------------------------------------|----------------------|
| 009-27728-IU   | Patients Care - medical lab & cleaning chemicals | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |               |
|------------------|---------------------------|------------|---------------|
| 01               | Non-contact Cooling Water | Continuous | 4,500.00 gpd  |
| 01               | Sanitary Wastewater       | Continuous | 19,000.00 gpd |
| 01               | Process Wastewater        | Continuous | 16,600.00 gpd |

Process Description

The facility provides patient care through medical and surgical services, which also includes emergency care, urgent care and extensive outpatient rehabilitation and diagnostic services. Process wastewater is generated from patient care/housekeeping, laboratories and kitchen/cafeteria. Used grease from the kitchen is sent off-site for recycling, and the wastewater is sewer discharged via a grease trap.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                              |
|---------------|------------------------------------------|-------------------------------------------------|
| 27532         | St. Mary Mercy Hospital                  | 36475 W. Five Mile Road<br>Livonia MI 481541971 |

| <u>Permits</u> | <u>Raw Materials</u>                | <u>Limits</u>                                |
|----------------|-------------------------------------|----------------------------------------------|
| 00627532IU     | General and Specialized health care | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |               |
|------------------|---------------------------|------------|---------------|
| 01               | Boiler Blowdown           | Continuous | 400.00 gpd    |
| 01               | Sanitary Wastewater       | Continuous | 20,000.00 gpd |
| 01               | Process Wastewater        | Continuous | 26,332.00 gpd |
| 01               | Non-contact Cooling Water | Continuous | 5,000.00 gpd  |
| 02               | Sanitary Wastewater       | Continuous | 41,250.00 gpd |
| 02               | Process Wastewater        | Continuous | 51,332.00 gpd |
| 02               | Non-contact Cooling Water | Continuous | 5,000.00 gpd  |
| 02               | Boiler Blowdown           | Continuous | 400.00 gpd    |

Process Description

The process includes patient care, laboratory, kitchen, X-ray film processing, morgue, laundering, and child care. Wastewater is generated from patient care, kitchen, laboratory and laundry. Wastewater generated from kitchen, cooling tower (non-contact cooling water), boiler blowdown and laundry is discharged directly into the city sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |         |          |
|---------------|------------------------------------------|--------------------|---------|----------|
| 27330         | Sterling Metal Finishing                 | 2500 Meldrum       | Detroit | MI 48207 |

| <u>Permits</u> | <u>Raw Materials</u>                      | <u>Limits</u>                                                                                                                                                                                                                                                    |
|----------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 02327330IU4    | metal parts, zinc, acid, alkaline cleaner | 01 LOC. Local Limits<br>01 413.A.14f (PSES) Electroplating<br><10,000 gpd<br>01 413.A.14b (PSES) Electroplating<br><10,000 gpd<br>02 LOC. Local Limits<br>02 413.A.14f (PSES) Electroplating<br><10,000 gpd<br>02 413.A.14b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u> |                    |       |          |     |
|------------------|--------------------|-------|----------|-----|
| 01               | Process Wastewater | Batch | 1,000.00 | gpd |
| 02               | Process Wastewater | Batch | 500.00   | gpd |

Process Description

The incoming parts are racked to go through the process line of zinc plating, which consists of soak cleaning, electro/acid cleaning, rinse, alkaline zinc plating, and rinsing.

The wastewater is generated from rinsing operations of parts following the cleaning and plating operations.

The wastewater is collected in a floor pit, transferred to a holding tank and the treatment tank to be batch treated. The pretreatment process includes neutralization, clarification and filtering.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |
|---------------|------------------------------------------|---------------------|
| <b>91953</b>  | <b>Sulfo Technologies, LLC</b>           | <b>32300 Howard</b> |

**Madison Heights MI 48071**

| <u>Permits</u> | <u>Raw Materials</u>  | <u>Limits</u>        |
|----------------|-----------------------|----------------------|
| 00991953IU2    | HDPE, SO3, NH3, NaOH, | 01 LOC. Local Limits |

| <u>Flow Rate</u>                         |
|------------------------------------------|
| 01 Process Wastewater Batch 1,280.00 gpd |

Process Description

Plastic parts are exposed to sulfur trioxide in a treatment barrel. A reaction occurs between sulfur trioxide and polyethylene creating a hydrocarbon barrier on the surface of the parts. The parts are neutralized by exposing the parts to gaseous ammonia inside the treatment barrel, washing the parts in diluted caustic soda and rinsing with water. The air from the sulfonating barrel gets filtered in a mist elimination system which is packed with fiberglass. The treatment barrels are washed at the end of the process. Wastewater generated from ammonia scrubbing, caustic soda washing, mist elimination and the sulfonating barrel washing gets pumped into the 2000 gallon holding tank and pH adjusted before sewer discharge.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                        |
|---------------|------------------------------------------|-------------------------------------------|
| 27533         | Sun Plastic Coating Company              | 42105 Postiff Drive Plymouth MI 481704637 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                               |
|----------------|----------------------|-------------------------------------------------------------|
| 15627533IU3    | Steel parts          | 02 LOC. Local Limits<br>02 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |                          |
|------------------|---------------------|--------------------------|
| 02               | Sanitary Wastewater | Continuous 342.00 gpd    |
| 02               | Process Wastewater  | Continuous 23,000.00 gpd |

Process Description

The process consists of:

- (i) Zinc Phosphating: Steel parts are alkaline cleaned, rinsed, zinc phosphated and rinsed.
- (ii) Finish Coating: Dried parts are coated with fluorocarbon, molykote and powder of epoxy, polyester and nylon.

Process wastewater is generated from alkaline cleaning and rinsing. Once in every six (6) months 150 gallons of spent alkaline cleaner is dumped into a holding tank and from this tank the spent cleaner is bled into the treatment process continuously along with flow of rinse wastewater. On average, it takes five (5) days to finish the bleeding of alkaline cleaner. The wastewater pretreatment system consists of pH adjustment, precipitation, flocculation, clarification and sludge dewatering.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                     |
|---------------|------------------------------------------|----------------------------------------|
| 27290         | Superior Metal Finishing                 | 3510 E. McNichols Detroit MI 482121618 |

| <u>Permits</u> | <u>Raw Materials</u>                               | <u>Limits</u>                                                                                                 |
|----------------|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 15227290IU     | metal parts, zinc, phosphate, acid, caustic, polym | 01 LOC. Local Limits<br>01 413.E.54b (PSES) Electroplating <10,000 gpd<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 31,700.00 gpd |

Process Description

Zinc Phosphating line: the operation consists of acid/Alkaline cleaning, rinses, zinc phosphating, rinsing and lubricating. This operation started in 1967

Zinc Electroplating lines (#1 and #2): the operation includes acid/alkaline cleaning, rinses, zinc electroplating, rinse and trivalent chrome conversion coating. The operation for line #1 started in 1995, and for line #2 in 1998

The wastewater from both zinc phosphating and zinc electroplating processes is combined together in collection pit and undergoes pretreatment prior to discharge into the sewer

Discharge &gt;25 kgpd

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |               |                 |
|---------------|------------------------------------------|--------------------|---------------|-----------------|
| <b>96751</b>  | <b>Supreme Gear Company</b>              | <b>17430 Malyn</b> | <b>Fraser</b> | <b>MI 48026</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15196751IU     |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |              |              |
|------------------|--------------------|--------------|--------------|
| 01               | Process Wastewater | Intermittent | 1,450.00 gpd |

Process Description

The categorical wastewater generating operation is a chemical etching process that is used on an “as needed” (batch) basis. The process consists of treating the parts with temperature adjustment, rinsing, acid and solvent immersion prior to inspection.

Wastewater is generated from the running rinse waters which are collected in a 1100 gallon holding tank prior to batch discharge through a sampling weir box.

The main operations of the facility consist of machining and tooling with no wastewater being generated.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>             |
|---------------|------------------------------------------|--------------------------------|
| 96809         | Supreme Gear Company - Plating Depa      | 34410 Commerce Fraser MI 48026 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 151-96809-IU   |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |                    |
|------------------|--------------------|--------------------|
| 01               | Process Wastewater | Batch 1,500.00 gpd |

Process Description

The processes at this facility are copper stripping and electro-less nickel plating of aircraft parts. Facility's processes also include acid cleaning and electro cleaning operations. The process operations have associated rinse stages which use DI water. Rinse wastewater streams from the process operations (copper stripping/nickel electro-less plating, acid cleaning and electro cleaning) are circulated through dedicated ion exchange resin columns for cation/anion removal or chelation; treated wastewater is sewer discharged in batches after it is collected and pH adjusted in the facility's 5000 Gallon holding tank.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>   | <u>SIU Address</u>            |                |                 |
|---------------|--------------------------------------------|-------------------------------|----------------|-----------------|
| <b>95626</b>  | <b>The Crown Group Company - Livonia P</b> | <b>31774 Enterprise Drive</b> | <b>Livonia</b> | <b>MI 48150</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 156-95626-IU   |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |           |     |
|------------------|--------------------|------------|-----------|-----|
| 01               | Process Wastewater | Continuous | 80,000.00 | gpd |
| 01               | Other              | Continuous | 360.00    | gpd |

Process Description

Automotive parts are e-coated in a monorail system. The process consists of two (2) stage alkaline cleaning, two (2) stage water rinsing, zinc phosphating, water rinsing, sealing, de-ionized water rinsing, e-coating, and curing. Process wastewater is generated from alkaline cleaning, rinsing, and floor cleaning. The pretreatment consists of adding CaCl<sub>2</sub> into the wastewater, which is followed by pH adjustment, precipitation, flocculation, clarification, and sludge dewatering. Everyday sludge is dewatered through a filter press and the filtrate is routed back to the treatment system.

Once every six months, 2,500 to 5,000 gallons of spent alkaline cleaner is dumped into a holding tank and from this tank the spent cleaner is bled into the treatment process continuously in conjunction with flow of the rinse wastewater. It takes three (3) to four (4) days to finish the bleeding of the whole tank for treatment purpose. RO reject wastewater is also treated and discharged with process wastewater.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>  | <u>SIU Address</u>    |                |                 |
|---------------|-------------------------------------------|-----------------------|----------------|-----------------|
| <b>95508</b>  | <b>The Crown Group Company - Lynch Ro</b> | <b>6334 Lynch Rd.</b> | <b>Detroit</b> | <b>MI 48234</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15295508IU2    |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |
|                |                      | 01 PHEN. Phenols                    |

| <u>Flow Rate</u> |                     |            |          |     |
|------------------|---------------------|------------|----------|-----|
| 01               | Sanitary Wastewater | Continuous | 2,400.00 | gpd |
| 01               | Process Wastewater  | Continuous | 9,351.00 | gpd |
| 01               | Other               | Continuous | 1,602.00 | gpd |

Process Description

Parts (axle assemblies) are washed with alkaline cleaner in stage #1 and #2, rinsed with water in stage #3 and #4, followed by zinc phosphating operations through stage #5 to stage #9. The parts are dried by passing them through air blower. They are heated in an oven, followed by spray painting with water based paint, and cured in a convection oven. Finally, finished parts are un-racked for packaging and shipping.

Process wastewater is generated from the alkaline solution spray cleaning in stages #1 and #2, spray water rinsing in stages #3 and #4. The solutions in these four stage process tanks are recycled for about two weeks before batch treatment and discharge to the sewer. The batch treatment operations include mixing, chemical addition (calcium), pH adjustment for flock precipitation, separation of water/flock (solids), and flock dewatering through filter press.

The process wastewater generated from zinc phosphating operations (stage #5 - #9) is collected in three holding tanks. In order to treat the process wastewater from the phosphating operation, the facility has built continuous pretreatment system, which consists of equalization, pH adjustment, flocculation, clarifier, sludge thickening, and filtration.

The discharge from the existing batch system and the new continuous flow system is discharged through the existing plumbing to the existing sampling location. Discharge limitations for 40 CFR 433.17 as listed in permit 152-95508-IU are applicable to both continuous and batch flows.

The process includes the following:

- " Stage #1 & 2- Alkaline cleaning of the parts with spray unit
  - " Stage #3 & 4- Rinsing with fresh water
  - " Stage #5-Application of a surface conditioner for Zinc phosphate
  - " Stage #6- Application of Zn phosphate
  - " Stage #7- Rinsing with fresh water
  - " Stage #8- Application of the sealer
  - " Stage #9- RO spray rinse
  - " The parts are then dried by passing them through forced air oven, followed by spray painting with water based paint, and cured in a convection oven.
- Finally, finished parts are un-racked for packaging and shipping.

Wastewater is generated from the alkaline spray cleaning in stages #1 and #2, fresh water rinsing in stages #3 and #4. Process water from these four stages are recycled for about two weeks before going to intermediate holding tanks, and eventually to the stainless steel holding tank and to the wastewater treatment system.

Wastewater from stage #5 and #6 each go to separate holding tanks which are metered into the alkaline holding tank which goes to the stainless Steel holding tank and then to the wastewater treatment system.

The wastewater treatment system is continuous and consists of equalization, pH adjustment, polymer detackifier, flocculation and clarification. After leaving the clarifier, the clean overflow discharges to the sewer system and the sludge goes to a thickening tank.

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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                               |
|---------------|------------------------------------------|--------------------------------------------------|
| 95543         | The Crown Group Company - Shelby PI      | 12020 Shelby Tech Drive Shelby Township MI 48315 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 15195543IU1    |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 19,300.00 gpd |

Process Description

The facility receives different kinds of auto parts that could be made of aluminum, steel, or galvanized steel. These parts are eventually powder coated after going through the following stages:

Stage # Operation

- 1 part are pre-cleaned
- 2 & 3 Parts are alkaline cleaned
- 4 & 5 Parts are rinsed
- 6 Parts are conditioned
- 7 Parts are zinc phosphated
- 8 & 9 Parts are rinsed using de-ionized water from the reverse osmosis unit
- 10 Parts are sealed using anti-rust chemical
- 11 Parts are rinsed
- 12 Parts are e-coated
- 13-15 Parts are rinsed-close loop, (i.e. wastewater is not discharged to the sewer)
- 16 Parts are cured in 375 0F oven
- 17 Parts are powder coated
- 18 Parts are cured in 375 0F oven

The process wastewater is generated from the rinsing operations, from the spent alkaline cleaners, and from the spend sealers. All the process waste water is pumped to a holding tank, where pH is adjusted first, and polymer is added second for flocculation. The contents are then directed to a clarifier. The sludge from the bottom of the clarifier is thickened and filter pressed to be hauled off eventually. The clear water from the clarifier is discharged to the sewer. The spent zinc phosphate solution from stage 7 is bled to the pretreatment system for treatment before discharge.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                          |
|---------------|------------------------------------------|---------------------------------------------|
| 94434         | Tower Automotive LLC                     | 43955 Plymouth Oaks Blvd. Plymouth MI 48170 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                               |
|----------------|----------------------|-------------------------------------------------------------|
| 15694434IU2    | Truck frames, Paints | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 5,960.00 gpd  |
| 01               | Process Wastewater  | Continuous | 49,550.00 gpd |

Process Description

The process consists of alkaline cleaning of metal frames, rinsing, applying activator, zinc phosphate coating, rinsing, non-chrome sealing, deionized water rinsing, electro-coating, and curing in oven.

Process wastewater is generated from cleaning, rinsing, and sealing. Process wastewater from the rinsing operations is pretreated prior to discharge into the city sewer. The wastewater pretreatment system consists of equalization, neutralization, flocculation, clarification and sludge dewatering.

The facility collects the wastewater in two tanks tank 1 and tank 2. Tank 1 is used for regular rinses and tank 2 is used for spent sealer, tank 2 is bled into the treatment system to be treated with the wastewater from tank 1 in a continuous basis. The spent alkaline cleaner is hauled off site about once every three months.



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| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                     |
|---------------|------------------------------------------|----------------------------------------|
| 27564         | Troy Laboratories, Inc.                  | 440 South Street<br>Rochester MI 48307 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                                                                                                  |
|----------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 02727564IU2    | Aluminum parts       | 01 LOC. Local Limits<br>01 413.D.44f (PSES) Electroplating<br><10,000 gpd<br>01 413.D.44b (PSES) Electroplating<br><10,000 gpd |

| <u>Flow Rate</u> |                           |            |               |
|------------------|---------------------------|------------|---------------|
| 01               | Sanitary Wastewater       | Continuous | 200.00 gpd    |
| 01               | Process Wastewater        | Continuous | 5.19 gpd      |
| 01               | Non-contact Cooling Water | Continuous | 10,985.00 gpd |

Process Description

Anodizing of aluminum includes: (a) Alkaline cleaning with caustic soda followed by triple rinse, (b) anodizing in a 15% sulfuric acid solution followed by a double rinse, (c) dyeing followed by a rinse, (d) sealing with hot water or nickel acetate solution followed by a rinse, and (e) air drying. Wastewater is generated from the cleaning, anodizing, dyeing, and sealing operations and pretreated prior to discharge. The facility's pretreatment operations consist of pH adjustment 7 to 8 by addition of caustic soda followed by flocculation and clarification. The sludge is filter-pressed, the filtrate sent back to the clarifier. Wastewater generated from non-contact cooling water and sanitary waste is discharged into the storm sewer and city sewer system respectively without any treatment

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |           |          |
|---------------|------------------------------------------|--------------------|-----------|----------|
| 27178         | Turri's Italian Foods - Roseville        | 16695 Common Road  | Roseville | MI 48066 |

| <u>Permits</u> | <u>Raw Materials</u>                        | <u>Limits</u>        |
|----------------|---------------------------------------------|----------------------|
| 00127178IU     | Semolina, durum flour, ricotta cheese, eggs | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 4,000.00  | gpd |
| 01               | Process Wastewater        | Continuous | 73,600.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 4,000.00  | gpd |
| 01               | Boiler Blowdown           | Continuous | 12,000.00 | gpd |

Process Description

The facility operates six (6) process lines to manufacture various not fully cooked, filled and unfilled Italian Specialty Pastas (Ravioli, Tortellini, Manicotti, stuffed shells, and other short cut pasta from durum flour and Ricotta Cheese). The operations involve flour and water blending and mixing, cooking, cooling, stuffing, freezing and packaging.

Process wastewater is generated from water chilling or water cooling of products (contact cooling water), cooking and daily cleaning of process lines and floors. The wastewater flows through a grease trap prior to discharge into the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>   | <u>SIU Address</u>                                   |
|---------------|--------------------------------------------|------------------------------------------------------|
| 93994         | Turri's Italian Foods, Inc. - Chesterfield | 50903 E. Russell Schmidt Blvd. Chesterfield MI 48051 |

| <u>Permits</u> | <u>Raw Materials</u>             | <u>Limits</u>        |
|----------------|----------------------------------|----------------------|
| 00193994IU2    | Durum flour, cheese, meat, water | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Process Wastewater        | Continuous | 30,000.00 | gpd |
| 01               | Sanitary Wastewater       | Continuous | 2,000.00  | gpd |
| 01               | Non-contact Cooling Water | Continuous | 2,200.00  | gpd |
| 01               | Boiler Blowdown           | Continuous | 1,500.00  | gpd |

Process Description

The facility has two (2) Italian food production lines. Generally, the facility receives the raw food products from customers, applies the production lines on-site to process the raw food products as frozen precooked Italian specialties, such as pastas. The frozen food products are put in bulk packages to be shipped back to the customers.

The operation of the production lines are similar: through which raw Italian foods are hot water (180 F) cooked, fresh water chilled, shaken, frozen and packaged for shipment. The facility has a cleaning end shift for cleaning the equipment and the process area. Process wastewater is generated from hot water cooking, fresh water chilling (continuous flow runs one time) and cleaning operation. All process wastewater is discharged to the sewer without pretreatment.

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**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                      |
|---------------|------------------------------------------|-----------------------------------------|
| 27280         | U-Metco Inc.                             | 8651 E. 7 Mile Road<br>Detroit MI 48234 |

| <u>Permits</u> | <u>Raw Materials</u>             | <u>Limits</u>        |
|----------------|----------------------------------|----------------------|
| 002077         | Rough sorted steel scraps, water | 01 LOC. Local Limits |

| <u>Flow Rate</u>                               |
|------------------------------------------------|
| 01 Process Wastewater Continuous 19,900.00 gpd |

Process Description

The scrap steel undergoes washing, drying, cutting and sorting operations. Wastewater is generated from the washing process. The facility utilizes an oil/water skimming system to trap oil from the wastewater stream that discharges to the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>   | <u>SIU Address</u>                |
|---------------|--------------------------------------------|-----------------------------------|
| 91562         | U.S. Steel Corporation - Great Lakes Works | 1 Zug Island River Rouge MI 48218 |

| <u>Permits</u> | <u>Raw Materials</u>       | <u>Limits</u>                                                            |
|----------------|----------------------------|--------------------------------------------------------------------------|
| 03491562IU2    | Iron Ore, Coke, Lime Stone | 01 LOC. Local Limits<br>01 420.C.35a (PSES) Iron and Steel Manufacturing |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Sanitary Wastewater       | Continuous | 24,000.00  | gpd |
| 01               | Process Wastewater        | Continuous | 7,000.00   | gpd |
| 01               | Non-contact Cooling Water | Continuous | 140,000.00 | gpd |
| 01               | Other                     | Continuous | 105,000.00 | gpd |

Process Description

The facility's main process is manufacturing of iron and steel from iron ore, coke and limestone. The assistant processes consist of boiler house for steam production, power house for blast furnace wind, and the support operations (maintenance and transportation services).

a. The process wastewater is generated from:

" Iron-making - gas condensate collected from gas transmission line and

b. Non process wastewater is from the following sources:

" Miscellaneous: Boiler blowdown, filter backwash, ground/stormwater, powerhouses and other support operations;

" Non-Contact Cooling water and

" Sanitary.

The process wastewater flows to lift station #6 without pretreatment and mixes with the total plant non-process wastewater. At lift station #6, the combined stream is pumped through sampling location into the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>           |
|---------------|------------------------------------------|------------------------------|
| 96748         | U.S. Wheel, Inc. (d/b/a Detroit Wheel an | 1027 E 14 Mile Troy MI 48083 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                       |
|----------------|----------------------|-------------------------------------|
| 159-96748-IU   |                      | 01 LOC. Local Limits                |
|                |                      | 01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |              |
|------------------|--------------------|------------|--------------|
| 01               | Process Wastewater | Continuous | 2,000.00 gpd |

Process Description

Process involves automotive rim straightening, welding and refinishing, which includes chemical stripping, cleaning and applying a new finish. During chemical stripping, rims are placed in steel basket and then submerged into one of the heated (170oF) and then stripped from 1 to 2 hours depending on the finish being removed. When finished, basket is lifted out of the tank solution and the basket rests above the tank until all solution drips off and rims are dry. Then the basket is moved to the rinse tank for a clean water rinse. Rims are then placed in the pressure wash enclosure for a final clean water rinse. The clean rim is placed into the machine bowl of polishing machines. While the bowl is vibrating a low level of water and chemical compound is sprayed into the bowl. Two different kinds of chemicals are used in two machines. Rims are brightened and passivated by these chemicals. Rims are then painted in two powder coating booths or in wet painting booth. Finally rims are placed in cart and then pushed into oven for curing.

Process wastewater is generated from rinsing and brightening/passivation operations. All process wastewater passed through an oil/water separator before discharged into the city sewer.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                             |
|---------------|------------------------------------------|------------------------------------------------|
| 27310         | US Ecology Michigan, Inc.                | 6520 Georgia Street<br>Detroit<br>MI 482111661 |

| <u>Permits</u> | <u>Raw Materials</u>           | <u>Limits</u>                                        |
|----------------|--------------------------------|------------------------------------------------------|
| 92327310IU2    | HAULED-IN WASTE: Hazardous     | 01 LOC. Local Limits                                 |
|                | HAULED-IN WASTE: Non-Hazardous | 01 437.D.46b.1 (PSES) Centralized<br>Waste Treatment |
|                |                                | 01 PHEN. Phenols                                     |

| <u>Flow Rate</u> |                    |       |     |
|------------------|--------------------|-------|-----|
| 01               | Process Wastewater | Batch | gpd |

Process Description

The treatment process may include, but not limited to chemical oxidation/reduction, neutralization, chemical precipitation, detoxification/adsorption and lime stabilization. Detoxification involves the removal of toxicity in the materials to be treated. Treated waste is typically filter pressed. The treated wastewater is discharged to the sewer and any applicable filter cake is hauled to a landfill.

AK - author

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>       |                |                 |
|---------------|------------------------------------------|--------------------------|----------------|-----------------|
| <b>92986</b>  | <b>Uncle Ray's Snacks, LLC</b>           | <b>14245 Birwood St.</b> | <b>Detroit</b> | <b>MI 48238</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00592986IU3    | Potatos, oils        | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |            |     |
|------------------|---------------------|------------|------------|-----|
| 01               | Sanitary Wastewater | Continuous | 3,600.00   | gpd |
| 01               | Process Wastewater  | Continuous | 190,000.00 | gpd |

Process Description

The process consists of washing, peeling, slicing of potatoes, frying, packing, and distribution of potato chips. The wastewater is generated from washing of potatoes, floor and equipment. The wastewater is directed to a series of collection tanks, including mud tanks for settling out of mud. The wastewater that is clear of mud is pumped into a sump through a set of screens designated to remove more solids. The overflow from the sump is discharged into the public sewer.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u>    | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                 |          |          |
|------------------|------------------------------------------|------------------------------------|----------|----------|
| 27143            | Unicote Corporation                      | 33165 Groesbeck Highway            | Fraser   | MI 48026 |
| <u>Permits</u>   | <u>Raw Materials</u>                     | <u>Limits</u>                      |          |          |
| 021-27143-IU     | Alkaline cleaner                         | 01 LOC. Local Limits               |          |          |
|                  | Iron Phosphates                          | 01 413.E.54f (PSES) Electroplating |          |          |
|                  | Spray coating                            | <10,000 gpd                        |          |          |
|                  | Paint                                    | 01 413.E.54b (PSES) Electroplating |          |          |
|                  |                                          | <10,000 gpd                        |          |          |
| <u>Flow Rate</u> |                                          |                                    |          |          |
| 01               | Process Wastewater                       | Continuous                         | 5,980.00 | gpd      |

Process Description

The facility has three (3) powder spray coating or painting lines. Through each line, the parts are alkaline cleaned and water rinsed, iron phosphated and water rinsed, powder spray coated and cured/oven baked. Paint line number two has a reverse osmosis final rinse.

The facility also has a closed loop deburring machine. There is no discharge to the sewer system from this machine.

Process wastewater is generated from the rinsing operations. The facility's pretreatment system consists of equalization, neutralization, clarification and filtration.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                   |
|---------------|------------------------------------------|------------------------------------------------------|
| <b>91963</b>  | <b>Unique Linen Service, Inc.</b>        | <b>530 W. Nine Mile Road<br/>Hazel Park MI 48030</b> |

| <u>Permits</u> | <u>Raw Materials</u>      | <u>Limits</u>        |
|----------------|---------------------------|----------------------|
| 00991963IU     | Linen, uniform, detergent | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 360.00 gpd    |
| 01               | Process Wastewater  | Continuous | 19,953.00 gpd |

Process Description

The process consists of laundry washing, drying, and pressing. The process wastewater is generated from laundry washing which passes through two screens in series for lint removal and leads to the discharge sump and to the public sewer. The screens are replaced approximately every 3 weeks.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>  | <u>SIU Address</u>        |              |                 |
|---------------|-------------------------------------------|---------------------------|--------------|-----------------|
| <b>92834</b>  | <b>Unistrut International Corporation</b> | <b>4205 Elizabeth St.</b> | <b>Wayne</b> | <b>MI 48184</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                               |
|----------------|----------------------|-------------------------------------------------------------|
| 15692834IU2    | Steel parts          | 02 433.A.17a (PSNS) Metal Finishing<br>03 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 02               | Process Wastewater        | Continuous | 21,482.00 | gpd |
| 03               | Sanitary Wastewater       | Continuous | 3,250.00  | gpd |
| 03               | Non-contact Cooling Water | Continuous | 1,203.00  | gpd |
| 03               | Boiler Blowdown           | Continuous | 5.00      | gpd |
| 03               | Process Wastewater        | Continuous | 21,482.00 | gpd |

Process Description

Plain steel, pre-galvanized steel, stainless steel and aluminum coils are stamped into fittings, nuts, clamps, angles and welded as required. Parts are then further processed through one of the process lines described below.

Process 1: Nuts and fittings are alkaline cleaned and rinsed in a small parts washer. Washed nuts are heat treated and sent outside for electroplating. Washed fittings are sent to the warehouse for packing.

Process 2 (Zinc Plating Line): Carbon steel parts are caustic cleaned, water rinsed, quick dip rinsed (brightened), then acid pickled, water rinsed, caustic cleaned, water rinsed, zinc electroplated, water rinsed, chromated, water rinsed and air dried.

Process wastewater is generated from alkaline cleaning and rinsing. Rinse wastewater from process 1 and 2 is collected into an 8,000 gallon equalization tank. It is then directed through a chrome reduction tank to a neutralization tank and finally to a clarifier for solids setting. From the clarifier, the effluent is discharged to the sewer through a sampling tank. Once a week, about 750 gallons of spent alkaline cleaner is dumped into the equalization tank and treated with the rinse wastewater. The sludge portion of the clarifier is pumped into a 5,000 gallon sludge thickener. Three (3) times a week the thickened sludge is pressed in the filter press to produce a dry cake for disposal. The filtrate is sent back to the equalization tank.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                    |
|---------------|------------------------------------------|---------------------------------------|
| 27281         | United Linen Service LLC                 | 200 W 7 Mile Road<br>Detroit MI 48203 |

| <u>Permits</u> | <u>Raw Materials</u>                 | <u>Limits</u>        |
|----------------|--------------------------------------|----------------------|
| 00227281IU2    | Restaurant clothing, Soap and Bleach | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Process Wastewater  | Continuous | 10,000.00 gpd |
| 01               | Sanitary Wastewater | Continuous | 200.00 gpd    |
| 01               | Boiler Blowdown     | Continuous | 25.00 gpd     |

Process Description

The facility picks up dirty linens, carpets, towels, aprons, table clothes and work uniforms from commercial establishments. These are washed, dried ironed and delivered to customers.

The washing operation generates wastewater containing pollutants which is collected in trenches where screens are placed to collect lint and other particles before process wastewater enters the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |                |                 |
|---------------|------------------------------------------|---------------------|----------------|-----------------|
| <b>27406</b>  | <b>United Meat and Deli</b>              | <b>3273 Hubbard</b> | <b>Detroit</b> | <b>MI 48210</b> |

| <u>Permits</u> | <u>Raw Materials</u>                          | <u>Limits</u>        |
|----------------|-----------------------------------------------|----------------------|
| 004-27406-IU   | Caustic Cleaner<br>Beef, Spicy water solution | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 500.00   | gpd |
| 01               | Process Wastewater        | Continuous | 4,564.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 100.00   | gpd |

Process Description

The facility has the following meat processing operations: Beef is water cleaned and cut. Some beef is directly cut to wholesale meat products. Some beef is manufactured as spicy corned beef by injecting spicy (garlic & onion) water solution into the raw meat. Corned beef and other meat products are packaged and stored on-site for distribution.

Wastewater is generated from meat cleaning, floor and equipment washing and passes through screened floor drains and settling sumps to remove fat debris and other solids prior to discharge into the sewer system.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>   |         |              |
|---------------|------------------------------------------|----------------------|---------|--------------|
| 27449         | Usher Oil Company                        | 9000 Roselawn Street | Detroit | MI 482042746 |

| <u>Permits</u> | <u>Raw Materials</u>                  | <u>Limits</u>                                   |
|----------------|---------------------------------------|-------------------------------------------------|
| 91527449IU2    | Oily and organic process wastewater   | 03 LOC. Local Limits                            |
|                | sulfuric acid, caustic soda, polymers | 03 PHEN. Phenols                                |
|                |                                       | 03 437.D.46e (PSES) Centralized Waste Treatment |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 03               | Sanitary Wastewater       | Continuous | 800.00     | gpd |
| 03               | Non-contact Cooling Water | Continuous | 25.00      | gpd |
| 03               | Process Wastewater        | Batch      | 100,000.00 | gpd |
| 03               | Process Wastewater        | Batch      | 100,000.00 | gpd |

Process Description

The facility receives two different categories of wastewater:

a) Organic wastewater & no oil-bearing waters such as leachate, storm-water and groundwater: This wastewater is unloaded into Primary Water Treatment Tanks #3, #4, #30, 31 and #32. The capacity of each of these five tanks is 20,000 gallons. In these tanks, pH is adjusted and chemicals such as polymers, oxidizers are added. The treated water is then discharged to the sewer on batch basis. The pH of the batch is tested before discharge. A minimal amount of sludge is found in these tanks.

b) Oily wastewater: The facility receives this kind of waste into two different kinds:

i. Mixtures of oily water (emulsions), water soluble oil, and coolants. This wastewater is unloaded into the Primary Oil Treatment Tank #2 (POT Tank #2). In this tank, the emulsion structure is broken using heat via steam, sulfuric acid, and polymers. Instead of emulsion, now we have wastewater that composes of two phases-the oil phase layer and the water phase layer, in addition of some sludge that settle on the bottom of the tank. The oil phase layer is skimmed and pumped to a series of Secondary Oil Treatment tanks A, B, & C. The capacity of each is 20,000 gallons. The water phase layer is pumped to Equalization Tanks #101, and #102 for further treatment, each has a capacity of 100,000 gallons. The sludge is removed to be sent off-site to a land fill.

The wastewater phase that was pumped into the Equalization Tanks #101 and #102 are pretreated further before discharge to the sewer. The pretreatment system consists of coalescer tank, reaction tanks, settling tanks, DAF unit (Dissolved Air Floatation), and possibly polishing tanks.

1. The wastewater from Tanks #101, #102 is first pH adjusted when needed,
2. Then it gets pumped to a coalescer tank, whose function is to remove the remaining film of oil via mechanical filter.
3. The water is then pumped into three reaction tanks, the last one of which is called Flash Mix Tank. To break any remaining emulsion, polymer, caustic, and either ferric chloride, or aluminum sulfate are added.
4. The water then flows into two settling tanks before reaching the DAF unit.
5. In the DAF unit, the treated water is injected with micro air bubbles at the entry end. This will cause the floc ( the light sludge) to float. The floating floc is removed by a flight skimmer, while the settled solids are removed by an auger conveyor and then pumped into a Sludge Storage Tank. The treated water from this step is discharged to the sewer after spilling over a separation weir.
6. If further treatment is required, the water is pumped into two polishing tanks, where it is pumped back into the Primary Oil Separation Tank #2-the very beginning of the process.

ii. High oil concentration wastes. This waste is unloaded into the Secondary Oil Treatment tanks A, B, & C to be mixed with the phase oil layer that was pumped from the Primary Oil Tank (POT), as stated in (b) above. In this tank, the oily waste is heated via live steam, pH adjusted and treated with polymer. The heating process and the addition of chemicals would lead the oily waste to be separated into two phases-the oil phase layer and the water phase layer, with an inter-phase layer in between. The water phase is pumped into the Primary Oil Tank (POT), and the clean oil phase is skimmed and transferred into the Oil Storage Batch Tanks. There are 16 of them, whose capacity ranges from 15,000 to 50,000 gallons. The stored clean oil is categorized according to its chlorine concentration when it is sold to customers. The inter-phase layer stated above, also called the rag layer, is removed and shipped off-site.

IH - author

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>           |
|---------------|------------------------------------------|------------------------------|
| 96637         | Vaughan Industries, Inc.                 | 8490 Lyndon Detroit MI 48238 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00596637IU     |                      | 01 LOC. Local Limits |

| <u>Flow Rate</u>                         |
|------------------------------------------|
| 01 Process Wastewater Batch 2,000.00 gpd |

Process Description

Premade surfactant products are blended in mixing tanks and then diluted with water. Mixing tanks are washed each time a different kind of batch is produced. The facility wash chemical supply totes in a washing machine. All wastewater from mixing tank washing and totes washer are collected in a 2,000 gallons capacity holding tank for equalization. Process wastewater is then passed through a filter to capture labels which are removed from totes washing and then discharged through sampling box into city sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>  | <u>SIU Address</u> |                |                     |
|---------------|-------------------------------------------|--------------------|----------------|---------------------|
| <b>27450</b>  | <b>VernDale Products, Inc. - Plant #1</b> | <b>8445 Lyndon</b> | <b>Detroit</b> | <b>MI 482382454</b> |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00527450IU-2   | Milk, cleaner        | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 640.00    | gpd |
| 01               | Boiler Blowdown           | Continuous | 600.00    | gpd |
| 01               | Sanitary Wastewater       | Continuous | 800.00    | gpd |
| 01               | Process Wastewater        | Continuous | 36,946.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 34,746.00 | gpd |
| 01               | Boiler Blowdown           | Continuous | 302.00    | gpd |

Process Description

The process consists of the following:

- Fresh milk is hauled in from farmers and stored onsite.
- Milk then is concentrated in a reverse osmosis/filter system. Water is rejected.
- Milk concentrate is applied to the roller/drum dryer, which is rotated and steam heated to generate a thin film of dried milk. The water is evaporated.

A thin sheet of dried milk is scrapped by blades and the dried sheet of milk powder is transferred to a hammer mill to be broken into small powder particles, which is transported to packaging section for distribution.

Process wastewater is generated from reverse osmosis/filtration of the fresh milk concentration process, and from routine water washing and cleaning of process tanks, equipment and floors. The facility discharges the process wastewater to the sewer without pretreatment.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>            |
|---------------|------------------------------------------|-------------------------------|
| 96223         | VernDale Products, Inc. - Plant #2       | 18940 Weaver Detroit MI 48228 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 00596223IU1    | Milk                 | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |               |
|------------------|---------------------------|------------|---------------|
| 01               | Sanitary Wastewater       | Continuous | 500.00 gpd    |
| 01               | Process Wastewater        | Continuous | 32,000.00 gpd |
| 01               | Non-contact Cooling Water | Continuous | 3,000.00 gpd  |

Process Description

Fresh milk is received from farms, stored, concentrated by reverse osmosis filtration, pasteurized and dried. Dried milk powder is tempered and milled before packaging Process wastewater is generated from the reverse osmosis milk concentration process, and from washing of tanks, equipment and floors.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>     | <u>SIU Address</u>            |              |                 |
|---------------|----------------------------------------------|-------------------------------|--------------|-----------------|
| <b>27573</b>  | <b>Waste Management of MI, Inc.-Eagle Va</b> | <b>600 W. Silverbell Road</b> | <b>Orion</b> | <b>MI 48359</b> |

| <u>Permits</u> | <u>Raw Materials</u>       | <u>Limits</u>        |
|----------------|----------------------------|----------------------|
| 70727573IU3    | Landfill wastes - Leachate | 01 LOC. Local Limits |
|                |                            | 01 PHEN. Phenols     |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 200.00 gpd    |
| 01               | Process Wastewater  | Continuous | 29,357.00 gpd |

Process Description

Final permit was modified manually, as new boiler plate was introduced after issuance of draft permit on January 16, 2013. PIMS (Sample Points-Limits) is modified for individual phenols instead of Total Phenolic Compounds, as per the facility's comments dated February 11, 2013, to the draft permit.

Self-Monitoring minimum sampling frequency is modified to replace Total Phenolic compounds to individual phenols.

Permit definition page is revised based on the comments.

Vijay Patel  
February 19, 2013.

The site activities include:

- i) Land disposal of non-hazardous solid waste.
- ii) Landfill leachate extraction using pumps, controls, piping systems, and meters.
- iii) Landfill gas extraction using wells, collection pipes, condensate knockout structures, gas moving equipment and flares.
- iv) Landfill construction activities.
- v) Vehicle maintenance.

The landfill gas is both flared onsite and delivered via pipeline to General Motors for use as fuel. The leachate and gas condensate are discharged into the sewer. Wastewater generated from vehicle maintenance operation is hauled off-site for disposal.

Expiration date is incorrect (11/1/2013) and it is corrected as 03/01/2012, as per the Permit.

Vijay Patel (8/1/2012)

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Vijay Patel (8/1/2012)

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u> |       |          |
|---------------|------------------------------------------|--------------------|-------|----------|
| 27499         | Waste Management of MI, Inc.-Woodlan     | 4620 Hannan Road   | Wayne | MI 48184 |

| <u>Permits</u> | <u>Raw Materials</u>       | <u>Limits</u>        |
|----------------|----------------------------|----------------------|
| 70627499IU2    | landfill waste<br>Leachate | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 01               | Other                     | Continuous | 200.00   | gpd |
| 01               | Sanitary Wastewater       | Continuous | 25.00    | gpd |
| 01               | Process Wastewater        | Continuous | 8,210.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 6,482.00 | gpd |

Process Description

Process consists of collection, treatment and sale/disposal of landfill gas and leachate. Collected gas is compressed, de-watered and piped to an off-site customer for use as fuel. Landfill gas condensate flows to an oil/water separator where oil is removed. Oil free condensate flows to an underground storage tank from where it is pumped to an aeration tank. Landfill leachate from north landfill is collected in a leachate collection tank and then pumped to the aeration tank. Leachate and condensate collected in the aeration tank is aerated and then the mixture flows to a manhole where it is combined with leachate from south landfill. The combined wastewater flows to the sampling location and then to the sewer. Non-contact cooling water, groundwater and sanitary are discharged through the sampling location without any treatment.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                    |
|---------------|------------------------------------------|---------------------------------------|
| 27484         | Waste Management of MI, Inc.-Woodlan     | 5900 Hannan Road<br>Wayne<br>MI 48184 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                            |
|----------------|----------------------|------------------------------------------|
| 00627484IU1    | Solid waste          | 01 LOC. Local Limits<br>01 PHEN. Phenols |

| <u>Flow Rate</u> |                     |                          |
|------------------|---------------------|--------------------------|
| 01               | Sanitary Wastewater | Continuous 400.00 gpd    |
| 01               | Process Wastewater  | Continuous 35,575.00 gpd |
| 01               | Other               | Continuous 50.00 gpd     |

Process Description

The following operations are performed at the landfill:

- a) Solid waste landfilling
- b) Maintenance Shop

The solid waste, which mainly consists of street garbage and construction waste, is trucked in by customers, scaled and then dumped into the disposal cell until the disposal cell is filled up completely. The solid waste then compacted and covered with a layer of sand. Process wastewater is generated from landfill leachate and the maintenance shop. The leachate from the facility is discharged into the sewer without any pretreatment, and the maintenance shop wastewater passes through an oil/water separator before discharging into the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u>  | <u>SIU Address</u>    |                  |                 |
|---------------|-------------------------------------------|-----------------------|------------------|-----------------|
| <b>27572</b>  | <b>Waterford Hills Landfill/MDEQ, RRD</b> | <b>7900 Gale Road</b> | <b>Waterford</b> | <b>MI 49201</b> |

| <u>Permits</u> | <u>Raw Materials</u>       | <u>Limits</u>        |
|----------------|----------------------------|----------------------|
| 70727572IU4    | Landfill wastes - Leachate | 01 LOC. Local Limits |

| <u>Flow Rate</u> |            |          |     |
|------------------|------------|----------|-----|
| 01 Other         | Continuous | 3,184.00 | gpd |

Process Description

The leachate produced from the closed landfill contains toxic pollutants PCB, Mercury (Hg) and Arsenic (As). The leachate gets collected in the on-site wet well and then pre-treated in a granular activated carbon treatment system prior to the sewer discharge. The settled suspended solids are removed from the wet well and disposed of in a licensed landfill.

The facility's carbon treatment building is situated at 7501 Maceday Lake Road, Waterford, MI 49201, which is a DNR site.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                              |
|---------------|------------------------------------------|-------------------------------------------------|
| 96824         | Welders & Presses Inc. (WPI)             | 27295 Luckino Dr<br>Chesterfield Towns MI 48047 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                               |
|----------------|----------------------|-------------------------------------------------------------|
| 15196824IU     |                      | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |              |
|------------------|--------------------|------------|--------------|
| 01               | Process Wastewater | Continuous | 5,000.00 gpd |

Process Description

Parts are alkaline cleaned by spray cleaning followed by dip cleaning, double rinsed, acid pickled, rinsed, conditioned, zinc phosphated, rinsed, non-chrome sealed, RO water rinsed, hung and drained, e-coated and triple rinsed. The facility generates process wastewater from the operations of alkaline cleaning, acid pickling, non-chrome sealing, zinc phosphating and e-coating. The facility pretreats the wastewater through its processes of equalization, pH adjustment and lamella clarification. The final effluent gets pH adjusted prior to sewer discharging. The sludge is thickened and filter pressed, the filtrate being recycled through the treatment system.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                    |
|---------------|------------------------------------------|---------------------------------------|
| 27492         | Westside Flame Hardening, Inc.           | 38200 Executive Dr. Westland MI 48185 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                               |
|----------------|----------------------|-------------------------------------------------------------|
| 15627492IU3    | Automotive parts     | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                       |                         |
|------------------|-----------------------|-------------------------|
| 01               | Sanitary Wastewater   | Continuous 240.00 gpd   |
| 01               | Process Wastewater    | Continuous 1,000.00 gpd |
| 01               | Contact Cooling Water | Continuous 3,500.00 gpd |

Process Description

Process consists of : (a) Alkaline cleaning and acid cleaning of parts followed by water rinse, (b) Black oxidizing coating followed by water rinse, (c) Application of rust inhibitor, (d) Flame hardening and contact cooling, (e) oil quenching whenever required.

The wastewater generating processes are rinsing and contact cooling wastewater. The wastewater generated from rinsing and the wastewater generated from the contact cooling involved in the flame hardening operation is discharged continuously without pretreatment into public sewers.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                     |
|---------------|------------------------------------------|----------------------------------------|
| 93367         | William Beaumont Hospital - Grosse Po    | 468 Cadieux Grosse Pointe MI 482301592 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                |
|----------------|----------------------|----------------------------------------------|
| 00293367IU     | Patients Care.       | 01 LOC. Local Limits<br>02 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 10,000.00 | gpd |
| 01               | Process Wastewater        | Continuous | 23,693.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 325.00    | gpd |
| 01               | Boiler Blowdown           | Continuous | 675.00    | gpd |
| 02               | Sanitary Wastewater       | Continuous | 15,000.00 | gpd |
| 02               | Process Wastewater        | Continuous | 36,040.00 | gpd |
| 02               | Non-contact Cooling Water | Continuous | 325.00    | gpd |
| 02               | Boiler Blowdown           | Continuous | 675.00    | gpd |

Process Description

- \* The facility provides care for the sick.
- \* Radiology, X-rays, and other forms of imaging.
- \* Laboratory facilities in bacteriology, microbiology, pathology, histology and toxicology.
- \* Surgical procedures are also performed at this facility.
- \* Food services to patients, employees and guests.



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>         |           |          |
|---------------|------------------------------------------|----------------------------|-----------|----------|
| 27744         | William Beaumont Hospital - Royal Oak    | 3601 W. Thirteen Mile Road | Royal Oak | MI 48073 |

| <u>Permits</u> | <u>Raw Materials</u>                                | <u>Limits</u>        |
|----------------|-----------------------------------------------------|----------------------|
| 00927744IU4    | X-Ray<br>Laboratory<br>Food service<br>Patient Care | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |            |     |
|------------------|---------------------------|------------|------------|-----|
| 01               | Sanitary Wastewater       | Continuous | 127,500.00 | gpd |
| 01               | Process Wastewater        | Continuous | 253,667.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 12,390.00  | gpd |
| 01               | Boiler Blowdown           | Continuous | 3,006.00   | gpd |

Process Description

The facility's a healthcare service provider. The wastewater generating processes are patient care/housekeeping, kitchen/cafeteria, laboratories and morgue. Used grease from the kitchen is recycled by Dover Grease Traps, Inc, and the wastewater gets discharged via grease traps. The facility has 3 x-ray processors, two in Radiation Oncology which are rarely used and one in Radiology School (which will be closing in 2014). These processors are equipped with silver recovery buckets. The facility disposes of used formalin solutions (10%) into the sewer which amount to 150 - 200 gallons for every 2 weeks.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>            |
|---------------|------------------------------------------|-------------------------------|
| 27568         | William Beaumont Hospital - Troy         | 44201 Dequindre Troy MI 48098 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>        |
|----------------|----------------------|----------------------|
| 007049         | Patients care        | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |               |
|------------------|---------------------------|------------|---------------|
| 01               | Sanitary Wastewater       | Continuous | 52,000.00 gpd |
| 01               | Process Wastewater        | Continuous | 49,894.00 gpd |
| 01               | Non-contact Cooling Water | Continuous | 35,000.00 gpd |
| 01               | Boiler Blowdown           | Continuous | 4,000.00 gpd  |

Process Description

The Process consists of patient care and housekeeping; and other related operations such as morgue, laboratories (microbiology, bacteriology, etc.) and kitchen/cafeteria. Grease traps are in place for releasing the kitchen/cafeteria wastewater into the sewer.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                             |
|---------------|------------------------------------------|------------------------------------------------|
| 27535         | Williams Diversified, Inc.               | 13170 Merriman Road<br>Livonia<br>MI 481501816 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                              |
|----------------|----------------------|------------------------------------------------------------|
| 02627535IU2    | Automotive parts     | 03 LOC. Local Limits<br>03 413.A.14c (PSES) Electroplating |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 03               | Sanitary Wastewater | Continuous | 2,250.00 gpd  |
| 03               | Process Wastewater  | Continuous | 55,784.00 gpd |

Process Description

## PROCESS DESCRIPTION

The processes consist of neutral and alkaline cleaning, zinc plating, zinc phosphating, rinsing, sealing, black oxidizing and grinding for finishing parts. Wastewater is generated from rinsing after the neutral and alkaline cleaning, sealing, zinc plating, black oxidizing, and zinc phosphating. The wastewater is pretreated prior to discharge into the city sewer system. The pretreatment system consists of wastewater collection, pH adjustment, clarification, sludge thickening, filter pressing, and sludge drying.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                     |
|---------------|------------------------------------------|----------------------------------------|
| 27247         | Winter Sausage Mfg. Co.                  | 22011 Gratiot East Pointe MI 480212225 |

| <u>Permits</u> | <u>Raw Materials</u>                     | <u>Limits</u>        |
|----------------|------------------------------------------|----------------------|
| 00127247IU1    | Raw Beef/ Pork<br>Spices<br>Washing soap | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                     |            |               |
|------------------|---------------------|------------|---------------|
| 01               | Sanitary Wastewater | Continuous | 700.00 gpd    |
| 01               | Process Wastewater  | Continuous | 10,592.00 gpd |
| 01               | Boiler Blowdown     | Continuous | 20.00 gpd     |

Process Description

The facility's meat processing operations are as follows: Linings are soaked in water, pork and beef trimmings are ground, emulsified, mixed with spices, stuffed into linings for formulation of products (sausage and ham). Products may be cooked or smoked, then chilled with water shower and stored in the refrigerator.

Process wastewater is generated from soaking of linings, cooking and chilling of products, cleaning of walls, floors, and equipment.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                 |
|---------------|------------------------------------------|------------------------------------|
| 27338         | Wolverine Packing Company                | 1342 Winder<br>Detroit<br>MI 48207 |

| <u>Permits</u> | <u>Raw Materials</u>                       | <u>Limits</u>        |
|----------------|--------------------------------------------|----------------------|
| 00327338IU1    | Lamb, Calves, water and cleaning chemicals | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |           |     |
|------------------|---------------------------|------------|-----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 1,600.00  | gpd |
| 01               | Process Wastewater        | Continuous | 64,882.00 | gpd |
| 01               | Non-contact Cooling Water | Continuous | 2,630.00  | gpd |

Process Description

The process consists of slaughtering of lambs and calves on-site, chilling and cleaning of the carcasses, meat processing (trimming, de-boning, packing), and shipping of lamb and veal products.

Wastewater is generated from the slaughtering of lambs and calves, chilling and cleaning of carcasses, routine washing and cleaning of equipment and floors. The facility has screens on drains and a catching pit for capture of fats and small meat parts.

IH - author

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                       |
|---------------|------------------------------------------|----------------------------------------------------------|
| 27144         | Wolverine Plating Corporation            | 29456 Groesbeck Highway      Roseville      MI 480661942 |

| <u>Permits</u> | <u>Raw Materials</u>         | <u>Limits</u>                       |
|----------------|------------------------------|-------------------------------------|
| 15127144IU1    | Automotive/Appliance Parts   | 01 LOC. Local Limits                |
|                | Alkaline Cleaner             | 01 413.A.14c (PSES) Electroplating  |
|                | Hydrochloric Acid            | 01 433.A.17a (PSNS) Metal Finishing |
|                | Plating/Chromating Solutions |                                     |
|                | Polymer                      |                                     |

| <u>Flow Rate</u> |                    |            |                |
|------------------|--------------------|------------|----------------|
| 01               | Process Wastewater | Continuous | 145,000.00 gpd |

#### Process Description

The facility has two (2) zinc-plating & chromating lines no. 1 & 2 and two (2) zinc/nickel alloy plating lines no. 3 & 4. The processes are the same for each line. Parts are automatically processed in barrels through baths for alkaline cleaning, alkaline electro-cleaning, acid pickling, zinc or zinc/nickel electroplating & chromating with each operation followed by water rinsing or multi-rinsing and finally sealing.

The facility added a new zinc-plating & chromating line #5. The process for this line consists of alkaline cleaning, alkaline electro-cleaning, hydrochloric acid dipping, alkaline electro-cleaning, zinc electroplating & chromating with each operation followed by water rinsing or multi-rinsing and finally sealing.

The rinse water and spent solution is treated on-site in two independent waste treatment units, #1 and #2. The treatment operations for unit #1 include neutralization, flocculation, clarification, filtration and chromium ion reduction. The treatment operations for unit #2 include neutralization, flocculation, clarification, and filtration.

MB - author

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>   |                |                 |
|---------------|------------------------------------------|----------------------|----------------|-----------------|
| <b>27521</b>  | <b>Woolf Aircraft Products, Inc.</b>     | <b>6401 Cogswell</b> | <b>Romulus</b> | <b>MI 48174</b> |

| <u>Permits</u> | <u>Raw Materials</u>                   | <u>Limits</u>                                |
|----------------|----------------------------------------|----------------------------------------------|
| 00627521IU     | Steel, Stainless steel, Aluminum pipes | 01 LOC. Local Limits<br>03 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |          |     |
|------------------|---------------------------|------------|----------|-----|
| 01               | Sanitary Wastewater       | Continuous | 1,200.00 | gpd |
| 01               | Process Wastewater        | Continuous | 166.00   | gpd |
| 01               | Non-contact Cooling Water | Continuous | 230.00   | gpd |
| 03               | Sanitary Wastewater       | Continuous | 760.00   | gpd |
| 03               | Process Wastewater        | Continuous | 60.00    | gpd |

Process Description

The process primarily consists of fabrication of tubing made of carbon steel, stainless steel, and aluminum. The operation carried out at this location includes cutting, bending, machining, brazing, welding, boiling water rinsing, water pressure testing, and zyglo weld inspection.

The facility discharges process wastewater from the following operations: a) Aqueous Parts Washing, b) Machining, c) Boiling Water Rinse, d) Zyglo Weld Inspection, e) Water Pressure Testing, f) Floor Cleaning, g) Compressor Air Condensation, h) Weld-O-Cleaning, i) Rust Cleaning, j) Low-Melt Alloy Rinsing and k) Equipment Maintenance

The pretreatment operations at this facility are ultrafiltration and oil separation

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>          |                   |                 |
|---------------|------------------------------------------|-----------------------------|-------------------|-----------------|
| <b>91939</b>  | <b>X-Cel Industries, Inc.</b>            | <b>21121 Telegraph Road</b> | <b>Southfield</b> | <b>MI 48033</b> |

| <u>Permits</u> | <u>Raw Materials</u>                          | <u>Limits</u>                                               |
|----------------|-----------------------------------------------|-------------------------------------------------------------|
| 159-91939-IU   | Zinc phosphate, Acid, Paint, Solvents, Resins | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 39,800.00 gpd |

Process Description

The process consists of two operating lines namely the Zinc phosphate/E-coat, and Washing line. In-coming aluminum or steel parts are alkaline cleaned, conditioned and immersed in zinc phosphate solution. After rinsing with water followed by reverse osmosis water spray, the parts are subjected to E-coating immersion, further spraying with water, and oven-drying. The coated parts are then run through the washing line in which they are acid cleaned and rinsed again with reverse osmosis water.

Process wastewater generated from rinsing at different stages, is directed into a two-stage equalization tank where it is adjusted for pH and treated with metal precipitants to induce flocculation. The treated flow is transferred to a clarifier to settle out solids. The overflow is discharged into public sewers while the sludge accumulated at the bottom is pumped into a sludge thickening tank and from there through a filter press. The resulting cakes are hauled away for eventual disposal and the filtrate returned to the equalization tank for further treatment.

TT - Author



**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>             |
|---------------|------------------------------------------|--------------------------------|
| 92934         | XRI Testing                              | 1961 Thunderbird Troy MI 48084 |

| <u>Permits</u> | <u>Raw Materials</u> | <u>Limits</u>                                                                                                                                                                                                     |
|----------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 157-92934-IU   | Metal Parts          | 01 LOC. Local Limits<br>01 433.A.17a (PSNS) Metal Finishing<br>02 LOC. Local Limits<br>05 LOC. Local Limits<br>05 433.A.17a (PSNS) Metal Finishing<br>06 LOC. Local Limits<br>06 433.A.17a (PSNS) Metal Finishing |

| <u>Flow Rate</u> |                               |            |              |
|------------------|-------------------------------|------------|--------------|
| 01               | Sanitary Wastewater           | Continuous | 700.00 gpd   |
| 01               | Process Wastewater            | Continuous | 9,452.00 gpd |
| 01               | Air Pollution Control Wastew. | Continuous | 900.00 gpd   |

Process Description

Metal parts, usually stainless steel, (auto and/or airplane parts) are alkaline washed, rinsed, dipped in tanks filled with nitric acidic solution, rinsed, neutralized with caustic soda, and rinsed again. The facility has five tanks of nitric acid solutions with different concentrations; ranges from 25% to 50%. Four of these tanks are used for passivation and the fifth one is used for etching. The specifications of the part will determine which concentration is to be used. The process wastewater generated from the stated rinsing operations is discharged to the sewer after being neutralized. The facility also has an air scrubber. The wastewater generated from the latter is neutralized and discharged to the sewer on continuous basis. The dilution caused by introducing the sanitary is less than 10%. Accordingly, the combined waste formula will not apply.

The facility also magnetizes some of the parts. This process does not generate any wastewater. The other process conducted in the facility is coating the parts with liquid called penetrant, which is water-soluble die, examining the parts for defects under a black-light, and then rinsing the die from the parts generating wastewater. The parts may also be x-rayed to test for defects. The x-ray films are developed in the facility. The process wastewater generated from developing the films is treated in the newly installed treatment system and discharged into same sampling location along with other separately treated process water.

**Facility Name: Detroit Water & Sewerage**

**NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>  |                 |                 |
|---------------|------------------------------------------|---------------------|-----------------|-----------------|
| <b>79686</b>  | <b>Xcel Steel Pickling</b>               | <b>4343 Wyoming</b> | <b>Dearborn</b> | <b>MI 48126</b> |

| <u>Permits</u> | <u>Raw Materials</u>        | <u>Limits</u>                                      |
|----------------|-----------------------------|----------------------------------------------------|
| 03479686IU     | Carbon steel strip in coils | 01 LOC. Local Limits                               |
|                | Hydrochloric Acid           | 01 420.I.95b.4 (PSES) Iron and Steel Manufacturing |
|                | Rust preventive oil         | 01 420.I.95b.2 (PSES) Iron and Steel Manufacturing |

| <u>Flow Rate</u> |                    |            |               |
|------------------|--------------------|------------|---------------|
| 01               | Process Wastewater | Continuous | 16,278.00 gpd |

Process Description

The process involves receiving steel coil, storage, uncoiling, flattening, shearing (head & tail), alkaline cleaning, 2% to 9% HCL pickling in three-stage counter current and semi-continuous pickler, water rinse, mil bond coating, hot air drying, thin oil coating, recoiling and blank automotive stamping in the auto press division. The wastewater pretreatment process consists of neutralization and clarification prior to sewer discharge. Spent pickling acid and clarifier bottom solids (sludge) are shipped off-site for treatment/disposal. The wastewater generated from rinsing is discharged to the city sewer after pretreatment.

The process involves receiving steel coil, storage, uncoiling, flattening, shearing (head & tail), alkaline cleaning, 2% to 9% HCL pickling in three-stage counter current and semi-continuous pickler, water rinse, mil bond coating, hot air drying, thin oil coating, recoiling and blank automotive stamping in the auto press division. The wastewater pretreatment process consists of neutralization and clarification prior to sewer discharge. Spent pickling acid and clarifier bottom solids (sludge) are shipped off-site for treatment/disposal. The wastewater generated from rinsing is discharged to the city sewer after pretreatment.

**Facility Name: Detroit Water & Sewerage****NPDES Permit #: MI 0022802**

| <u>SIU ID</u> | <u>Significant Industrial User (SIU)</u> | <u>SIU Address</u>                                 |
|---------------|------------------------------------------|----------------------------------------------------|
| 27478         | Z Technologies Corporation               | 26500 Capitol Avenue Redford Township MI 482392506 |

| <u>Permits</u> | <u>Raw Materials</u>                             | <u>Limits</u>        |
|----------------|--------------------------------------------------|----------------------|
| 00627478IU3    | Organic solvents, Paint Formulating Agent, Acids | 01 LOC. Local Limits |

| <u>Flow Rate</u> |                           |            |              |
|------------------|---------------------------|------------|--------------|
| 01               | Process Wastewater        | Continuous | 510.00 gpd   |
| 01               | Boiler Blowdown           | Continuous | 100.00 gpd   |
| 01               | Sanitary Wastewater       | Continuous | 750.00 gpd   |
| 01               | Non-contact Cooling Water | Continuous | 1,000.00 gpd |

Process Description

The process consists of blending of chemicals such as aliphatic and aromatic solvents, waxes, calcium carbonates, oils and cut back asphalt. Process wastewater is generated from rinsing and washing of vessels. Wastewater generated from cleaning the vessels used for making zinc contained product is treated separately in batches prior to discharge into the city sewer system. Wastewater generated from cleaning the vessels used for making non-zinc products, boiler blow down and non-contact cooling is discharged continuously. Water based paints waste and waste flammable liquid are hauled off site for treatment/disposal.

Prepared By: S. Kuplicki, PE, JD  
October 30, 2017

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