

Reviewing and Approving POTW Pretreatment Programs and Program Modification Requests

Pretreatment Workshop
July 21, 2015

Sponsored by:
Colorado River Basin Water Board & EPA Region 9

Presented by:
Ann LaDuca, Tetra Tech, Inc.

What Will Be Discussed?

- Who/What/When/Where/Why/How of Requiring, Approving and Modifying POTW Pretreatment Programs
- What is Your Role as an Approval Authority?
- What Sources Are Available to Assist Me?

Who/What/When/Why/How ?

Which POTWs* are Required to Develop a Program?

- Total Design Flow > 5 MGD and
 - Receiving pollutants from IUs
 - which Pass Through or Interfere with POTW operations or
 - Are otherwise subject to Pretreatment Standards
- Total Design Flow \leq 5 MGD if
 - Nature or volume of industrial influent, treatment process upsets, violations of POTW effluent limitations, contamination of municipal sludge, or other circumstances warrant in order to prevent Interference of Pass Through

*or combination of POTWs operated by the same authority

40 CFR 403.8(a)

Plant Information - NPDES Permit Application

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate _____ mgd

Two Years Ago

Last Year

This Year

b. Annual average daily flow rate _____ mgd

c. Maximum daily flow rate _____ mgd

40 CFR 122.21(j)(1)(vi)

IU Information – NPDES Permit Application

SUPPLEMENTAL APPLICATION INFORMATION	
PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES	
All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.	
GENERAL INFORMATION:	
F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.	
a. Number of non-categorical SIUs.	<input type="text"/>
b. Number of CIUs.	<input type="text"/>
SIGNIFICANT INDUSTRIAL USER INFORMATION:	
Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.	
F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.	
Name:	<input type="text"/>
Mailing Address:	<input type="text"/>
F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.	
<input type="text"/>	

What is Your Role as an Approval Authority?

- Receive Program Description and “make a determination on the request...”

40 CFR 403.9(a)

- Approve or Deny Requests
 - *for* POTW Program Approvals, and
 - *for* Applications for Removal Credit Authorizations

40 CFR 403.11

- Incorporate Approved Program in NPDES Permit – *NPDES Permit Reissuance or Modification*

40 CFR 403.8(c)

Pretreatment Program Review

For completeness, compliance
(and functionality and practicality):

Tools:

- *Procedures Manual for Reviewing a POTW Pretreatment Program Submission* (1983)
- Checklists - recommended provisions (*)/some citations are wrong
- Conditional approval (40 CFR 403.9(c))
- Flexibility – large vs. small community

Who/What/When/Why/How

What is in a Program Submission?

What are the Required Components?

- **Legal Authority** 40 CFR 403.8(f)(1)
- **Program Implementation Procedures** 40 CFR 403.8(f)(2)
- **Organization, Staffing, Equipment, Funding** 40 CFR 403.8(f)(3)
- **Technical Information (Local Limits)** 40 CFR 403.8(f)(4)
- **Enforcement Response Plan** 40 CFR 403.8(f)(5)
- **List of IUs and SIUs** 40 CFR 403.8(f)(6)

Required Components of the Legal Authority Portion

40 CFR 403.9

- Statement from city official
- Copy of ordinances, agreements, etc.
 - Sewer Use Ordinance
 - Enforcement response plans
 - Multijurisdictional agreements, if applicable
- Statement of endorsement from all parties

Legal Authority (cont'd)

40 CFR 403.8(f)(1)

Legal authority to:

- Deny or condition new or increased contributions of pollutants
- Require compliance with applicable pretreatment requirements

Legal Authority (cont'd)

Legal authority to:

- Issue general or individual permits to control discharges to POTW
 - Statement of duration
 - Statement of transferability
 - Effluent limits
 - Self-monitoring requirements
 - Reporting and notification requirements
 - Statement of applicable civil and criminal penalties
 - Any applicable requirements to control slug discharges

Legal Authority (cont'd)

Legal authority to:

- Issue compliance schedule for pretreatment technology installation
- Require reports from IUs to assess and assure compliance (§ 403.12)
- Conduct inspections, surveillance and monitoring

Legal Authority (cont'd)

Legal authority to:

- Obtain remedies for noncompliance and enforcement authority (civil or criminal penalties)
- Implement Confidentiality requirements (§ 403.14)

Legal Authority - Enforcement

Enforcement Response Plans must include:

- Description of how the POTW will investigate instances of noncompliance
- Description of escalating enforcement actions
- Identification of responsible personnel
- Reflection of the POTW's primary responsibility to enforce all applicable pretreatment standards and requirements

40 CFR 403.8(f)(5)

Program Implementation Procedures

- Updating IWS
40 CFR 403.8(f)(2)(i) and (ii) and 122.42(b)
- Notification of IUs of applicable requirements
40 CFR 403.8(f)(2)(iii)
- Receipt and analysis of self-monitoring reports and other data
40 CFR 403.8(f)(2)(iv)
- Random sampling and analysis
40 CFR 403.8(f)(2)(v)

Program Implementation Procedures (cont'd)

- Slug discharge control plan evaluations
40 CFR 403.8(f)(2)(vi)
- Investigating noncompliance
40 CFR 403.8(f)(2)(vii)
- Public notification of violations
40 CFR 403.8(f)(2)(viii)
- Public participation in local limits
development - 40 CFR 403.5(c)(3)

Technical Information - IWS

Industrial Waste Survey - 40 CFR 403.8(f)(2)(i)

- Identify industrial users
- Qualify and quantify pollutants from IUs
- Notification of industrial users subject to pretreatment requirements
- Identification of Which IUs are SIUs (or which IUs are not SIUs)

Technical Information – IWS

(Review of NPDES Permit Application)

SUPPLEMENTAL APPLICATION INFORMATION	
PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.	
GENERAL INFORMATION:	
F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program? ____ Yes ____ No	
F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works. a. Number of non-categorical SIUs. _____ b. Number of CIUs. _____	
SIGNIFICANT INDUSTRIAL USER INFORMATION:	
Supply the following information for each SIU. If more than one SIU discharges to the treatment works, cover questions F.3 through F.8 and provide the information requested for each SIU.	
F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary. Name: _____ Mailing Address: _____ _____	
F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge. _____	
F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge. Principal product(s): _____ Raw material(s): _____	
F.6. Flow Rate. a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent. _____ gpd (____ continuous or ____ intermittent)	
b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent. _____ gpd (____ continuous or ____ intermittent)	
F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following: a. Local limits ____ Yes ____ No b. Categorical pretreatment standards ____ Yes ____ No If subject to categorical pretreatment standards, which category and subcategory? _____	

40 CFR 122.21(j)(6)

See also 40 CFR 122.21(j)(7)
[not shown]

Technical Information – IWS

(Review of NPDES Permit Application)

FACILITY NAME AND PERMIT NUMBER:		Form Approved 1/14/99 OMB Number: 2040-0066
SUPPLEMENTAL APPLICATION INFORMATION		
PART D. EXPANDED EFFLUENT TESTING DATA		
Refer to the directions on the cover page to determine whether this section applies to the treatment works.		
Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.		

Outfall number: _____ (Complete once for each outfall discharging effluent)

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE	
	Conc.	Units	Conc.	Units
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.				
ANTIMONY				

SUPPLEMENTAL APPLICATION INFORMATION		
PART E. TOXICITY TESTING DATA		
POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters. <ul style="list-style-type: none">At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E. If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.		
E.1. Required Tests.		
Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years. _____ chronic _____ acute		
E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.		
Test number: _____	Test number: _____	Test number: _____

40 CFR 122.21(j)(4) & (5)

Technical Information – Local Limits

Local Limits Development (40 CFR 403.5(c))

- Local limits to address prohibitions at 403.5(a)(1) and (b)
- Check methodology and calculations
- Use regionally developed spreadsheets
- Local Limits Development Guidance (2004)

Organization, Staffing, Equipment, Funding

- Sufficient resources (personnel and equipment) and funding (40 CFR 403.8(f)(3))
- Funding and resources can be implemented at later date (40 CFR 403.9(b)(3))

Who/What/When/Why/How ?

Who Can Initiate an Approval or Modification?

- Can be initiated by Either
Approval Authority or POTW

When is a Modification Necessary?

- Necessary when:
 - Significant change in the operation of a pretreatment program
 - Changes to the federal pretreatment program requirements

“Substantial” vs. “Nonsubstantial” Modification?

40 CFR 403.18

Substantial

- Relaxes POTW legal authorities
- Relaxes local limits that increases total industrial loadings
- Changes to POTW’s control mechanism
- Decreases in IU self-monitoring and reporting
- Decreases in compliance monitoring and inspection frequencies
- Changes to confidentiality procedures
- Designated as substantial by the AA

Nonsubstantial

- Changes reflecting revisions to 40 CFR Part 403
- Correcting typographic errors
- Changes to POTW’s pH limit
- Reallocation of MAIL
- Making limits more stringent
- Changes in personnel
- Changes in fee structure
- Anything that makes a program more stringent

Approval Procedures – Substantial Modifications

- POTW submits program modification description and data to Approval Authority
- Approval Authority follows § 403.11(b) through (f):
 - Public notice and opportunity for public hearing (§ 403.11(b))
 - Approves or disapproves the modification (§ 403.8(c))
 - EPA objection to modification approval (§ 403.11(d))
 - Notice of decision by Approval Authority (§ 403.11(e))
 - Approval Authority ensures public access to submission and comments (§ 403.11(f))
 - Modification is effective upon approval by the Approval Authority

Approval Procedures – Nonsubstantial Modifications

- Approval Authority must notify the POTW of its decision within 45 days
- If Approval Authority does not notify the POTW of its decision:
POTW may implement the modification

Approval Procedures of Modification Requests

- Substantial modifications must be approved by the Approval Authority before the modifications are implemented
- Nonsubstantial modifications must be submitted to the Approval Authority for review
 - Due at least 45 days prior to implementation
- All approved modifications are incorporated into the POTW's NPDES permit

Who/What/When/Why/How

When is the Approval or Modification Complete?

Incorporation into NPDES Permit

- Consider the 3 W's [40 CFR 403.8(c)-(e)]
 - *When*
 - *What*
 - *Where*

Incorporation into NPDES Permit: Approved Program

- The NPDES permit must be modified to incorporate the approved program as enforceable conditions of the permit [40 CFR 403.8(c), 122.44(j), and 122.63(g)]

Incorporation into NPDES Permit: Sample Language

6. Special Provisions for POTWs

a. Pretreatment Program

- (1) Pretreatment Program: The Discharger shall implement and enforce its approved pretreatment program in accordance with federal Pretreatment Regulations (40 CFR § 403), pretreatment standards promulgated under Sections 307(b), 307(c), and 307(d) of the Clean Water Act, pretreatment requirements specified under 40 CFR § 122.44(j), and the requirements in **Attachment H, "Pretreatment Requirements."** The Discharger's responsibilities include, but are not limited to:
- i. Enforcement of National Pretreatment Standards of 40 CFR §§ 403.5 and 403.6;
 - ii. Implementation of its pretreatment program in accordance with legal authorities, policies, procedures, and financial provisions described in the General Pretreatment regulations (40 CFR § 403) and its approved pretreatment program;
 - iii. Submission of reports to USEPA, the State Water Board, and the Regional Water Board, as described in **Attachment H "Pretreatment Requirements"**.
 - iv. Evaluate the need to revise local limits under 40 CFR § 403.5(c)(1); and within 180 days after the effective date of this Order, submit a report acceptable to the Executive Officer describing the changes with a plan and schedule for implementation. To ensure no significant increase in the discharge of copper, and thus compliance with antidegradation requirements, the Discharger shall not consider eliminating or relaxing local limits for copper in this evaluation.
- (2) The Discharger shall implement its approved pretreatment program and the program shall be an enforceable condition of this Order. If the Discharger fails to perform the pretreatment functions, the Regional Water Board, the State Water Board, or the USEPA may take enforcement actions against the Discharger as authorized by the Clean Water Act.

Incorporation into NPDES Permit: Sample Language

e. Pretreatment Requirements

- 1) The discharger shall be responsible for the performance of all pretreatment requirements contained in 40 CFR 403 and shall be subject to enforcement actions, penalties, fines and other remedies by the USEPA, or other appropriate parties, as provided in the Clean Water Act, as amended (33 USC 1351 et seq.) (Hereafter "Act"). The Discharger shall implement and enforce its Approved POTW Pretreatment Program. The Discharger's approved POTW pretreatment program is hereby made an enforceable condition of this permit. USEPA or the Board may initiate enforcement action against an industrial user for noncompliance with applicable standards and requirements as provided in the Act.
- 2) The Discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d) and 402(b) of the Act. The Discharger shall cause industrial users subject to federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.
- 3) The Discharger shall perform the pretreatment functions as required in 40 CFR 403, including, but not limited to:
 - a) Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
 - b) Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
 - c) Implement the programmatic functions as provided in 40 CFR 403.8(f)(2); and
 - d) Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).



Questions?