

Triangle Wastewater Treatment Plant Industrial Pretreatment Program 5926 NC Hwy 55 E. Durham, NC 27713 Telephone: (919) 560.9035

Fax: (919) 544-8590

BASELINE MONITORING REPORT (BMR) Pharmaceutical Manufacturing Category (40 CFR 439) Subcategories A, B, C and D Point Source Category Regulations

(Please print or type)

I. Company Information	
Name:	Tel:
Physical Address:	
	Zip:
Mailing Address:	
	Zip:
Industrial Wastewater Discharge Permit Number	I
Industrial Wastewater Discharge Permit Flow Ra	te gal/day
Federal Standard Industrial Classification Numbe	ers (SIC) characterizing this facility:
Company's Industrial Waste Contact Person:	_
Title:	
Title:	
	e entity if appropriate):
Address of Owner:	
II. Environmental Control Permits – List envi	ronmental control permits held by or for your facility.

III. Category Determination

A.		operations that a	•	t your facility ² f	rom raw materia	ls to the finished
В.	Pretreatment the production	ent Standards for cts manufactured	the Pharmaceutic d and/or research	cal Manufacturing	Point Source Cat	y of Final Federal egory. Are any of ne Pharmaceutical
	Manufacti	uring Category (4	0 CFR 439)? No			
	regulation	s. Your claim wi p to Section IX o	ll be verified thro	ough inspections of	of your facility by	Cacturing Category County personnel. and return this form
	If the ans	wer is Yes, pleas	se continue.			
C.	subjects to has no car	o Pharmaceutical tegorical pretreat	Manufacturing ment standards),	Category, Subpar please skip to Se	t E – Research S	esearch (i.e., only Subcategory which form, complete the ntinue.
D.					hich is manufactury. Use additional	red at your facility pages if needed.
		ı	Manufactured by Pi	rocesses or Activitie	es	
		Subcategory A	Subcategory B	Subcategory C	Subcategory D	
Name	of Product	Fermentation Products	Extraction Products	Chemical Synthesis	Mixing / Compounding and Formulation	Average Daily Production Rate

E. Date the pharmaceutical manufacturing operation(s) started:

IV. <u>Information on Regulated Pollutants Used or Generated</u> – (You may skip this section and proceed to Section V if your company will perform self-monitoring for ALL regulated pollutants.)

Permit limits and compliance monitoring are required for each regulated pollutant generated or used at your facility. However, permit limits and compliance monitoring are not required for regulated pollutants that are neither used nor generated at your facility. Please complete the following table(s) based on a review of all raw materials in use, and an assessment of the process chemistry, products and by-products resulting from each of the manufacturing process. A list of raw materials and products shall be attached to this BMR.

A. Please complete the following table if your facility is covered under Subpart A – Fermentation Products Subcategory and/or Subpart C – Chemical Synthesis Products Category.

Regulated Pollutant	Is Used or Generated	Is Neither Used nor Generated
Cyanide		
Ammonia (as N)		
Acetone		
4-Methyl-2-Pentanone		
Isobutyraldehyde		
N-Amyl Acetate		
N-Butyl Acetate		
Ethyl Acetate		
Isopropyl Acetate		
Methyl Formate		
Isopropyl Ether		
Tetrahydrofuran		
Benzene		
Toluene		
Xylenes		
N-Hexane		
N-Heptane		
Methylene Chloride		
Chloroform		
1,2-Dichlorobenzene		
Chlorobenzene		
O-Dichlorobenzene		
Diethyl Amine		
Triethyl Amine		

B. Please complete the following table if your facility is covered under Subpart B - Extraction Products Subcategory and/or Subpart D - Mixing/Compounding and Formulation Subcategory.

Regulated Pollutant	Is Used or Generated	Is Neither Used nor Generated
Acetone		
N-Amyl Acetate		
Ethyl Acetate		
Isopropyl Acetate		
Methylene Chloride		

C. If your facility neither uses nor generates any of the regulated pollutants, please proceed to Section IX of this form. Otherwise, please continue.

V. <u>Flow Measurement Information</u> – Please complete the following tables (use additional pages as needed). Also, attach a schematic process flow diagram showing wastestreams, flow rates, treatment units and sampling locations

units and samp	units and sampling locations.						
Description of EPA Regulated Wastewater Flows ³	Average Daily Flow (gal/day)	Maximum Daily Flow (gal/day)	Flow Description ⁴		Does Wastestream Receive Pretreatment? Yes or No Describe		
			E/M	B/C			

Description of EPA Unregulated Wastewater Flows ⁵	Average Daily Flow (gal/day)	Maximum Daily Flow (gal/day)	Flow Desc	cription ⁴	Does Wastestream Receive Pretreatment? Yes or No Describe
			E/M	B/C	

Description of Dilution Wastewater Flows ⁶	Average Daily Flow (gal/day)	Maximum Daily Flow (gal/day)	Flow Description ⁴		Does Wastestream Receive Pretreatment? Yes or No Describe
			E/M	B/C	

VI. Measurement of Pollutants

Wastewater discharged from your facility must be sampled and analyzed for all pollutants discharged at your facility, including all of the constituents listed in Table I, II, III, and/or IV of the attached "Summary of Final Federal Pretreatment Standards" which are used or generated at your facility. The wastewater must be sampled and analyzed in accordance with 40 CFR 403.12(b) (d) (iii-viii), and Table V of the enclosed "Summary of Final Federal Pretreatment Standards." 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.

Grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organics. The grab samples should be taken in a period in which your facility typically discharges wastewater. 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				

ao				
Total volume	of wastewater disc	charged during the	e period in which samples	were taken:
•	the sampling and pected pollutant dis	• •		esentative of normal work
Date: _				
Sign Name: _				
Print Name: _				
Title:				

VII. Determination of Limitations and Compliance

Complete the following tables to determine concentration limits for your facility and compliance with the limitations. Note that concentration limitations must be adjusted to take into account any dilution flows (see Section V).

In order to be in compliance with the regulations, you must meet both daily maximum and monthly average discharge limitations. Compliance with monthly average discharge limitations is determined by averaging concentrations in all samples taken during a calendar month. If only one sample is taken during the month, the sample must meet all monthly average discharge limitations.

In filling out the tables, determine the daily maximum and monthly average pretreatment standards for your facility by using the appropriate values for your subcategory (ies) from the tables in the "Summary of Final Federal Pretreatment Standards – Pharmaceutical Manufacturing Category." If a particular pollutant is not regulated under your subcategory (ies), or is neither used nor generated at your facility, simply put "None" in the box for that pretreatment standard.

Compliance Determination for Daily Maximum Pretreatment Standards					
Pollutant	Daily Maximum Pretreatment Standard (mg/l)	Dilution Factor ⁷	Modified Daily Maximum Pretreatment Standard ⁸	Daily Sample Result (mg/l) ⁹	In Compliance? ¹⁰ (Yes or No)
Cyanide ¹¹	33.5				
Ammonia (as N) 11	84.1				
Acetone	20.7				
4-Methyl-2- Pentanone (MIBK)	20.7				
Isobutyraldehyde ¹¹	20.7				
N-Amyl Acetate	20.7				
N-Butyl Acetate ¹¹	20.7				
Ethyl Acetate	20.7				
Isopropyl Acetate	20.7				
Methyl Formate ¹¹	20.7				
Isopropyl Ether ¹¹	20.7				
Tetrahydrofuran ¹¹	9.2				
Benzene ¹¹	3.0				
Toluene ¹¹	0.3				
Xylenes ¹¹	3.0				
N-Hexane ¹¹	3.0				

N-Heptane ¹¹	3.0				
Methylene Chloride	3.0				
Chloroform ¹¹	0.1				
1,2-					
Dichloroethane ¹¹	20.7				
Chlorobenzene ¹¹	3.0				
O-	20.7				
Dichlorobenzene ¹¹	20.7				
Diethyl Amine ¹¹	255.0				
Triethyl Amine ¹¹	255.0				
Complian	nce Determinat	ion for Mon	thly Average Pre	treatment St	andards
Pollutant	Monthly Average Pretreatment Standard (mg/l)	Dilution Factor ⁷	Modified Monthly Average Pretreatment Standard ¹²	Monthly Sample Result (mg/l) ¹³	In Compliance? ¹⁴ (Yes or No)
Cyanide ¹¹	9.4		2 3332 2332 33		
Ammonia (as N) 11	29.4				
Acetone	8.2				
4-Methyl-2-	8.2				
Pentanone (MIBK) ¹¹	0.2				
Isobutyraldehyde ¹¹	8.2				
N-Amyl Acetate	8.2				
N-Butyl Acetate ¹¹	8.2				
Ethyl Acetate	8.2				
Isopropyl Acetate	8.2				
Methyl Formate ¹¹	8.2				
Isopropyl Ether ¹¹	8.2				
Tetrahydrofuran ¹¹	3.4				
Benzene ¹¹	0.7				
Toluene ¹¹	0.2				
Xylenes ¹¹	0.7				
N-Hexane ¹¹	0.7				
N-Heptane ¹¹	0.7				
Methylene Chloride	0.7				

Chloroform ¹¹	0.03		
1,2-Dichloroethane ¹¹	8.2		
Chlorobenzene ¹¹	0.7		
O-Dichlorobenzene ¹¹	8.2		
Diethyl Amine ¹¹	100.0		
Triethyl Amine ¹¹	100.0		

VIII.

Statement of Compliance
An authorized official of the company as defined in 40 CFR 403.12(1) 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 categorica 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
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:

Print Name:	
Qualifications as an Environmental Professional:	
Company Name:	
Company Address:	

(Qualified professional's signature)

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 sale 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

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

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

³Separately include all wastestreams discharging to this connection/outfall which are covered by EPA categorical regulation(s). (A, B, C, and/or D are covered.)

⁴Please indicate by letter in this column whether wastewater flow value is (E) estimated or (M) measured, and (B) batch or (C) continuous.

⁵Includes wastewater flows to this connection/outfall from operations not covered by EPA industrial categorical regulations and not considered dilution flows.

⁶Dilution 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.

 7 The dilution factor is determined as $(F_T-F_D)/F_T$ where F_T is the total daily flowrate from your facility and F_D is the average daily flowrate of dilution flows (see Section V). If there is no dilution flows at your facility, the dilution factor is 1.

⁸The daily maximum pretreatment standard times the dilution factor.

⁹The highest value on any single day. If you have multiple grab samples from one day, average the sample results to obtain the daily value.

¹⁰Compare the (modified) daily maximum pretreatment standard for each pollutant to the sample result for the pollutant.

¹¹Regulated under subcategories A and C only.

¹²The monthly average pretreatment standard times the dilution factor.

¹³Average all sample results taken within a calendar month to obtain the monthly average value. If you have sample results from more than one month, enter the highest monthly average.

¹⁴Compare the (modified) monthly average pretreatment standard for each pollutant to the sample result for the pollutant.