Wastewater Treatment Plant Operator Certification Training

Module 22: Industrial Pretreatment Programs

This course includes content developed by the Pennsylvania Department of Environmental Protection (Pa. DEP) in cooperation with the following contractors, subcontractors, or grantees:

The Pennsylvania State Association of Township Supervisors (PSATS)
Gannett Fleming, Inc.
Dering Consulting Group
Penn State Harrisburg Environmental Training Center

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Unit 1 – Introduction to the National Pretreatment Program

Learning Objectives

- Identify the historical basis for the National Pretreatment Program.
- Explain the general regulatory structure of the National Pretreatment Program.
- List three prohibited discharges under the National Pretreatment Program.
- Describe what a categorical pretreatment standard is under the National Pretreatment Program.

Regulatory History

Although regulations that address the pollution of our nation's waters date back to 1899, comprehensive, effective regulation really began in the 1970s.

- In December 1970, a Presidential executive order established the United States Environmental Protection Agency (EPA).
- On October 18, 1972, Congress passed the Federal Water Pollution Control Act Amendments of 1972 [PL 92-500, commonly referred to as the Clean Water Act (CWA)].
  - This set of rules was designed to clean up the nation's waterways from past pollution and establish a program to minimize future pollution.
- In response to the CWA, the EPA established the National Pollutant Discharge Elimination System (NPDES) to reduce pollution of our waterways by controlling the amount of contamination in point source wastewater discharges, i.e., discharges from process pipes.
  - The NPDES required permits for point source (direct) discharges to the waters of the United States.
  - Publicly Owed Treatment Works (POTWs), as well as industries, were required to obtain NPDES permits.
- To address sewer discharges that went to POTWs (indirect discharges) instead of directly to a watercourse, EPA established pretreatment requirements to limit the amount of pollutants in discharge.
- The CWA has been revised over the years since 1972, but the basic philosophy embodied in PL 92-500 has remained intact.

Regulatory Structure

The Clean Water Act (CWA) signaled an unprecedented involvement by the federal government in pollution abatement. It also triggered a partnership among the federal, state, and local governments to implement the requirements established by the CWA.

- At the federal level, EPA oversees the program at all levels and assumes responsibility for program implementation where required.
- At the state level, delegated states act as the approval authorities for local Pretreatment Programs and establish state laws to empower local authorities.
- At the local level, where authorized, Pretreatment Program requirements are established and implemented.

Regulatory responsibilities at each level are discussed in more detail in Unit 2.

General Pretreatment Regulations

Pretreatment is 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 leu of, discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration may be obtained by physical, chemical or biological processes, process changes or by other means, except as prohibited by 40 CFR 403.6(d).

- The objectives of the General Pretreatment Regulations include:
  - Minimizing the mass of pollutants that pass through a POTW into a receiving stream.
  - Preventing or minimizing any interference with a POTW's treatment processes.
  - Preventing or minimizing the mass of pollutants contained in sewage sludge.
  - Encouraging recycling of wastewaters and sludge.
- These regulations were established to control pollutants that pass through or interfere with POTW treatment processes or which may contaminate sewage sludge.
- All POTWs designed to accommodate flows of more than 5 MGD and smaller POTWs with Significant Industrial Users are required to establish local Pretreatment Programs.
- Responsibilities were established for federal, state, and local governments and industries to implement the pretreatment requirements.
- The General Pretreatment Regulations, which were originally published in 1978 and have been updated several times, are presented in 40 CFR 403.
  - The regulations can be accessed via the EPA web site at www.epa.gov.

Prohibited Discharge Standards

Prohibited discharges are promulgated in the Code of Federal Regulations (CFR) at 40 CFR 403.5.

Prohibited discharge standards are comprised of *general* and *specific* prohibitions that apply to all indirect dischargers. *General* prohibitions are designed to prevent the discharge of any pollutant that would pass through or interfere with POTW performance or contaminate sludge.

Specific prohibitions include a list of restricted discharges:

- Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 140° Fahrenheit or 60° Centigrade using the test methods specified in 40 CFR 261.21.
- Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such discharges.
- Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference.
- 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.
- Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40 °C (104 °F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits.
- Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.
- 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.
- Any trucked or hauled pollutants, except at discharge points designated by the POTW.

Categorical Pretreatment Standards

Categorical Pretreatment Standards specify quantities or concentrations of pollutants or pollutant properties which may be discharged from a process to a POTW by existing or new Industrial Users in specific industrial categories and subcategories.

Not all industries are assigned to a pretreatment category. Therefore, not all industries are regulated by categorical standards.

- Compliance with categorical pretreatment standards is generally measured or calculated at the process discharge point, and not at the end of the pipe discharge point for the industrial facility.
- The general categorical pretreatment requirements are promulgated at 40 CFR 403.6.
- Industry-specific requirements are promulgated at 40 CFR Chapter I, Subchapter N (Parts 405 through 471 as of June 2004).

Figure 1.1 Example of Categorical Standard Content

PART 433 – METAL FINISHING POINT SOURCE CATEGORY

Subpart A--Metal Finishing Subcategory

§433.10 Applicability; description of the metal finishing point source category.

§433.11 Specialized definitions.

§433.12 Monitoring requirements.

§433.13 Effluent limitations representing the degree of effluent reduction attainable by applying the best practicable control technology currently available (BPT).

§433.14 Effluent limitations representing the degree of effluent reduction attainable by applying the best available technology economically achievable (BAT).

§433.15 Pretreatment standards for existing sources (PSES).

§433.16 New source performance standards (NSPS).

§433.17 Pretreatment standards for new sources (PSNS).

Figure 1.2 Excerpt from Part 433—Metal Finishing Point Source Category

§ 433.15 Pretreatment standards for existing sources (PSES).

(a) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and achieve the following pretreatment standards for existing sources (PSES):

PSES for All Plants Except Job Shops and Independent Printed Circuit Board Manufacturers

Pollutant or Pollutant Property	Maximum for any 1 Day (mg/L)	Monthly Average Shall Not Exceed (mg/L)
Cadmium (T)	0.69	0.26
Chromium (T)	2.77	1.71
Copper (T)	3.38	2.07
Lead (T)	0.69	0.43
Nickel (T)	3.98	2.38
Silver (T)	0.43	0.24
Zinc (T)	2.61	1.48
Cyanide (T)	1.20	0.65
TTO	2.13	

(T) = Total

(b) Alternatively, for industrial facilities with cyanide treatment, upon agreement between a source subject to those limits and the pollution control authority, the following amenable cyanide limit may apply in place of the total cyanide limit specified in paragraph (a) of this section:

Pollutant or Pollutant Property	Maximum for Any One Day (mg/L)	Monthly Average Shall Not Exceed (mg/L)
Cyanide (A)	0.86	0.32

(A) = Amenable

(c) No user introducing wastewater pollutants into a publicly owned treatment works under the provisions of this subpart shall augment the use of process wastewater as a partial or total substitute for adequate treatment to achieve compliance with this standard.

(d) An existing source submitting a certification in lieu of monitoring pursuant to §433.12 (a) and (b) of this regulation must implement the toxic organic management plan approved by the control authority.

(e) An existing source subject to this subpart shall comply with a daily maximum pretreatment standard for TTO of 4.57 mg/l.

(f) Compliance with the provisions of paragraph (c), (d), and (e) of this section shall be achieved as soon as possible, but not later than June 30, 1984, however metal finishing facilities which are also covered by part 420 (iron and steel) need not comply before July 10, 1985. Compliance with the provisions of paragraphs (a) and (b) of this section shall be achieved as soon as possible, but not later than February 15, 1986.

[48 FR 32485, July 15, 1983, as amended at 48 FR 41410, Sept. 15, 1983; 48 FR 43682, Sept. 26, 1983]

[End of Figure 1.2]

Local Limits

Local limits are site-specific limitations on the discharge of specific pollutants required to enable a Control Authority, such as a POTW, to satisfy its NPDES discharge limitations.

- Each POTW developing a POTW Pretreatment Program is also required to develop and enforce specific pollutant limits to implement the prohibited discharge standards.
- Each POTW with an approved Pretreatment Program shall continue to develop these limits as necessary and effectively enforce such limits.

Key Points for Unit 1 – Introduction to the National Pretreatment Program

- The US EPA was established in 1970 and the Clean Water Act followed in 1972.
- The NPDES requires permits for point source discharges into the waters of the United States.
- POTWs and industries are required to obtain NPDES permits.
- States act as the approval authorities for local pretreatment programs.
- All POTWs designed to accommodate flows of more than 5 MGD and smaller POTWs with Significant Industrial Users are required to establish local Pretreatment Programs.
- Not all industries are assigned to a pretreatment category. Therefore, not all industries are regulated by categorical standards.
- Local limits are site-specific limitations on the discharge of specific pollutants required to enable a Control Authority, such as a POTW, to satisfy its NPDES discharge limitations.

Exercise for Unit 1 – Introduction to the National Pretreatment Program

1. NPDES is an abbreviation for _____.
2. POTW is an abbreviation for _____.
3. List the four objectives of the General Pretreatment Regulationsl
   a. _____
   b. _____
   c. _____
   d. _____
4. List three discharges prohibited under the National Pretreatment Program.
   a. _____
   b. _____
   c. _____

Unit 2 – Regulatory Authority

Learning Objectives

- Identify three levels of regulatory authority for administering a Pretreatment Program.
- Describe how Pretreatment Program authority is established for any state.
- Identify three mechanisms by which local authority manages industrial discharges.
- Differentiate between a sewer use ordinance and an Industrial User permit.
- Discus why local limits may be required by a local authority.

National Pretreatment Standards

- EPA has the responsibility for developing and modifying National Pretreatment Standards and supporting technical and guidance documents.
- National Pretreatment Standards are applicable to all indirect dischargers unless superseded by stricter state or local standards.

Indirect Discharge refers to an Industrial User that discharges wastewater through a POTW rather than directly to a receiving stream, such as a river.

- National Pretreatment Standards are promulgated in the Code of Federal Regulations at 40 CFR Chapter I, Subchapter N (Effluent Guidelines and Standards): Part 403, General Pretreatment Regulations, and Parts 405 through 471 (as of June 2004), Industry-specific (Categorical) requirements.

Approval Authority for Non-authorized States

- Only states that have an approved Pretreatment Program can act as an approval authority for control authorities, such as POTWs with approved Pretreatment Programs.
- EPA assumes responsibility as the approval authority for all states without an approved Pretreatment Program.

Pennsylvania *does not have* an approved Pretreatment Program. Therefore, in Pennsylvania, EPA Region III assumes all the responsibilities listed in Figure 2.1 for the approval authority.

Monitoring Implementation and Initiating Enforcement

- EPA is responsible for monitoring implementation of approved Pretreatment Programs either through oversight of approved state programs or direct oversight of Control Authorities (e. g., POTWs).
- EPA has authority to initiate enforcement action against violators of the pretreatment requirements.

Figure 2.1 Roles and Responsibilities

EPA (Federal)

- Headquarters
  - Oversee program implementation at all levels.
  - Develop and modify regulations for the program.
  - Develop policies to clarify and further define the program.
  - Develop technical guidance for program implementation.
  - Initiate enforcement actions as appropriate.
- Regions
  - Fulfill Approval Authority responsibilities for states without a state Pretreatment Program.
  - Oversee state program implementation.
  - Initiate enforcement actions as appropriate.

Approval Authorities (EPA Regions and Delegated States)

- Notify POTWs of their responsibilities.
- Review and approve requests for POTW Pretreatment Program approval or modification.
- Review requests for site-specific modifications to categorical pretreatment standards.
- Oversee POTW program implementation.
- Provide technical guidance to POTWs.
- Initiate enforcement actions, against non-compliant POTWs or industries.

Control Authorities (POTWs, States, or EPA Regions)

- Develop, implement, and maintain approved Pretreatment Program.
- Evaluate compliance of regulated Industrial Users.
- Initiate enforcement action against industries as appropriate.
- Submit reports to Approval Authorities.
- Develop local limits (or demonstrate why they are not needed).
- Develop and implement enforcement response plan.

Industrial Users

- Comply with applicable pretreatment standards and reporting requirements.

Establishing State Approval Authority

States may assume the role of Approval Authority, with all the responsibilities summarized in Figure 2-1, by applying for and obtaining approval from EPA to administer and enforce an EPA-approved State Pretreatment Program. In order to be approved, a request for State Pretreatment Program Approval must demonstrate that the State Pretreatment Program has the following elements, as listed below.

- Legal authority, which shall include the power to:
  - Incorporate POTW Pretreatment Program conditions into permits issued to POTWs; require compliance by POTWs with these incorporated permit conditions; and require compliance by Industrial Users with Pretreatment Standards.
  - Ensure continuing compliance by POTWs and Industrial Users.
  - Seek civil and criminal penalties, and injunctive relief, for non-compliance.
  - Approve and deny requests for approval of POTW Pretreatment Programs.
  - Approve and deny requests for authority to modify categorical Pretreatment Standards.
- Procedures to carry out requirements of the Clean Water Act, including procedures to:
  - Implement Legal Authority.
  - Identify and notify POTWs required to develop Pretreatment Programs.
  - Carry out the responsibilities for operating a State Pretreatment Program in the absence of a POTW Pretreatment Program.
  - Provide technical and legal assistance to POTWs in developing Pretreatment Programs.
  - Develop compliance schedules for inclusion in POTW Permits.
  - Sample and analyze regulated discharges to verify compliance.
  - Take enforcement action.
- Funding and qualified personnel to carry out the required authorities and procedures.

State Discharge Limits

- States have the authority to promulgate regulations that establish discharge limits for all dischargers.
- However, only state discharge limits that are more stringent than federal requirements take precedence over the federal requirements.

NPDES Permits if Authorized

- States with approved National Pollutant Discharge Elimination System (NPDES) permit programs issue NPDES permits to industries and control authorities for direct discharges.
  - Requirements for NPDES permit programs are specified at 40 CFR 123.
- NPDES permit requirements may also dictate pretreatment requirements, such as local limits, established by control authorities.

Pennsylvania ***does*** have an approved NPDES permit program. Consequently, Pennsylvania issues NPDES permits.

Legal Authority

- In order to initiate a POTW Pretreatment Program, approval of the program must be obtained from the Approval Authority. In Pennsylvania, that authority is EPA Region III.
- It is the POTW's responsibility to demonstrate that it has adequate legal authority to implement the Pretreatment Program throughout the service area.
  - This demonstration is accomplished in part through a statement from the POTW's attorney which explains how the legal authority requirements of 40 CFR Section 403.8(f) are met.
  - The attorney's statement should include copies of all statutes, ordinances, contracts, or agreements which provide the POTW's authority.

Legal authority must be enforceable in federal, state, and local courts of law. A Sewer Use Ordinance, which is typically part of a city or county code, often provides the legal authority required by the National Pretreatment Regulations.

Sewer Use Ordinance

The Sewer Use Ordinance defines the following:

- The bases for a sewer use ordinance, including
  - The General Pretreatment Regulations.
  - State Laws and Regulations.
  - Local Regulations including Local Limits.
- Authorized activities including, but not limited to
  - Industrial User monitoring.
  - Industrial User reporting.
  - Enforcement of federal, state, and local pretreatment requirements.
  - Compliance oversight.
  - Administrative review procedures.
  - Setting fees for the equitable distribution of costs for operating the Pretreatment Program.
- Pollutants of universal concern and their concentrations of concern.

EPA has issued a Model Sewer Use Ordinance (EPA-833-B-92-003, June 1992). The model ordinance is written as an actual sewer use ordinance; however, its purpose is to serve as a guidance document for development of local sewer use ordinances, not as a template to be copied verbatim.

Figure 2.2 EPA Model Pretreatment Ordinance (June 1992) Table of Contents

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Industrial User Permits

- Industrial User Permits are required by the General Pretreatment Regulations, which states that discharges from all *Significant Industrial Users* be controlled by a permit or similar individual control mechanism.

Significant Industrial User is currently defined as:

  - A user subject to categorical discharge requirements, OR
  - An Industrial User contributing an average of 25,000 gallons per day of process wastewater, OR
  - An Industrial User contributing a process discharge with at least 5% of the total POTW dry weather influent flow or 5% of the organic load, OR
  - An Industrial User designated as a significant Industrial User by the control authority.

- Industrial User Permits must contain these specific provisions:
  - Permit duration (typically up to five years).
  - Effluent limitations (both in terms of flow rate and pollutant load or concentration).
  - Monitoring, reporting, and recordkeeping requirements.
  - Compliance schedule.
  - Description of penalties for non-compliance.
  - Transferability conditions (generally not transferable).
- EPA has issued *Industrial User Permitting Guidance Manual*, *Office of Water* (EN-336), September 1989, to facilitate the drafting of Industrial User permits.

Authority Granted Through State Law

The Pennsylvania Publicly Owned Treatment Works Penalty Law 35 P.S. 752.1 et seq (Penalty Law) provides essentially two grants of authority.

- The statute provides a grant of authority to seek injunctive relief to gain compliance with pretreatment standards under certain specified conditions.
  - While the Penalty Law provides useful powers to POTWs to address serious events, it does not provide a general authority to a POTW to enforce the requirements of 40 C.F.R. section 403.8(f).
  - The injunctive enforcement powers granted by the Penalty Law, while limited, are available to POTWs for use with Industrial Users throughout the entire service area.
- The second grant of authority relates to penalties.
  - The Penalty Law provides that POTWs may assess penalties of $25,000 per day per violation provided the POTW has jurisdiction to impose such penalties.
  - The Penalty Law does not grant jurisdiction that does not exist through local law.

Legal authority must provide the certain powers to the control authority. What specific powers of authority would be necessary?

- _____
- _____
- _____
- _____
- _____

Figure 2.3 Approved Pretreatment Programs In Pennsylvania***

Local Authority	EPA Contact**		Local Authority	EPA Contact**
Adamstown	Matlin		Lock Haven	Lovell
Alcosan	Lovell		Lower Allen	Lovell
Allentown	Copeland		Lower Bucks Co.	Copeland
Altoona	Lovell		Lower Lackawanna	Copeland
Ambler	Copeland		McKeesport	Matlin
Bally Boro	Copeland		Meadville	Copeland
Bellefonte	Matlin		Mid-Cameron	Matlin
Berks-Montgomery	Matlin		Milton	Copeland
Berwick	Lovell		Monaca	Matlin
Bethlehem	Lovell		Montgomery Co.	Copeland
Bradford	Lovell		Moon Twp.	Matlin
Bristol Twp.	Matlin		Myerstown	Copeland
Bucks Co.	Copeland		New Castle	Matlin
Butler	Lovell		New Kensington	Lovell
Carlisle	Matlin		Norristown	Copeland
Catasauqua	Lovell		Northeast	Copeland
Chambersburg	Lovell		Oakmont	Copeland
Conshohocken	Matlin		Penn Twp.	Matlin
Conway Borough*	Copeland		Pennridge	Lovell
Curwensville	Matlin		Philadelphia	Lovell
Delcora	Lovell		Pine Creek	Matlin
Derry Twp.	Lovell		Pleasant Hills	Copeland
Dover Twp.	Copeland		Pottstown	Matlin
Downingtown	Copeland		Punxsutawney	Lovell
DuBois	Matlin		Quakertown	Copeland
East Norriton-Plymouth	Matlin		Reading	Lovell
Easton	Lovell		Ridgway	Copeland
Ellwood City*	Copeland		Schuylkill Haven	Matlin
Ephrata*	Copeland		Scranton	Matlin
Erie	Matlin		Shamokin-Coal Twp.	Matlin
Exeter Twp.	Copeland		Shippensburg	Lovell
Fleetwood	Matlin		Somerset	Copeland
Greater Hazleton	Lovell		Springettsbury	Copeland
Greater Pottsville	Matlin		SW Delaware Co.	Copeland
Hamburg	Copeland		St.Marys	Matlin
Hanover	Lovell		Sunbury	Lovell
Harrisburg	Copeland		Titusville	Matlin
Hatfield	Copeland		Tyrone	Lovell
Hempfield Twp.	Copeland		Union Twp.	Matlin
Hermitage	Matlin		University Area	Copeland
Hollidaysburg	Copeland		Upper Allegheny JSA	Lovell
Huntingdon	Matlin		Upper Gwynedd-Towamencin	Matlin
Indiana	Matlin		Upper Merion	Copeland
Johnstown	Lovell		Upper Moreland-Hatboro	Matlin
Kelly Twp.	Matlin		Valley Forge	Copeland
Kennett Square	Copeland		Warminster	Copeland
Kiski Valley	Matlin		Washington-E Washington.	Matlin
Lackawanna River Basin	Copeland		West Chester	Copeland
Lancaster Area	Matlin		Williamsport	Matlin
Lancaster City	Matlin		Wyoming Valley	Lovell
Latrobe	Matlin		York	Lovell
Lebanon	Matlin			

*Program not approved ** Contact as of May 2004 ***Information current through May 2004

Pretreatment Program Implementation Procedures

- Responsibility for implementing the pretreatment regulations falls to Control Authorities, usually POTWs. Responsibilities include:
  - Identifying and locating users subject to the Pretreatment Program requirements.
  - Identifying the character and volume of Industrial User discharges.
  - Notifying Industrial Users of their obligations under the Pretreatment Program.
  - Receiving and analyzing self-monitoring reports from users.
  - Randomly sampling Industrial User discharges to verify self-monitoring information.
  - Investigating instances of non-compliance.
  - Publishing an annual list of Industrial Users who were non-compliant during the past year.

Local Limits

Control Authorities are required to document their decision to establish local discharge limits or to document why local limits are not required. The documentation involves the identification of industrial and non-regulated users and the characterization of their discharges to identify *pollutants of concern*.

Pollutants of Concern are contaminants that pass through or interfere with POTW performance, adversely impact POTW sludge, cause the POTW to exceed its NPDES discharge limits, or adversely impact workers.

Factors Impacting the Development of Local Limits

- POTW's efficiency in treating wastes.
- POTW's compliance with its NPDES permit limits.
- The condition of the water body that receives its treated effluent.
- Water quality standards that are applicable to the water body receiving its effluent.
- POTW's retention, use, and disposal of sewage sludge.
- Worker health and safety concerns.

Headworks Analysis Method for Establishing Local Limits

The overall process for determining the need for local limits involves four general steps, as outlined below.

- Determine the Pollutants of Concern (POCs) by referring to:
  - National Pollutants of Concern
  - NPDES Permit Conditions
  - Water Quality Criteria
  - Sludge Quality Standards
  - Air Emission Standards
  - Drinking Water and Resource Protection Criteria
  - Prohibitions on Treatment Plant Interference
  - Prohibitions to Protect Treatment Works, Collection System, and Workers
- Collect and Analyze Data as follows:
  - Data on POCs from monitoring of Industrial Users should be available or collected
  - POTW influent and effluent POC data (to evaluate removal efficiency)
  - Known contributions from domestic sources, which are not regulated must determined or estimated
- Calculate the Maximum Allowable Headworks Loading (MAHL).

  

  A MAHL—Maximum Allowable Headworks Loading—is the upper limit of pollutant loading at which a POTW will not violate any treatment plant or environmental criteria developed to prevent process inhibition or interference, or violation of effluent, sludge, or air quality standards. MAHLs are the basis for local limits.
  - POTW plant data are used to calculate actual removal efficiencies through the plant for each pollutant of concern
  - Calculate the allowable headworks loading for each pollutant of concern
  - Select the most restrictive allowable headworks loading for each POC as the MAHL
- Determine the Need for and Implement Local Limits
  - Evaluate Actual versus Maximum Allowable Loadings
  - Determine the contribution from non-regulated sources
  - Calculate loadings allowed for all regulated/Industrial Users
  - Allocate loadings to individual users

Refer to EPA's document, *Local Limits Development Guidance,* for detailed information regarding development and calculations related to Headworks loading.

Note also that EPA Region III has issued *Guidance Setting Local Limits for a Pollutant Where the Domestic Loading Exceeds the Maximum Allowable Headworks Loading.*

Additional Requirements for Local Authority

- Significant Industrial User List
  - The control authority is required to prepare and maintain a list of significant Industrial Users and the pretreatment criteria applicable to each user.
- Enforcement Response Plan
  - The control authority is required to develop and enforce and enforcement response plan to address non-compliance.
- Funding
  - A control authority is required to have sufficient funding and staff to implement the Pretreatment Program.

Additional Resources

- *Guidance Manual for the Development and Implementation of Local Discharge Limitations under the Pretreatment Program, December 1987* (EPA 883-B-87-202, ERIC # W107, NTIS# PB92-129188).
  - Information related to ordering this publication from the Office of Wastewater Management is located at http://www.epa.gov/owm/inpub.htm
- *EPA Supplemental Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program: Residential and Commercial Toxic Pollutant Loadings and POTW Removal*
  - Published May 1, 1991, this publication provides information related to residential and commercial sources of toxic pollutants and estimated removal efficiencies of municipal treatment processes.
- *Draft Local Limits Development Guidance and Appendices*, EPA, August 1999.
  - This is a draft revision of the *Technically-Based Local Limits Guidance Manual* that was originally published in 1987. The final version of this document reportedly will be available in summer, 2004.

Key Points for Unit 2 – Regulatory Authority

- Indirect Discharge refers to an Industrial User that discharges wastewater through a POTW rather than directly to a receiving stream, such as a river.
- Pennsylvania *does not have* an approved Pretreatment Program. Therefore, in Pennsylvania, EPA Region III assumes all the responsibilities listed in Figure 2.1 for the approval authority.
- Pennsylvania *does* have an approved NPDES permit program. Consequently, Pennsylvania issues NPDES permits.
- Legal authority must be enforceable in federal, state, and local courts of law. A Sewer Use Ordinance, which is typically part of a city or county code, often provides the legal authority required by the National Pretreatment Regulations.
- EPA has issued a Model Sewer Use Ordinance (EPA-833-B-92-003, June 1992). The model ordinance is written as an actual sewer use ordinance; however, its purpose is to serve as a guidance document for development of local sewer use ordinances, not as a template to be copied verbatim.
- Refer to EPA's document, *Local Limits Development Guidance,* for detailed information regarding development and calculations related to Headworks loading.
- Note also that EPA Region III has issued *Guidance Setting Local Limits for a Pollutant Where the Domestic Loading Exceeds the Maximum Allowable Headworks Loading.*

Exercise for Unit 2 – Regulatory Authority

1. Explain the difference between direct and indirect discharges.

2. Only state discharge limits that are more stringent than federal requirements take precedence over the federal requirements.

   a. ____ True b. ____ False

3. Pollutants of concern are defined as

   a. ____ contaminants that interfere with POTW performance
   b. ____ adversely impact POTW sludge
   c. ____ cause the POTW to exceed its NPDES discharge limits
   d. ____ chemicals that can adversely impact workers
   e. ____ all of the above

4. MAHL is an abbreviation for

   _____.

5. Explain the meaning of a significance industrial user.

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Unit 3 – Identifying and Monitoring Industrial Users

Learning Objectives

- List and explain four elements of an industrial survey.
- List and explain the three general steps in completing an inspection of industrial facilities.
- Discuss why proper sampling location is critical for monitoring effectiveness.
- List guidelines for establishing sampling frequency.
- Identify three elements of good sampling protocol.

Identify and Locate Industrial Users Subject to the Pretreatment Program

The control authority is mandated by the pretreatment regulations to identify Industrial Users.

- To locate Industrial Users, the control authority first conducts an in-depth initial survey of the service area.
- A list of all Industrial Users is compiled and maintained.
- Periodic updates are conducted to keep the list current.

Elements of the Initial Survey

What are some resources that may be valuable in locating Industrial Users?

- _____
- _____
- _____
- _____
- _____
- _____

Survey Each Industrial User to Obtain Necessary Information

POTWs need to be able to characterize the impact of Industrial Users on the influent to the POTW. Some ways to obtain this information include:

- Conduct a preliminary telephone survey of each individual Industrial User.
- Conduct an in-person survey of the Industrial User.
- Conduct a written questionnaire-type survey to solicit pertinent information.

For details on the scope of a usable survey, refer to *Guidance Manual for POTW Pretreatment Program Development*, EPA, October 1983, NTIS# PB93-186112. The information is also available on the EPA website, www.epa.gov.

Conduct Follow-up Activities to Complete or Update Information Needs

It is important to obtain complete and accurate information from each Industrial User. Follow-up on all incomplete or inaccurate information provided by each user.

Users may not have or provide detailed information during the initial survey process. Therefore, the POTW must:

- Review all survey responses for completeness.
- Contact any non-responders and set a deadline for response.
- Conduct an in-person follow-up survey as necessary.

In all cases, for potential future enforcement purposes, it is important to document all follow-up actions that were taken to acquire the necessary and requested information.

Data Summary for Development of Pretreatment Program

To develop a Pretreatment Program, all the information from the Industrial Users must be compiled and examined. The POTW will perform, at a minimum, the following steps:

- Summarize the number and type of Industrial Users.
- Summarize the pollutant types and quantities contributed in total and by each Industrial User.
- Identify toxic pollutants contributed in total and individually by Industrial Users.
- Classify each Industrial User based on the nature of their wastewater discharge.

The characteristics of an Industrial User's discharge may make it liable for additional oversight, additional regulation, or special discharge limitations. The cumulative quantities of pollutants discharged into the POTW service area will dictate what type of control elements will be required for the Pretreatment Program.

40 CFR 403.8(f)(1)(v) requires that the legal authority that empowers a POTW to implement a Pretreatment Program must provide the authority to, "carry out all inspection, surveillance, and monitoring procedures necessary to determine, independent of information supplied by Industrial Users, compliance or non-compliance with applicable Pretreatment Standards and Requirements by Industrial Users."

There are three general steps in completing an inspection of industrial facilities: preparation, on-site assessment, and follow-up activities.

Preparation for Inspection

- Review preliminary information available for the facility or the industry type.
- Prepare an agenda for the on-site assessment.
- Prepare or obtain a checklist to use during the on-site assessment.
- Schedule the inspection at an appropriate time, based on preliminary knowledge of facility operations.
- Schedule sufficient time to complete a thorough assessment.

On-Site Assessment

- Tour the subject facility to become familiar with its operations.
- Identify any pretreatment facilities and collect available performance data.
- Identify and verify sanitary wastewater discharge locations and flow volumes.
- Identify and verify process discharge locations and characteristics.
- Based on the facility's operations and plumbing layout, identify appropriate monitoring locations.
- Determine from the Industrial User the best time to conduct sampling activities.
- List any potential pollutants of concern not previously identified by the Industrial User.

Follow-Up Activities

- Identify missing information and contact the facility to obtain it.
- Prepare a report summarizing the findings of the on-site assessment.

Sampling Locations

The following factors should be considered when selecting a sampling location:

- Locations must provide representative samples.
- Locations should be as easily accessible as possible.
- Categorical discharges must generally be sampled at the end of the process, if possible.
  - Combined Wastestream Formula (CWF) or Flow Weighted Average (FWA) approach must be used to calculate alternative discharge limits if process effluent is mixed prior to treatment with wastewaters other than those generated by the regulated process.
  - Refer to 40 CFR 403.6(e) for information on the CWF approach.
  - EPA guidance for the CWF and FWA approach is provided in *Guidance Manual for the Use of Production-Based Pretreatment Standards and the Combined Wastestream Formula,* September 1985.

Sampling Frequency

- Control Authorities are required by pretreatment regulations to inspect and sample the discharge from significant Industrial Users at least once per year.
- Frequency can be increased based on judgment related to:
  - Compliance history
  - Flow volume
  - Type and concentration of pollutants
- Categorical Industrial Users are required to sample their effluent twice per year and report the results to the control authority.
- The required sampling frequency can be addressed with a combination of POTW sampling as well as self-monitoring by the industry.

Sampling Protocol

In order to obtain representative and legally defensible sampling results, it is necessary to follow specific protocols that are standard practice in the industry.

The following considerations must be addressed when collecting and handling samples:

- All samples must be collected into appropriate containers and properly preserved from time of collection until time of analysis.
- Sample holding times must not be exceeded.
  - Note that holding times vary depending on the analyses to be conducted.
- A record documenting the details of sample collection must be maintained.
- A chain of custody must be maintained to assure the integrity of the analyses.
- For complete guidelines, refer to *Industrial Users Inspection and Sampling Manual for POTWs*, EPA-831-B-94-001, April 1994.

Good sampling practice dictates that a sampling work plan is prepared for each sample collection event. The work plan can be made relatively standard by incorporating standard operating procedures for most sampling activities, but also including site-specific procedures as necessary to ensure that all required protocols are addressed for each sampling event.

Key Points for Unit 3 – Identifying and Monitoring Industrial Users

- The control authority is mandated by the pretreatment regulations to identify Industrial Users.
- It is important to obtain complete and accurate information from each Industrial User. Follow-up on all incomplete or inaccurate information provided by each user.
- In all cases, for potential future enforcement purposes, it is important to document all follow-up actions that were taken to acquire the necessary and requested information.
- The characteristics of an Industrial User's discharge may make it liable for additional oversight, additional regulation, or special discharge limitations. The cumulative quantities of pollutants discharged into the POTW service area will dictate what type of control elements will be required for the Pretreatment Program.
- 40 CFR 403.8(f)(1)(v) requires that the legal authority that empowers a POTW to implement a Pretreatment Program must provide the authority to, "carry out all inspection, surveillance, and monitoring procedures necessary to determine, independent of information supplied by Industrial Users, compliance or non-compliance with applicable Pretreatment Standards and Requirements by Industrial Users."
- In order to obtain representative and legally defensible sampling results, it is necessary to follow specific protocols that are standard practice in the industry.
- Good sampling practice dictates that a sampling work plan is prepared for each sample collection event.

Exercise for Unit 3 – Identifying and Monitoring Industrial Users

1. List three general steps to follow in completing an inspection of industrial facilities.

   a. _____

   b. _____

   c. _____

2. What are some essential elements of a good sampling and analysis plan?

   a. _____

   b. _____

   c. _____

   d. _____

   e. _____

   f. _____

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Unit 4 – Enforcement Implementation

Learning Objectives

- List five elements for enforcement of industrial Pretreatment Programs.
- Explain what an Enforcement Response Plan is.
- List three enforcement mechanisms under the National Pretreatment Program.
- Explain why enforcement tracking is important.

Enforcement is a critical element of a Pretreatment Program, and is required of Control Authorities by the General Pretreatment Regulations. 40 CRF 403.8(f)(5) requires that the Control Authority (POTW) develop and implement an Enforcement Response Plan.

Purpose of the Enforcement Response Plan (ERP)

The purposes of an ERP include:

- Establishing a framework for action.
- Compelling POTWs to formalize procedures for investigating, documenting, and responding to instances of Industrial User non-compliance.
- Specifying criteria by which POTW personnel can determine the enforcement action most appropriate to the nature of the violation.
- Instilling consistency in the enforcement process.

Basic Elements of an ERP

A comprehensive and effective ERP will:

- Describe how the POTW will investigate instances of non-compliance.
- Describe the types of escalating enforcement responses the POTW will take.
- Establish time periods within which responses will occur.
- Identify by title the Control Authority official(s) responsible for each type of response.
- Adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards.

EPA has published a 1989 guidance manual titled, *Guidance for Developing Control Authority Enforcement Response Plans*, which contains detailed information on the topic.

Benefits of an ERP

What are some of the benefits of an Enforcement Response Plan? Consider benefits for the user and the POTW.

- _____
- _____
- _____
- _____
- _____

A POTW controls Significant Industrial Users through a variety of methods, based on the applicable general pretreatment standards in 40 CFR 403, categorical pretreatment standards, local limits, and state and local law. Monitoring information must be reviewed, processed, and analyzed by the POTW in order for the POTW to fulfill its oversight obligations.

Reports Required by Pretreatment Regulations

Periodic reports submitted by Industrial Users include Baseline Monitoring Reports (BMRs), periodic reports required by the General Pretreatment Regulations, and periodic reports required by the Control Authority.

- Baseline Monitoring Reports (BMRs)
  - Initial reports are submitted by new Categorical Industrial Users based on sampling of their wastewater (or estimated data if the facility is not yet in operation).
  - BMRs establish the wastewater characteristics of an Industrial User necessary for the POTW to fulfill its oversight role.
  - BMRs identify the possible need for pretreatment prior to discharge or establish criteria for determining the need for local limits.
  - Appendix II provides a sample copy of a BMR.
- Periodic Reports Required by General Pretreatment Regulations
  - Categorical Users submit semi-annual self-monitoring reports.
  - Reports shall be based on sampling and analysis for pollutants controlled by the applicable categorical standard.
- POTWs are required by the General Pretreatment Regulations to perform inspection monitoring to verify the user self-monitoring.
  - Control Authorities are required by Pretreatment Regulations to inspect and sample the discharge from Significant Industrial Users at least once per year.

Benefits of Reviewing Reports

What are some of the benefits to reviewing user reports?

- _____
- _____
- _____
- _____

Regulations require that the Control Authority be able to obtain remedies for non-compliance by any Industrial User with any pretreatment standard and requirement. POTWs are able to seek injunctive relief and have the authority to seek or assess civil or criminal penalties in at least the amount of $1000 per day for each violation. The Control Authority's legal authority (its sewer use ordinance, for example) must provide for multiple, escalating mechanisms for enforcement.

- Notice of Violation (NOV)
  - NOV is a notice to a user that a compliance violation has occurred and is generally used for minor or infrequent violations.
  - The NOV should require the user to identify the cause of the violation.
  - It requires a user plan and schedule for remediation of the violation.
- Administrative Orders
  - This is generally the first step for significant violations.
  - Orders may be negotiated or unilaterally issued.
  - They generally direct the user to take specified action(s) and may incorporate compliance schedules or fines.
- Administrative Fines
  - Fines are a monetary penalty for violations of pretreatment standards.
  - They are designed to recover full or partial benefits from non-compliance.
  - They provide incentive to the user to avoid future violations.
  - They represent an escalation in enforcement strategy.
- Civil Litigation
  - This lawsuit is intended to secure court-ordered action or recover POTWs costs for non-compliance.
  - Litigation is often implemented to protect human health or public welfare.
  - It represents an escalated response to non-responsive non-compliant users.
- Criminal Prosecution
  - Prosecution attempts to secure convictions of violators punishable by fines or imprisonment.
  - This attempts to punish non-compliance and deter future non-compliance.
  - Prosecution represents a severe escalation response to non-compliance.
- Termination of Service
  - Termination revokes the privilege to discharge to the sewer.
  - This will likely result in the closure of the non-compliant user's facility.

Key Points for Unit 4 – Enforcement Implementation

- Enforcement is a critical element of a Pretreatment Program, and is required of Control Authorities by the General Pretreatment Regulations. 40 CRF 403.8(f)(5) requires that the Control Authority (POTW) develop and implement an Enforcement Response Plan.
- EPA has published a 1989 guidance manual titled, *Guidance for Developing Control Authority Enforcement Response Plans*, which contains detailed information on the topic.
- A POTW controls Significant Industrial Users through a variety of methods, based on the applicable general pretreatment standards in 40 CFR 403, categorical pretreatment standards, local limits, and state and local law. Monitoring information must be reviewed, processed, and analyzed by the POTW in order for the POTW to fulfill its oversight obligations.
- Regulations require that the Control Authority be able to obtain remedies for non-compliance by any Industrial User with any pretreatment standard and requirement.

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Unit 5 – Recordkeeping and Recording Requirements

Learning Objectives

- Explain the purpose of a Data Management System.
- Describe three elements of POTW reporting.
- Describe the guidelines for monitoring Industrial User Reporting.

Any Industrial User and all POTWs subject to the reporting requirements of 40 CFR 412 shall maintain records of all information resulting from any monitoring activities for a period of no less than three years.

Industrial User Records Maintained by POTWs

In addition to maintaining Industrial User monitoring data and reports, POTWs generally maintain addition records such as the following:

- Industrial Waste Questionnaire.
- Permit Applications.
- Permits.
- Inspection reports by POTW.
- Required plans.
- Enforcement activities.
- Correspondence between POTW and Industrial User.

POTW Records

In addition to records received from Industrial Users and reports to their Approval Authority, POTWs also maintain records pertinent to the administration of their Pretreatment Program. Some examples include:

- Legal Authority.
- Pretreatment Program approval and modifications.
- Copy of POTW's NPDES Permit.
- Applicable federal and state regulations.
- Local Limits development documentation.
- Enforcement Response Plan.
- Correspondence between POTW and Approval Authority and EPA.
- Public notices.

Functions of Data Management Systems

- Storing user data.
- Tracking due dates for compliance submittals.
- Identifying and tracking compliance violations.
- Maintaining user compliance history.
- Calculating local limits and user limits for compliance.

Confidentiality of User Data

- Any information submitted by an Industrial User may be claimed as confidential data. EPA will make a final determination in accordance with 40 CFR 2.
- Confidentiality claims must be made at the time of submittal and in the manner specified in the regulations.
- Effluent data, as defined by 40 CFR 2, may not be claimed as confidential information.
- Any information not subject to a confidentiality claim is public information.

Annual Report

POTWs with approved Pretreatment Programs shall provide the Approval Authority with a report that briefly describes the POTW's program activities. The report must be submitted no later than one year after approval of the POTW's Pretreatment Program, and at least annually thereafter.

The content of a POTW's Annual Report should include:

- An updated list of the POTW's Industrial Users.
  - This list shall identify which Industrial Users are subject to categorical pretreatment standards and specify which standards are applicable to each Industrial User.
  - The list shall indicate which Industrial Users are subject to local standards that are more stringent than the categorical pretreatment standards.
  - The POTW shall also list the Industrial Users that are subject only to local requirements.
- A summary of the status of Industrial User compliance over the reporting period.
- A summary of compliance and enforcement activities (including inspections) conducted by the POTW during the reporting period.
- A summary of changes to the POTW's Pretreatment Program that have not been previously reported to the Approval Authority.
- Any other relevant information requested by the Approval Authority.

Public Notices

Section 101(e) of the Clean Water Act established public participation as one of its goals in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by EPA or any State.

- Public participation is encouraged via public notices and public hearings.
- A POTW is required to publish annually, in the largest daily newspaper in the municipality in which the POTW is located, a list of Industrial Users who were in significant non-compliance at any time during the previous twelve months.

Key Points for Unit 5 – Recordkeeping and Reporting Requirements

- Any Industrial User and all POTWs subject to the reporting requirements of 40 CFR 412 shall maintain records of all information resulting from any monitoring activities for a period of no less than three years.
- POTWs with approved Pretreatment Programs shall provide the Approval Authority with a report that briefly describes the POTW's program activities. The report must be submitted no later than one year after approval of the POTW's Pretreatment Program, and at least annually thereafter.
- Section 101(e) of the Clean Water Act established public participation as one of its goals in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by EPA or any State.

Industrial User Inspection Checklist

1. Industry Name: _____

2. Site Address(s): _____

3. Mailing Address: _____

_____

4. Contact(1): _____

5. Title: _____

6. Telephone Number: _____

7. Contact(2): _____

8. Title: _____

9. Telephone Number: _____

Credentials presented to whom ? _____

Inspector(s)

Name	Agency	Telephone Number

Inspection Date ____/____/____

Note: Complete sections A-E prior to onsite visit.

A. General Information

General Description of Processes and Products.

2a. Categorical Industry ? Yes ___ No ___

b. Category(s): _____

Subcategory(s): _____

Regulatory New Source Date ____/____/____

c. New Source ? Yes ___ No ___

d. List of categorical processes

e. List other operations producing wastewater.

3. Are any alternates to effluent monitoring conducted ? (e.g., TTO/TOMP requirements)?

Yes ___ No ___

Describe: _____

4. Provide production rates for all processes subject to production based standards.

Process	Production Rate Used for calculating Limits	Production Rate for Last 12 Months

5. Any anticipated changes in processes or production rates ?

Yes ___ No ___ Describe _____

_____

B. SHIFT INFORMATION

1. No. of Employees	Hours	Work Days
Shift 1:		
Shift 2:		
Shift 3:		
Total:		

2. Is production seasonal ? Yes ___ No ___

Explain: _____

_____

C. WASTEWATER DISCHARGES

1. Attach a block flow diagram of manufacturing process, chemical storage area, and wastewater generated. Identify all regulated, unregulated and dilution wastewater discharges. Include sampling location, discharge flowrates and method of disposal.* Note any changes and obtain a new diagram if necessary.

* Disposal Method

CD - Continuous discharge to sanitary
ND - Not discharged or disposed
BD - Batch discharge to sanitary sewer
HH - Hauled as hazardous waste
OD - Other disposal - not to sanitary sewer
HW - Hauled as nonhazardous waste

D. PRETREATMENT FACILITY

1. Pretreatment installed ? Yes ___ No ___

2. Attach a schematic of the pretreatment facility (include all units and sludge storage)

3. Briefly describe operation.

_____

_____

_____

4. Describe sludge storage and disposal method.

_____

_____

_____

5. Describe appearance of effluent at time of inspection.

_____

_____

_____

E. CURRENT COMPLIANCE STATUS

1. Indicate compliance status with:

a. effluent limits _____

b. monitoring _____

c. reporting _____

2. Describe existing enforcement actions (attach schedule)

_____

_____

3. What is current status of compliance with schedule ?

_____

_____

4. OTHER COMMENTS

F. SELF MONITORING

1. Does facility have sampling plan or protocol including use of 40 C.F.R. Part 136 techniques (obtain copy)?

   Yes ___ No ___

2. Is sampling location (C.1) same as in control mechanism?

   Yes ___ No ___

   If no, explain _____

3. Is sampling location appropriate ? Yes ___ No ___

   If no, explain _____

4. Are any parameters monitored by approved methods more frequently than required ?

   Yes ___ No ___

   If yes, are all results submitted to the Control Authority ?

   Yes ___ No ___

5. Does facility resample and report within 30 days of discovering a violation ?

   Yes ___ No ___

6. Are sampling records maitained on site ? Yes ___ No __

   For how long ? _____

7. a. How is flow measured ? _____

   _____

   b. Is measurement location appropriate ? Yes ___ No __

   c. Is flow measurement device calibrated ?

   Yes ___ No ___ N/A ___ How often ? _____

8. Is monitoring equipment (e.g. pH meter) calibrated ?

   Yes ___ No ___ How often ? _____

9. Is sampling and analysis done in-house or by contract ?

   _____

10. Is QA/QC program for sampling and analysis adequate ?
    (obtain copy of plan if available)

    Yes ___ No ___ If no, explain _____

    _____

11. Describe any perceived deficiencies in the self-monitoring program.

    _____

    _____

    _____

    _____

G. Hazardous Material Management

1. Is IU aware of RCRA regulations ? Yes ___ No ___

2. Does facility generate any hazardous waste ?

   Yes ___ No ___

   If yes, indicate type and method of management on site and means of disposal on a separate sheet. Describe any spillage problems or any other releases that are observed.

3. Has facility notified POTW and EPA of any hazardous waste discharges to the sewer ?

   Yes ___ No ___ N/A ___

H. SPILL PREVENTION

1. Does the IU have a spill prevention (SP) plan to address spills to the POTW ?

   Yes ___ No ___ Unknown ___ N/A ___

2. Does the facility have spill notification procedures posted ?

   Yes ___ No ___ Unknown ___ N/A ___

3a. Has the facility had any spills or been responsible for slug loads ?

   Yes ___ No ___ Unknown ___ N/A ___

3b. If yes, was POTW notified ?

   Yes ___ No ___ Unknown ___ N/A ___

4. Did the IU follow procedures outlined in the spill plan at the time of spills ?

   Yes ___ No ___ Unknown ___ N/A ___

5. Were procedures effective in containing spill ?

Yes ___ No ___ Unknown ___ N/A ___

6. Is the facility keeping records of spill events ?

Yes ___ No ___ Unknown ___ N/A ___

7. Have there been any changes in spill procedures recently ?

Yes ___ No ___ Unknown ___ N/A ___

Describe: _____

_____

_____

8. General Comments: _____

_____

_____

(i.e. perceive deficiencies/violations/discrepancies)

I. FILE REVIEW (indicate Y (in file) or N (not in file))

1. Current IU control mechanism ? __

2. Notices and correspondence with control authority including:

a. Self monitoring report transmittals ? __

b. BMR if required ? __

c. Other ? _____ __

3. Do sampling records include:

a. Date of sampling event ? __

b. Time of sampling event ? __

c. Name of sampling person and affiliation ? __

d. Sample collection method ? ___

e. Method of sample preservation ? ___

f. Description of sample location ? ___

g. Name of person conducting analysis ? ___

h. Date of analysis ? ___

i. Time of analysis ? ___

j. Sample analyses method ? ___

4. Is type of sample as specified in control mechanism ? ___

5. Are all parameters monitored at the required frequency ? Note any discrepencies in section K. ___

6. Analytical results ? ___

7a. Are all monitoring results sent to the Control Authority ? ___

b. Copies to POTW ? ___

8. Appropriate production records for production based standards ? ___

9. Documentation of flow rates and volumes ? ___

10. Are records maintained at least 3 years ? ___

J. SAMPLING

1. Were samples taken ? Yes ___ No ___

If yes, attach sample results.

2. Describe sampling location, method & time.

_____

_____

_____

_____

_____

_____

K. OTHER COMMENTS

Note any entry or other problems.

Industrial Baseline Monitoring Report

Please complete this form in as much detail as possible. Attach additional sheets if necessary.

Company Information

A. Facility Name: _____
Mailing Address: _____
_____

B. Contact Representative:_____
Title: _____
Telephone Number: _____

C. Number of Employees:_____ Number of Shifts:_____

D. Start time for each shift: 1st shift:_____a.m._____p.m.
2nd shift:_____a.m._____p.m.
3rd shift:_____a.m._____p.m.

E. Operational days per week:_____

Nature of Operation

A. List raw materials used: _____
_____
_____

B. List chemicals used:_____
_____
_____

C. Describe manufacturing conducted:_____
_____
_____

D. Attach sheet (s) describing each regulated process in detail

Wastewater Flow

A. Total plant flow in gallons per day (gpd):

Ave:_____ Max:_____

B. Individual process flows in gallons per day (gpd)

Regulated Process	Ave Flow Rate (gpd)	Max Flow Rate (gpd)	Type of Discharge

Unregulated Process	Ave Flow Rate (gpd)	Max Flow Rate (gpd)	Type of Discharge

C. Attach sheet (s) of schematic drawings of flow charts of each regulated and unregulated processes that generates wastewater. Include schematic drawings on location of treatment system and sampling location.

Nature and Concentration of Pollutants

A. Analysis of Regulated Flows

The Industrial User must perform sampling and analysis of the effluent from all regulated processes (after treatment, if applicable). Provide the analytical data for the regulated processes in the space provided below. Attach additional sheets if necessary. Only those pollutants specifically regulated by the applicable category need be reported.

Regulated Process:_____

Ag	Cd	CN`A	CN`T	Cr	Cu	Ni	Pb	Ph	Zn	TTO
										Ave
										Mx

Sample Location:_____
Sample Type (Composites are required except where not feasible):
Number of Samples and Frequency Collected:_____
Analytical Method Used:_____
Analysis of Total Plant Flow (If Appropriate)

An Industrial User may sample and analyze the total plant flow and calculate an equivalent concentration limit using the combined wastestream formula if regulated process flows are mixed with other flows prior to treatment and/or sampling. Record the analytical results for all regulated pollutants below. Record the calculated concentration limits as well as the actual measured concentrations.

Ag	Cd	CN`A	CN`T	Cr	Cu	Ni	Pb	pH	Zn	TTO
										MEC*
										AEC*
										AMMC
										AAAC*

Sample Location:_____
Sample Type:_____
Number of Samples and Frequency Collected:_____
Analytical Methods Used:_____

*MEC=> Maximum Equivalent Concentration (CWA)
*AEC=> Average Equivalent Concentration (CWA)
*AMMC=> Actual Measured Maximum Concentration
*AAAC=> Actual Measured Average

Wastewater Treatment

Briefly describe any and all wastewater treatment utilized. (Show treatment system location in relation to process flows on schematic drawing required by questions 3.c).

Environmental Control Permits

Describe all environmental control permits held by or for the facility:

Title of the Permit	Permit Number	Issuing Agency	Expiration Date

Compliance Certification

A. Is the facility meeting applicable categorical pretreatment standards on a consistent basis?
Yes_____ No_____

B. If no, do you require:
1. Additional operation and maintenance (O&M) to achieve compliance? Yes_____ No_____

2. New or additional pretreatment facilities to achieve compliance? Yes_____ No_____

C. If additional O&M or new or additional pretreatment will be required to meet categorical pretreatment standards on a consistent basis, attach a schedule on a separate sheet projecting increments of progress indicating dates for the commencement and completion of major events leading to compliance with the standard. Note: the final compliance date in this schedule shall not be later than the compliance date for the applicable pretreatment standard. Written progress reports

are required within 15 days of the compliance dates specified in the compliance schedule.

Signatory Requirement

I certify under penalty of law that I have personally examined and am familiar with the information in this report and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in this report, 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 imprisonment.

_____

Authorized Representative Signature

_____ _____

Official Title Date