

City of Houston
Houston Public Works
INDUSTRIAL WASTE PERMIT APPLICATION

Please complete every line item with a response or indicate "None" or "NA" as needed.

Submit the original, completed form with a photocopy of the company check for the application fee to:

City of Houston Industrial Wastewater Service
10500 Bellaire Blvd.
Houston, TX 77072

Mail a company check for the application fee of \$125.31 with a photocopy of the first page of this application form to:

City of Houston Fiscal Services
611 Walker 24th Floors
Houston, Texas 77002-4903

SECTION A: COMPANY INFORMATION

1. Legal Name: _____
2. Service Address: _____
Address Continued: _____ Zip: _____
3. Mailing Address: _____
Address Continued: _____ Zip: _____
4. Owner's Name/ Corporate Head: _____
5. Mailing Address: _____
Address Continued: _____ Zip: _____
6. Primary Contact Person: _____ Phone: _____
Title: _____ Email: _____
7. Alternate Contact Person: _____ Phone: _____
Title: _____ Email: _____
8. Number of employees working at this facility (do not include individuals that do not physically work at this location): _____
9. Hours of Operation
Monday _____
Tuesday _____
Wednesday _____
Thursday _____
Friday _____
Saturday _____
Sunday _____
10. Hours of Discharge to the sewer system
Monday _____
Tuesday _____
Wednesday _____
Thursday _____
Friday _____
Saturday _____
Sunday _____
11. Date the facility commenced or plans to commence operations: _____

12. Is the operation subject to seasonal variation? YES NO If Yes, explain how:

13. Does the facility shut down for holidays, maintenance, or other reasons? YES NO If Yes, when?

14. Is this facility covered by any other environmental control permits? YES NO

If Yes, list all permits below.

Title of Permit	Permit Number	Issuing Agency	Expiration Date

15. Is this facility subject to any National Emission Standards for Hazardous Air Pollutants (NESHAP)? YES NO

If Yes, provide the category and CFR Citation below.

SECTION B: NATURE OF OPERATIONS

1. NAICS Code(s): _____

2. SIC Code(s): _____

3. Describe the manufacturing process or services provided. Attach additional pages as needed.

Attachment No.: _____

4. Describe all wastewater-generating processes at the facility including all the sources of contaminated stormwater runoff. Attach additional pages as needed.

Attachment No.: _____

5. Attach a Facility Map (drawn to approximate scale) showing the following with proper labelling;
 - a. All production areas, maintenance areas, materials-handling areas, and waste-disposal areas
 - b. Locations of all raw material and chemical storage areas
 - c. Location of the pretreatment system (if applicable)
 - d. Locations of all floor drains
 - e. Location of each water meter and effluent meter (with the meter account number labelled)
 - f. Location of each sewer connection
 - g. Locations of any sewer discharge sample points (if applicable)
 - h. Directions of wastewater flow throughout the facility

Attachment No.: _____

6. List the chemicals used in the manufacturing processes. Avoid using trade names. If trade names are used, attach a safety data sheet (SDS) for that chemical. If this is a service industry, list chemicals that could be in the wastewater that is discharged to the sanitary sewer. Attach additional pages if needed.

Name of Chemical	Function

7. Describe preventive measures taken to avoid accidental release of chemicals from chemical storage areas. Attach additional pages as needed.

8. List each process operation, the average rate of production (i.e., 10,000 lbs. of [product name] per year), and the Standard Industrial Classification Code (SIC Code) for each manufacturing / service operations performed. Use additional pages as needed.

Process Description	Production Rate - Design	Production Rate - Actual	SIC Code

9. Indicate below if your facility employs or will be employing processes described by the following categories, even if they generate no wastewater, waste sludge, or hazardous wastes. Mark all that apply to the entire facility.

	<u>Industry Category</u>	<u>40 CFR Part</u>	<u>Subpart</u>
<input type="checkbox"/>	Aluminum Forming	467	
<input type="checkbox"/>	Battery Manufacturing	461	
<input type="checkbox"/>	Canned and Preserved Fruits and Vegetable Processing	407	
<input type="checkbox"/>	Carbon Black Manufacturing	458	
<input type="checkbox"/>	Centralized Waste Treatment	437	
<input type="checkbox"/>	Coil Coating	465	
<input type="checkbox"/>	Concentrated Animal Feeding Operations (CAFO)	412	
<input type="checkbox"/>	Copper Forming	468	
<input type="checkbox"/>	Electrical and Electronic Components	469	
<input type="checkbox"/>	Electroplating	413	
<input type="checkbox"/>	Fertilizer Manufacturing	418	
<input type="checkbox"/>	Glass Manufacturing	426	
<input type="checkbox"/>	Grain Mills Manufacturing	406	
<input type="checkbox"/>	Ink Formulating	447	
<input type="checkbox"/>	Inorganic Chemicals	415	
<input type="checkbox"/>	Iron and Steel Manufacturing	420	
<input type="checkbox"/>	Leather Tanning and Finishing	425	
<input type="checkbox"/>	Metal Finishing	433	
<input type="checkbox"/>	Metal Molding and Casting (Foundries)	464	
<input type="checkbox"/>	Nonferrous Metals Forming and Metal Powders	471	
<input type="checkbox"/>	Nonferrous Metals Manufacturing	421	
<input type="checkbox"/>	Oil and Gas Extraction	435	
<input type="checkbox"/>	Organic Chemicals, Plastics and Synthetic Fibers (OCPSF)	414	
<input type="checkbox"/>	Paint Formulating	446	
<input type="checkbox"/>	Paving and Roofing Materials (Tars and Asphalt)	443	
<input type="checkbox"/>	Pesticide Chemicals Manufacturing, Formulating and Packaging	455	
<input type="checkbox"/>	Petroleum Refining	419	
<input type="checkbox"/>	Pharmaceutical Manufacturing	439	
<input type="checkbox"/>	Porcelain Enameling	466	
<input type="checkbox"/>	Pulp, Paper and Paperboard	430	
<input type="checkbox"/>	Rubber Manufacturing	428	
<input type="checkbox"/>	Soaps and Detergents Manufacturing	417	
<input type="checkbox"/>	Steam Electric Power Generating	423	
<input type="checkbox"/>	Transportation Equipment Cleaning	442	
<input type="checkbox"/>	Waste Combustors	444	
<input type="checkbox"/>	None	NA	NA

10. Is this a new permit application for an existing facility?

YES NO

If YES,

Explain if there has been a transfer of ownership, new connection(s) to the sewer system, how wastewater was disposed of previously, and what prompted application for a wastewater discharge permit, etc.

11. Are per-and polyfluoroalkyl substances (PFAS) contained in any raw material, byproduct or final product used/manufactured at the facility?

YES NO

12. Are per-and polyfluoroalkyl substances (PFAS) believed to be present in wastewater discharged to the sanitary sewer system?

YES NO

SECTION C: SOURCES OF WATER

1. How many of the following meters or wells are at the facility?

City water meters for incoming clean water None 1 2 3 4 5 6 7

Sewer discharge meters for sewer billing None 1 2 3 4 5 6 7

Private, metered wells on the property None 1 2 3 4 5 6 7

Private, unmetered wells on the property None 1 2 3 4 5 6 7

Other water meters (describe): _____

2. List the account numbers for each of the following.

<u>City Water Meter Acct. No.</u>	<u>Effluent Meter Acct. No.</u>	<u>Private Well Meter Acct. No.</u>

3. Indicate the average gallons per day of wastewater discharge to the sanitary sewer system from the activities listed below (continued to next page, attach additional pages if necessary).

Activity	Average and Maximum Flow (Gallons per Day)
Manufacturing or Service Process:	
a) _____	_____
b) _____	_____
c) _____	_____
d) _____	_____
e) _____	_____
f) _____	_____
g) _____	_____
h) _____	_____
i) _____	_____

Non-Contact Cooling Water

Plant and Equipment Washdown

Sanitary (Employee Use)

Boiler Blowdown

Air Conditioning Condensate

Other (Specify: _____)

Other (Specify: _____)

4. Does the applicant plan to accept any wastewater from other locations via trucks, railroad tank cars, ships, or pipeline? YES NO

If YES, continue to next page.

a. List the type of wastes that the facility will accept:

b. Describe the methodology used to identify and reject non-acceptable waste types:

5. Is any non-regulated wastewater combined with the process water prior to any sample point?

YES NO

If Yes, at which sample point(s): _____

6. Attach a Flow Schematic with a water balance showing;

a. all sources of water and wastewater flow into the pretreatment system

b. amount of wastewater flow into and from each treatment unit

b. amount of wastewater flow to each outfall/point of disposal

Attachment No.: _____

SECTION D: WASTEWATER PRETREATMENT

1. Is pretreatment provided prior to discharge to the sanitary sewer system? YES NO

If YES, describe the treatment steps and the chemicals that are used in the pretreatment system. Indicate the pollutants the system is designed to remove from wastewater. Attach additional pages if needed.

2. Attach engineering documents of the pretreatment system and the overall facility. See Appendix A (Requirements for Wastewater Pretreatment Engineering Documents) for further details on which document(s) need to be attached.

Attachment(s): _____

3. Interceptors/Silver Recovery Units

How many of the following are present at the facility?

- | | | | | | | | | |
|---|-------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Grease Trap | <input type="checkbox"/> None | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Grit Trap | <input type="checkbox"/> None | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Oil Water Separator | <input type="checkbox"/> None | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Metallic Replacement Silver Recovery Unit | <input type="checkbox"/> None | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Electrolytic Silver Recovery Unit | <input type="checkbox"/> None | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Other Interceptors: | _____ | | | | | | | |

SECTION E: BATCH DISCHARGES TO THE SANITARY SEWER SYSTEM

1. Does the facility have a batch discharge to the sanitary sewer system? YES NO

Process That Generates Each Batch	Approximate Volume (Gal)	Expected Frequency
		<input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Semiannually <input type="checkbox"/> Annually
		<input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Semiannually <input type="checkbox"/> Annually
		<input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Semiannually <input type="checkbox"/> Annually
		<input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Semiannually <input type="checkbox"/> Annually

SECTION F: SPILL PREVENTION AND CONTROL

Does the facility have a spill prevention or slug discharge control plan? YES NO

If YES, submit a copy of the plan with this application.

SECTION G: HAZARDOUS WASTE HANDLING AND DISPOSAL METHODS

1. Does this facility discharge any substance to the sanitary sewer system which otherwise would be considered a hazardous waste if disposed of elsewhere as defined by 40 CFR Part 261?
 YES NO

If YES, attach a listing of those substances specifying EPA Identification Numbers and the quantities discharged per year.

2. Describe the storage and disposal methods for wastewater, hazardous and /or special wastes (e.g., chemical byproducts, pretreatment sludge, spent solvents, oils) generated by this facility. Include the names of the transporters and final disposal sites.

SECTION H: WASTEWATER CAPACITY

Attach a copy of the Wastewater Capacity Reservation Letter that was issued by the City of Houston’s Utility Analyses Section of the Department of Public Works and Engineering’s Planning and Development Services Division. Also attach a copy of all receipts that were issued by the City of Houston for the purchase of wastewater capacity for the service address listed on this application.

SECTION I: BEST MANAGEMENT PRACTICES

Does the facility currently implement Best Management Practices (BMPs)? YES NO

If YES, list and describe the BMPs and attach pertinent documentation.

SECTION J: WASTEWATER CHARACTERIZATION

Refer to Appendix B (Sampling and analysis requirements).

SECTION K: CERTIFICATION

This report must be signed by a principle executive officer, general partner, or proprietor or a duly authorized representative if such a representative is responsible for the overall operation of the facility from which the industrial discharge originates.

- I am a responsible corporate officer
- I am a general partner or proprietor (if the facility is a partnership or sole proprietorship)

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 fine and imprisonment for knowing violations.

Name: _____
Title: _____
Date: _____
Signature: _____

THE STATE OF TEXAS

COUNTY OF HARRIS

BEFORE ME, the undersigned authority, on this day personally appeared _____, who, being by me sworn, stated that the information contained in the foregoing certificate is true and correct. SWORN TO AND SUBSCRIBED before me on the ____ day of _____, 20____.

NOTARY PUBLIC

In and for Harris County, Texas

Steps to Obtain an Industrial Waste Permit

Before mailing any documents to the City of Houston please review the following steps for the procedures to obtain an Industrial Waste permit:

Step Number 1 – Prepare a check or money order:

Prepare a company check or money order payable to the City of Houston for the required permit fee. *Personal checks will not be accepted.*

Step Number 2 – Pay the permit application fee:

Send your firm's company check or money order **with a copy of the first page of the completed application form** to the following:

City of Houston
Fiscal Services
611 Walker 24th Floors
Houston, Texas 77002-4903.

Step Number 3 - Submit your firm's permit application:

Send a **photocopy of your company check or money order** with the completed **Permit Application Form** to the Industrial Wastewater Service at the following address:

Industrial Wastewater Service
10500 Bellaire Blvd.
Houston, Texas 77072

Please call the Industrial Wastewater Service at 832-395-5800 if you have any questions or to schedule a pre-application meeting.

Attachment L

SUBMIT THIS PAGE WITH THE ANALYTICAL LABORATORY REPORT AND CHAIN OF CUSTODY FORM

Reviewed by: _____ Date Reviewed: _____

Is your industry a Significant Industrial User (SIU)? YES NO

If yes, was a certification statement signed by an authorized person and submitted? N/A YES NO

Laboratory Report Review:

Were the samples analyzed using wastewater methods approved at 40 CFR Part 136? YES NO

Have test results been reported for each sample YES NO

Does the lab report include test results for each pollutant required to be self-monitored? YES NO

Was the lab report signed by a laboratory manager or other laboratory employee? YES NO

Are the method detection limits less than the permitted discharge limit YES NO

Is there a date and time each analysis was performed? YES NO

Is the person's name that performed the analysis on the lab report? YES NO

Chain of Custody Review

Were samples preserved with the correct chemical preservative(s) for each analytical test? YES NO

Was the correct sample type (composite or grab) collected per City requirement? YES NO

Were the samples collected on different days (If required)? N/A YES NO

Is the correct sample point number recorded on the chain of custody form? YES NO

Is the sampler's name on the chain of custody form? YES NO

Did the sampler relinquish the sample? YES NO

Are any of the names on the chain of custody typed? (Signatures are required) YES NO

Was the sample date and time recorded each grab sample? N/A YES NO

Was the sample begin date and end date recorded for each composite sample? N/A YES NO

Was the sample begin time and end time recorded for each composite sample? N/A YES NO

THERE SHALL BE NO BREAK IN THE CUSTODY OF THE SAMPLE: The sample's custody shall be accountable from the time of collection to the time it is received at the lab for analysis.

Sample Collection and Preservation Requirements

All wastewater samples must be preserved with the appropriate chemical preservative at the time the sample was collected in the field. The preservative(s) that are used must be recorded on the chain of custody form for each sample test that will be performed. Failure to do so will result in the issuance of a violation notice requiring your firm to repeat the sample collection and analyses.

There shall be no air (headspace) in any container that has a wastewater sample that will be tested for Sulfide. This must be documented on the chain of custody (COC) form or sample receipt checklist.

Failure to comply with the no head space requirement for Sulfide samples will cause the sample to be unacceptable and your firm will be required to re-sample for sulfide.

Please refer to the following table for the chemical preservatives that should be used for each of the following analytical tests:

<i>Analytical Test</i>	<i>Chemical Preservative</i>
Heavy Metals (Total)	Nitric Acid to a pH < 2
Oil & Grease (Total)	Sulfuric Acid to a pH < 2
Sulfide	Zinc Acetate and Sodium Hydroxide to a pH > 9
Cyanide Total	* Sodium Arsenite & Sodium Hydroxide to a pH >12
Cyanide Amenable	* Sodium Arsenite & Sodium Hydroxide to a pH >12
Volatile Organic Compounds	Hydrochloric Acid to pH < 2 and Sodium Thiosulfate*
Base Neutral Acids	Sodium Thiosulfate*

All samples must be cooled to < 4 degrees centigrade and kept on ice from the time of collection until delivery to the laboratory. Refrigeration is also a type of sample preservation.

The City of Houston's Industrial Wastewater Service preserves all wastewater samples in the field at the time of sample collection. In order to compare the sample results provided by your private laboratory, to the City's sample results, your firm's self-monitoring samples must be collected and preserved using the sample procedures that are followed by the City.

Note: **pH, residual Chlorine** and **Temperature** must be analyzed in the field within 15 minutes of collection.

* Sodium Arsenite and Sodium Thiosulfate are required if Chlorine is present.

APPENDIX A - REQUIREMENTS FOR WASTEWATER PRETREATMENT ENGINEERING DOCUMENTS

To determine if engineering plans of the application package are complete, the following should be included:

- 1) Process Flow Diagram (PFD) showing:
 - a. All equipment including pumps, sumps and tanks where each item on the PFD is clearly labelled
 - b. All monitoring and control equipment (e.g., pH/TSS/turbidity meters, etc.)
 - c. Indication of whether any process adjustment (e.g., Chemical addition, pH adjustment, etc.) is manual or automatic
 - d. Chemicals used at each treatment unit/tank (when applicable)
 - e. Residence time of each treatment unit/tank
 - f. Flowrate and head of each pump, indicating whether the pump is on VFD

- 2) Plot Plan of the Pretreatment System (drawn to approximate scale) showing the following with proper labelling:
 - a. Location of each unit of the pretreatment system including the location of treatment equipment, tanks, wastewater collection sumps, pumps, floor drains, and impoundments.
Note: If all details of the plot plan can be clearly shown on the overall Facility Map (Section B.5 of the permit application), Facility Map can be references here. If showing the details of the pretreatment system in the Facility Map in poor presentation/clarity of the treatment units, please show the boundary of the entire pretreatment system on the Facility Map and provide a separate plot plan to show the individual units of the pretreatment system.
 - b. Location(s) of sewer connection(s)/outfalls and sampling/monitoring points

- 3) A set of piping and instrumentation diagrams (P&IDs) issued for construction (**only for CIUs**)

- 4) A set of piping layouts (only for SIUs) OR plumbing plans issued for construction

- 5) Process narrative covering all of the following:
 - a. Description of sources of all wastewater generated/handled at site
 - b. Description of function of each equipment/tank shown in the PFD (i.e., Item # 2 above)
 - c. Description of sludge generation (i.e., How is sludge generated) and handling (e.g., collection, treatment, transfer, disposal, etc.) Process(es)
 - d. List of all chemicals used, indicating function of each chemical
 - e. Name(s) of the disposal site(s) for hauled waste/recovered-products (e.g. Sludge, recovered oil, etc.)
 - f. Generation frequency of each type of waste/ recovered-products (e.g., Wastewater – continuous; recovered oil – continuous, sludge – weekly)

- 6) Copies of vendor specifications or data sheets for all equipment including type, model, capacity, size, schematic, etc.

APPENDIX A - REQUIREMENTS FOR WASTEWATER PRETREATMENT ENGINEERING DOCUMENTS

- 7) Operation and Maintenance Manual including the following:
- a. Detailed steps of operation of each equipment, including but not limited to pumps, valves, treatment equipment, and tanks
 - b. Process conditions which trigger addition of any chemical at each treatment step and the approximate amount of each chemical added
 - c. Methods to verify if each unit of the pretreatment system is operating as intended
 - d. Procedures to follow during abnormal situations such as power failures, equipment malfunctions, etc.
 - e. Preventive maintenance schedules for each major/critical equipment
 - f. Recommended maintenance/troubleshooting steps for each major/critical equipment
- Note:** For new constructions/dischargers, preliminary O&M manual should be submitted with the application package. The updated, final version of the O&M manual should be submitted within 120 days of startup.
- 8) Spill prevention, control and countermeasure (SPCC) plan (only if applicable)

Notes:

1. For **non-SIUs**, to be considered for waiving requirement of any engineering document listed above, a written request must be submitted to the Industrial Wastewater Service. Such requests may be approved or disapproved based on multiple factors including but not limited to the size of the facility and nature of the business.

Email: PWE-PreTreatment@houstontx.gov

Mail: **Industrial Wastewater Service**
10500 Bellaire Boulevard
Houston, TX 77072

APPENDIX B-1 - WASTEWATER CHARACTERIZATION (Significant Industrial Users – SIUs)

Required Sample Collection and Analysis for Sample Point No. _____

Use this page for each sample point where local limits are applied.

Parameter	Number of Samples	Sample Type*	Suggested Analytical Method**
Carbonaceous Biochemical Oxygen Demand (CBOD) 5-day CBOD @ 20° C	3	Composite	SM 5210-B
Total Suspended Solids (TSS)	3	Composite	SM 2540-D
Chemical Oxygen Demand (COD)	1	Composite	SM 5220 D
Ammonia - Nitrogen	3	Composite	EPA 350.1
Oil & Grease (Total)	1	Grab	EPA 1664 HEM
Total Residual Chlorine	1	Grab	SM 4500-CI G-2011
Total Dissolved Solids (TDS)	1	Grab	2540-C
Phosphorous, Total	1	Composite	4500-P-E
pH	1	Grab	SM 4500H+B
Temperature	1	Grab	SM 2550 B
Cyanide, Total	1	Grab	SM 4500-CN G
Antimony	1	Composite	EPA 200.7
Arsenic, Total	1	Composite	EPA 200.7
Beryllium	1	Composite	EPA 200.7
Cadmium, Total	1	Composite	EPA 200.7
Chromium, Total	1	Composite	EPA 200.7
Copper, Total	1	Composite	EPA 200.7
Lead, Total	1	Composite	EPA 200.7
Mercury, Total	1	Composite	EPA 245.7
Molybdenum, Total	1	Composite	EPA 200.7
Nickel, Total	1	Composite	EPA 200.7
Selenium, Total	1	Composite	EPA 200.7
Silver, Total	1	Composite	EPA 200.7
Thallium	1	Composite	EPA 200.7
Zinc, Total	1	Composite	EPA 200.7
Base Neutral Acids (BNA)***	1	Composite	EPA 625
Volatile Organic Compounds (VOC)***	1	Grab	EPA 624

*Composite samples shall be collected over the duration of the discharge in one day.

**Wastewater samples must be analyzed in accordance with methods found in the current version of 40 CFR Part 136.

Record the sample point number on the chain of custody forms used for this sampling.

***BNAs and VOCs are used to calculate a Total Toxic Organic (TTO) value for compliance with the TTO Limit.

Individual pollutants corresponding to BNAs, VOCs, and Organochlorine Pesticides and PCBs can be found at the ***List of Priority Pollutants***.

APPENDIX B-2 - WASTEWATER CHARACTERIZATION (Non – SIUs)**Required Sample Collection and Analysis for Sample Point No.****1***Use this page for each sample point where local limits are applied.*

Parameter	Number of Samples	Sample Type*	Suggested Analytical Method**
Carbonaceous Biochemical Oxygen Demand (CBOD) 5-day CBOD @ 20° C	3	Composite	SM 5210-B
Total Suspended Solids (TSS)	3	Composite	SM 2540-D
Chemical Oxygen Demand (COD)	1	Composite	SM 5220 D
Ammonia - Nitrogen	3	Composite	EPA 350.1
Oil & Grease (Total)	1	Grab	EPA 1664 HEM
Total Residual Chlorine	1	Grab	SM 4500-Cl G-2011
Total Dissolved Solids (TDS)	1	Grab	2540-C
Phosphorous, Total	1	Composite	4500-P-E
pH	1	Grab	SM 4500H+B
Temperature	1	Grab	SM 2550 B
Cyanide, Total	1	Grab	SM 4500-CN G
Antimony	1	Composite	EPA 200.7
Arsenic, Total	1	Composite	EPA 200.7
Beryllium	1	Composite	EPA 200.7
Cadmium, Total	1	Composite	EPA 200.7
Chromium, Total	1	Composite	EPA 200.7
Copper, Total	1	Composite	EPA 200.7
Lead, Total	1	Composite	EPA 200.7
Mercury, Total	1	Composite	EPA 245.7
Molybdenum, Total	1	Composite	EPA 200.7
Nickel, Total	1	Composite	EPA 200.7
Silver, Total	1	Composite	EPA 200.7
Thallium	1	Composite	EPA 200.7
Zinc, Total	1	Composite	EPA 200.7

*Composite samples shall be collected over the duration of the discharge in one day.

**Wastewater samples must be analyzed in accordance with methods found in the current version of 40 CFR Part 136.

Record the sample point number on the chain of custody forms used for this sampling.

APPENDIX B-3 - WASTEWATER CHARACTERIZATION – contd.

BASE / NEUTRALS / ACIDS - Method EPA 625.1

1,2-Benzanthracene (Benzo (a) Anthracene)
1,2-Diphenylhydrazine
1,2,4-Trichlorobenzene
1,12-Benzoperylene (Benzo (ghi) Perylene)
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,6-Dinitrotoluene
3-Nitroaniline
3,3-Dichlorobenzidine
3,4-Benzofluoranthene (Benzo(b)fluoranthene)
3,4-Benzopyrene (Benzo (a) Pyrene)
4-Bromophenyl Phenyl Ether
4-Chloroaniline
4-Chlorophenyl Phenyl Ether
4-Nitroaniline
4-Nitrophenol
4,6-Dinitro-O-Cresol
11,12-Benzofluoranthene (Benzo (k) Fluoranthene)
Acenaphthylene
Acenaphthene
Anthracene
Benzidine
Benzyl Alcohol
Benzoic Acid
BIS (2-Chloroethoxy) Methane
BIS (2-Chloroethyl) Ether
BIS (2-Chloroisopropyl) Ether
BIS (2-Ethylhexyl) Phthalate
Butyl Benzyl Phthalate
Chrysene
Di-N-Butyl Phthalate
Di-N-Octyl Phthalate
Dibenzo (A,H) Anthracene (1,2,5,6-Dibenzanthracene)
Dibenzofuran
Diethyl Phthalate
Dimethyl Phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane

Indeno (1,2,3-CD) Pyrene (2,3-0-Phenylene-pyrene)
Isophorone
N-Nitrosodi-n-propylamine
N-Nitrosodimethylamine
N-Nitrosodiphenylamine
Naphthalene
Nitrobenzene
p-Cresol
Parachlorometa cresol (4-Chloro-3-Methylphenol)
Pentachlorophenol
Phenanthrene
Phenol (Acid extractable)
Pyrene
2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD)

VOLATILES - Method EPA 624.1

1,1-Dichloroethane
1,1-Dichloroethylene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
1,1,2,2-Tetrachloroethane
1,2-Dichloroethane
1,2-Dichloroethene (Total) (1,2-Trans-Dichloroethylene)
1,2-Dichloropropane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,3-Dichloropropylene (Cis-1,3-Dichloropropene)
Trans-1,3-Dichloropropene
2-Butanone
2-Chloroethyl Vinyl Ether (Mixed)
2-Hexanone
4-Methyl-2-Pentanone
Acetone
Benzene
Bromoform (Tribromomethane)
Carbon Disulfide
Carbon Tetrachloride (Tetrachloromethane)
Chlorobenzene
Chlorodibromomethane (Dibromochloromethane)
Chloroethane
Chloroform (Trichloromethane)
Dichlorobromomethane (Bromodichloromethane)
Ethylbenzene
Methyl Bromide (Bromomethane)
Methyl Chloride (Chloromethane)
Methylene Chloride
Styrene
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl Acetate
Vinyl Chloride (Chloroethylene)
Xylenes (Total)

APPENDIX B-3 - WASTEWATER CHARACTERIZATION – contd.

ORGANOCHLORINE PESTICIDES / PCBS - Method

608.3 (only if required in Appendix B-1)

4,4-DDD (p,p-TDE)	Endosulfan sulfate
4,4-DDE (p,p-DDX)	Endrin
4,4-DDT	Endrin aldehyde
Aldrin	Gamma-BHC (lindane)
Alpha-BHC	Heptachlor
Alpha-endosulfan	Heptachlor epoxide (BHC-hexachlorocyclohexane)
Beta-BHC	PCB-1016 (Arochlor 1016)
Beta-endosulfan	PCB-1221 (Arochlor 1221)
Chlordane (technical mixture and metabolites)	PCB-1232 (Arochlor 1232)
Delta-BHC (PCB-polychlorinated biphenyls)	PCB-1242 (Arochlor 1242)
Dieldrin	PCB-1248 (Arochlor 1248)
	PCB-1254 (Arochlor 1254)
	PCB-1260 (Arochlor 1260)
	Toxaphene

Note: This list excludes the individual metals covered under EPA's comprehensive list of Priority Pollutants, since those metals are listed individually in Section I of which can be found at 40 CFR Part 423, Appendix A.