



Triangle Wastewater Treatment Plant  
Industrial Pretreatment Program  
5926 NC Hwy 55 E.  
Durham, NC 27713  
Telephone: (919) 544-5280  
Fax: (919) 544-8590

**BASELINE MONITORING REPORT (BMR)**  
**Electroplating (40 CFR 413) or Metal Finishing (40 CFR 433)**  
**Point Source Category Regulations**  
(Please print or type)

**I. Company Information**

Name: \_\_\_\_\_ Tel: \_\_\_\_\_

Physical Address: \_\_\_\_\_

\_\_\_\_\_ Zip: \_\_\_\_\_

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

\_\_\_\_\_ Zip: \_\_\_\_\_

Industrial Wastewater Discharge Permit Number<sup>1</sup> \_\_\_\_\_

Industrial Wastewater Discharge Permit Flow Rate \_\_\_\_\_ gal/day

Federal Standard Industrial Classification Numbers (SIC) characterizing this facility: \_\_\_\_\_

Company's Industrial Waste Contact Person: \_\_\_\_\_

Title: \_\_\_\_\_

Person in Charge of Local Operations: \_\_\_\_\_

Title: \_\_\_\_\_

Owner of Company (parent company or corporate entity if appropriate): \_\_\_\_\_

Address of Owner: \_\_\_\_\_

**II. Category Determination**

**A. Unit Operations**

Please check any and all of the following unit operations which are performed at your facility.<sup>2</sup> Provide a brief description of those operations in the space provided (e.g. CuCN plating, H<sub>2</sub>SO<sub>4</sub> anodizing, Fe phosphatizing, FeCl<sub>3</sub> etching, etc.).

		Brief Description
1 ___	Electroplating	_____
2 ___	Electroless Plating	_____
3 ___	Anodizing	_____
4 ___	Coating (chromating, etc.)	_____
5 ___	Chemical Etching & Milling (includes caustic cleaning of aluminum & acid cleaning of most metals)	_____
6 ___	Printed Circuit Board Mfg.	_____
7 ___	None of the Above	

**B. Exempt Companies**

If you checked item number 7 in IIA above, your facility is not covered by the EPA Electroplating or Metal Finishing regulations. Your claim to such an exemption will be verified through inspections of your facility by County personnel.

If you believe your facility is exempt from the Electroplating and Metal Finishing regulations but may be covered by another EPA categorical regulation, please indicate the category here.

\_\_\_\_\_

As your company has denoted it is exempt by checking item 7 in IIA above, you do not need to fully complete this BMR. Please proceed to Section IX of this form, complete the certification statement and return this form to the County.

**C. Companies Not Exempt**

If you did not check item 7 in IIA above, please continue. Please check number one or two below. If your facility had categorical installations made both before and after August 31, 1982, please include a construction timetable as a separate attachment.

- 1 \_\_\_ New Source – electroplating or metal finishing operations were constructed after August 31, 1982.<sup>3</sup>

2 \_\_\_ Existing Source – electroplating or metal finishing operations were constructed prior to August 31, 1982. Date facilities were constructed. \_\_\_\_\_

Please check one of the following below.

3 \_\_\_ Job Shop – Owns less than 50% (area basis) of the materials undergoing metal finishing.

4 \_\_\_ Independent Printed Circuit Board Manufacturer – Manufactures printed circuit boards primarily for sale to other companies.

5 \_\_\_ Captive Shop – Owns over 50% (area basis) of the materials undergoing metal finishing.

**D. Category Determination**

The category your facility belongs to can be determined based on the items checked in IIC above. Please check the one below which applies to your facility.

\_\_\_ New Source Metal Finishing (40 CFR 433) if you checked box 1 and box 3, 4, or 5 in IIC.

\_\_\_ Existing Source Metal Finishing (40 CFR 433) if you checked box 2 and box 5 in IIC.

\_\_\_ Electroplating Less Than 10,000 gpd (40 CFR 413) if you checked box 2 and box 3 or 4 in IIC and your permit flow rate from page 1 is less than 10,000 gpd.<sup>4</sup>

\_\_\_ Electroplating Less Than 10,000 gpd (40 CFR 413) if you checked box 2 and box 3 or 4 in IIC and your permit flow rate from page 1 is less than 10,000 gpd.<sup>4</sup>

**III. Flow Measurement Information** – Please complete the following tables. Also, attach a schematic process flow diagram showing wastestreams, flow rates, treatment units and sampling locations.

Description of EPA Regulated Wastewater Flows <sup>5</sup>	Average Daily Flow (gal/day)	Maximum Daily Flow (gal/day)	Flow Description <sup>6</sup>		Does Wastestream Receive Pretreatment? Yes or No Describe
			E/M	B/C	

Description of EPA Unregulated Wastewater Flows <sup>7</sup>	Average Daily Flow (gal/day)	Maximum Daily Flow (gal/day)	Flow Description <sup>6</sup>		Does Wastestream Receive Pretreatment? Yes or No Describe
			E/M	B/C	

Description of Dilution Wastewater Flows <sup>8</sup>	Average Daily Flow (gal/day)	Maximum Daily Flow (gal/day)	Flow Description <sup>6</sup>		Does Wastestream Receive Pretreatment? Yes or No Describe
			E/M	B/C	

**IV. Environmental Control Permits**

Please list other environmental control permits held by or for your facility.

---



---

Does your facility have an air pollution control device which produces a discharge to the sewer?

Yes       No

**V. Production Information**

Provide a brief description of your operations from raw materials to finished product.

---



---



---



---

Rates of Production – Please complete the following table. Add additional pages if necessary.

	1	2	3
Name of unit production			
Unit of production			
Daily production rate			
Monthly production rate			

**VI. Total Toxic Organic (TTO) Information**

Dischargers subject to Metal Finishing (40 CFR 433) or Electroplating (40 CFR 413) regulations are regulated for TTO. Your company must periodically monitor its wastestream to show compliance with this limitation. EPA will allow dischargers subject to these regulations to provide the Control Authority with a list of TTO compounds stored or used at the facility to lessen the number of parameters which must be monitored. The discharger may also submit a Toxic Organic Management Plan (TOMP) to the County, which if approved will allow the discharger to certify that TTO compounds have not been discharged, in lieu of TTO self-monitoring. The County has guidelines for “Toxic Organic Management Plan” which you should request if you do not have a copy.

Please check the following which apply.

- TTO compounds **are** stored and/or used at this facility. A TOMP was submitted to the County on \_\_\_\_\_.
- No** TTO compounds are stored or used at this facility. A TOMP was submitted to the County on \_\_\_\_\_.
- This company will perform self-monitoring for TTO. (Check one of the choices below.)
  - Monitoring will be for the entire list of 111 regulated TTO compounds as shown in 40 CFR 433.11(e) or 40 CFR 413.02(i).
  - Monitoring will be performed for TTO compounds expected to be present in the wastewater, as listed below. It is understood that the County may expand the self-monitoring TTO parameters at their discretion.

TTO compounds stored or used at this facility (attach additional pages as necessary)	Is the compound listed in the adjacent column expected to be present in the wastewater? (Yes or No)


**VII. Measurement of Pollutants**

The daily maximum and average concentrations of all regulated pollutants in all regulated wastewater streams described in Section III must be provided with this BMR<sup>9</sup>. The wastewater must be sampled and analyzed in accordance with 40 CFR 403.12(b) (d) (iii-viii). The copies of the wastewater analysis results must be included with this BMR when it is submitted to the County. The results must indicate the analytical test method used for each parameter. All analyses must be performed by a state certified laboratory.

Representative samples will consist of a minimum of four (4) grab samples for pH, cyanide, and volatile organics. For all other pollutants, 24 hour composite samples must be obtained through flow proportional composite sampling techniques where feasible. All samples must be taken during periods typical of normal work hours. Historical sampling data from your facility may be used in lieu of taking new samples, if the samples are still representative of the discharge from your facility. For new sources only, estimates of pollutant values are allowed. However, within 90 days of commencement of discharge, the new source discharger must submit a 90-day compliance report to the County on an additional BMR form.

The volume of flow discharge during the period in which the samples are taken must also be determined. If your facility does not have a flowmeter on its effluent, the volume may be estimated using meter readings on influent water with losses calculated, or any other appropriate method.

Please complete the following table describing the sampling and analytical results accompanying this BMR.

Sample Type	Sampling Date & Time	Sampling Location	Name & Address of Company Obtaining Sample	Name & Address of Laboratory Performing Analysis
Composite				
Grab				
Grab				
Grab				

Total volume of wastewater discharged during the period in which samples were taken: \_\_\_\_\_

Sampling Certification

I certify that the sampling and analysis provided with this BMR is representative of normal work hours and expected pollutant discharges to the County.

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

Sign Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Using the results from the attached analyses, complete the shaded areas of the following table. Compare the sample result value to the 4-day or monthly average limit for your appropriate category to determine consistent compliance. If dilution flows from Page 4 passed through the sampling point, then the limits must be adjusted.

Constituent	Sample Result		Limits – Daily Maximum / 4 Day or Monthly Average (mg/l)				Do Sample Results Show Consistent Compliance?
			413 <10,000gpd	413 >10,000 gpd	433 Existing	433 New Source	
Cyanide <sup>10</sup>		mg/l	5.0/2.7	1.9/1.0	1.20/0.65 <sup>11</sup>	1.20/0.65 <sup>11</sup>	
Cd		mg/l	1.2/0.7	1.2/0.7	0.69/0.26	0.11/0.07	
Cr		mg/l		7.0/4.0	2.77/1.71	2.77/1.71	
Cu		mg/l		4.5/2.7	3.38/2.07	3.38/2.07	
Pb		mg/l	0.6/0.4	0.6/0.4	0.69/0.43	0.69/0.43	
Ni		mg/l		4.1/2.6	3.98/2.38	3.98/2.38	
Ag		mg/l		1.2/0.7 <sup>12</sup>	0.43/0.24	0.43/0.24	
Zn		mg/l		4.2/2.6	2.61/1.48	2.61/1.48	
Total Metals <sup>13</sup>		mg/l		10.5/6.8			
Volatile Organics <sup>14</sup>		mg/l					
TTO <sup>15</sup>		mg/l					

**VIII. Statement of Compliance**

An authorized official of the company as defined in 40 CFR 403.12(k) must review the following statements of compliance, which must be certified by a qualified professional.

*I hereby certify that the EPA categorical pretreatment standards which apply to this facility are being met on a consistent basis as evidenced by the attached date.*    \_\_\_ Yes    \_\_\_ No

*I hereby certify that dilution is not being used in lieu of treatment to meet the EPA categorical pretreatment standards.*    \_\_\_ Yes    \_\_\_ No

If the answer to either of the above statements is No, then additional pretreatment, flow reduction or operations and maintenance measures to bring the company into compliance with the EPA categorical regulations must be proposed below. Anticipated completion dates must be provided.

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

A detailed compliance schedule for the above changes must be attached. This schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to construction and operation of additional pretreatment required for the facility to meet the EPA categorical pretreatment standards (e.g. hiring an engineer, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.). A commitment to design, install or alter pretreatment or process systems to affect future compliance does not relieve your company of the requirement to immediately comply with discharge limits by whatever means necessary (cessation, impounding, hauling, etc.) until a more permanent solution is implemented.

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

Reviewed by: \_\_\_\_\_  
(Company official's signature)

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

*Qualified professional certification:*

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

Certified by: \_\_\_\_\_  
(Qualified professional's signature)

Print Name: \_\_\_\_\_

Qualifications as an Environmental Professional: \_\_\_\_\_

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

Company Address: \_\_\_\_\_



**IX. Certification**

The following statement as set forth in 40 CFR 403.6(a) (2) (ii) must be signed by an authorized company official as defined in 40 CFR 403.12(1).

*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 fine and imprisonment for knowing violations.*

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

Signature of authorized company official: \_\_\_\_\_

Print name of official: \_\_\_\_\_

Title: \_\_\_\_\_

“Authorized company official” means:

1. For a partnership: a general partner.
2. For a sole proprietorship: the proprietor.
3. For a corporation: a president, secretary, treasurer, or vice-president 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 the manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having a gross annual sales or expenditures exceeding \$25 million, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

A duly authorized official of one of the individuals described above may substitute if:

1. The authorization is made in writing by one of the individuals described above;
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the permittee’s facility, such as the position of the plant manager, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and
3. The written authorization is submitted to the County.

Footnotes

<sup>1</sup>One Baseline Monitoring Report (BMR) must be completed for every industrial wastewater discharge point to the sewer from your facility.

<sup>2</sup>If your facility has more than one sewer connection, indicate in the description area which operations discharge to which permit number.

<sup>3</sup>The term “new source” is not always easily defined. The County encourages you to request our assistance in making this determination if there is any uncertainty.

<sup>4</sup>If your permit flow rate is no longer an accurate measure of your daily discharge then your company should apply for a permit revision.

<sup>5</sup>Separately include all wastestreams discharging to this connection/outfall which are covered by EPA categorical regulations. Discharges regulated under categories other than 413 and 433 should also be listed here. For Metal Finishing, the six operations listed in Section IIA and an additional 40 operations are regulated. For Electroplating, only the six operations listed in Section IIA are regulated. Any of the additional 40 operations are considered unregulated flows under the Electroplating regulations and should be listed there.

<sup>6</sup>Please indicate by letter in this column whether wastewater flow value is (E) estimated or (M) measured, and (B) batch or (C) continuous.

<sup>7</sup>Includes wastewater flows to this connection/outfall from operations not covered by EPA industrial categorical regulations and not considered dilution flows.

<sup>8</sup>Dilution flows include non-contact cooling water and boiler blowdown, DI backwash and RO reject water from incoming water supply treatment and wastestreams listed in Appendix D to 40 CFR 403 and sanitary wastes. Sanitary wastes should not be listed here unless they discharge through the legal sampling point.

<sup>7</sup>Includes wastewater flows to this connection/outfall from operations not covered by EPA industrial categorical regulations and not considered dilution flows.

<sup>8</sup> Dilution flows include non-contact cooling water and boiler blowdown, DI backwash, and RO reject water from incoming water supply treatment, and wastestreams listed in Appendix D to 40 CFR 403 and sanitary wastes. Sanitary wastes should not be listed here unless they discharge through the legal sampling point.

<sup>9</sup> Dioxin may be screened, rather than specifically analyzed; as long as the discharger attaches a statement certifying that the facility neither stores, uses, nor manufactures dioxin.

<sup>10</sup> Average of all 4 CN grab sample results. Must be analyzed as CN amenable to chlorination for Electroplating Less Than 10,000 gpd. All other categories must analyze for Total CN.

<sup>11</sup> Under 40 CFR 433, Metal Finishers with CN wastestreams must obtain CN samples downstream of the cyanide treatment unit but prior to commingling with other wastestreams, or alternate CN limits must be calculated based on the dilution ratio of the CN wastestream flow to the effluent flow.

<sup>12</sup> These Electroplating >10,000 gpd silver limits only apply to Electroplating >10,000 gpd facilities which perform precious metal electroplating operations.

<sup>13</sup> For Electroplating >10,000 gpd only, total metals is the sum of Cr, Cu, Ni, & Zn.

<sup>14</sup> Average all 4 grab sample results for each regulated volatile organic compounding. Sum all average values in excess of 10 ug/l.

<sup>15</sup> Sum of all volatile organics value above and all other regulated toxic organic compounds detected in excess of 10 ug/l.