
9. PRETREATMENT

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Related Websites

Office of Wastewater Management (OWM) Homepage: <http://www.epa.gov/owm>

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9. A. Review of the General Pretreatment Regulations

Development of 40 *CFR* Part 403

In addition to materials in this chapter, inspectors must be familiar with Chapter 1 - "Introduction" & Chapter 2 - "Inspection Procedures".

The Clean Water Act (CWA) requires the Environmental Protection Agency (EPA) to promulgate regulations to control the discharge of pollutants to the Nation's waters to preserve their physical, chemical, and biological integrity. The National Pollutant Discharge Elimination System (NPDES) program is the primary regulatory mechanism developed to control point-source discharges to the surface waters of the United States. The National Pretreatment Program is the mechanism developed to regulate nondomestic users who discharge pollutants to Publicly Owned Treatment Works (POTWs) that could pass through or interfere with the treatment plant, threaten worker health and safety, or contaminate sludges.

The General Pretreatment Regulations [40 *Code of Federal Regulations (CFR)* Part 403] were promulgated on June 26, 1978. The regulations were revised and repromulgated on January 28, 1981. Since publication of the rule in 1981, the regulations have continued to be revised. Amendments have been made to the regulations to clarify some aspects and to respond to the findings of the Pretreatment Implementation Review Task Force (PIRT) study conducted in 1984. Additional regulatory changes were promulgated on July 24, 1990 (55 *Federal Register* 30082) in response to recommendations made in the Domestic Sewage Study (DSS) and on July 17, 1997, (62 *FR* 38405-38415) to change procedures. A summary of the General Pretreatment Regulations is provided in Table 9-1. Major technical changes resulting from final regulatory amendments or court decisions are noted in this table.

Summary and Background

The three specific objectives cited in 40 *CFR* 403.2 of the General Pretreatment Regulations are to:

- Prevent the introduction of pollutants that would cause interference with the POTW or limit the use and disposal of its sludge
- Prevent the introduction of pollutants that would pass through the treatment works or be otherwise incompatible
- Improve the opportunities to recycle or reclaim municipal and industrial wastewaters and sludges.

In addition, improved POTW worker health and safety and reduction of influent loadings to sewage treatment plants are further objectives of pretreatment. Briefly stated, the definitions for interference and pass through are the following (see 40 *CFR* 403.3 for the exact definitions):

- Interference is a discharge that alone or in conjunction with other discharges, disrupts the POTW or sludge processes, uses, and disposal, and therefore in turn causes violation of any requirement of the POTW's NPDES permit or prevents the POTW from using its chosen sludge use or disposal practice.
- Pass through is a discharge that exits the POTW's to waters of the United States in quantities or concentrations which, alone or in conjunction with other discharges, causes a POTW NPDES permit violation.

The General Pretreatment Regulations detail the procedures, responsibilities, and requirements of EPA, States, POTWs, and industries. To achieve the objectives of the regulations, implementation of the program by all regulated entities must be accomplished. The specific responsibilities of each are explained below.

The term Publicly Owned Treatment Works or POTW means a treatment works as defined by section 212 of the Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works.

Many of the specific prohibitions provide municipalities with the basis for instituting a proactive capacity, management, operation, and maintenance (CMOM) program, protecting the collection system from degradation due to explosion, corrosion, and obstruction. Particularly if locations of overflows (Sanitary Sewer Overflows {SSOs} and Combined Sewer Overflows {CSOs}) are predictable (based on facility history) and persistent, implementation of these pretreatment requirements should be evaluated.

Guidance manuals developed to assist EPA Regional Offices, States, POTWs, and industries with implementation of the General Pretreatment Program are listed in Section C, "References," of this chapter. In addition, policy memorandums from the EPA Office of Water Enforcement and Permits on pretreatment issues are listed.

Program Development and NPDES Requirements

Two terms are important in understanding the General Pretreatment Regulations: "Control Authority" and "Approval Authority." Control Authority directly regulates the significant industrial users (SIUs) (see glossary for definition) discharging to a POTW. The Control Authority is the POTW if the POTW has an approved pretreatment program. In the absence of an approved pretreatment program, the NPDES State is the Control Authority, if authorized by EPA. In the event neither the POTW nor the NPDES State has an approved pretreatment program, then EPA is the Control Authority. The Approval Authority oversees the development and implementation of POTW pretreatment programs and, for POTWs without an approved pretreatment program, is also the Control Authority that regulates industrial discharges to the POTW. The EPA Regional Office is the Approval Authority until a State is approved to administer the pretreatment program. Once a State is approved, the EPA Regional Office

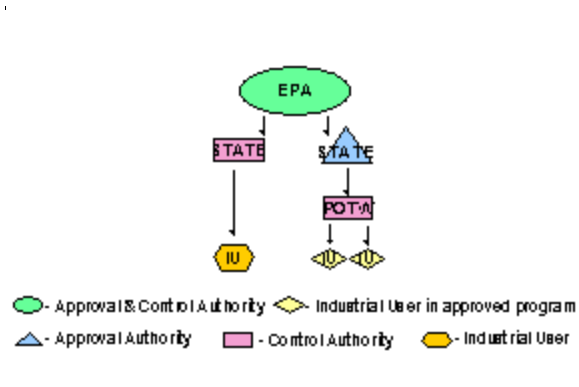
maintains oversight responsibilities. See Figure 9-1 for a visual representation of Control Authority and Approval Authority.

The NPDES permit must include development and implementation requirements for POTWs required to develop a program. Those requirements will thereby become an enforceable component of the permit. Part 403.8 of the General Pretreatment Regulations details the responsibilities of a POTW during the development of a pretreatment program. Additional information on the responsibilities of Control Authorities is provided in the EPA *Guidance Manual for POTW Pretreatment Program Development* (1993) and subsequent EPA guidance manuals.

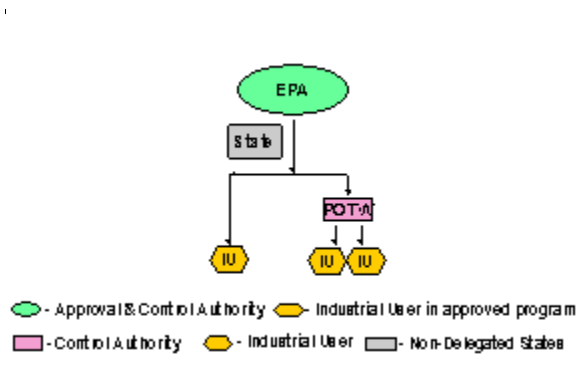
The Control Authority Pretreatment program is submitted to the Approval Authority, either the EPA Regional Office or the approved State. Once approval has been received the state or EPA amends the NPDES permit to require the Control Authority to implement the program.

Figure 9-1

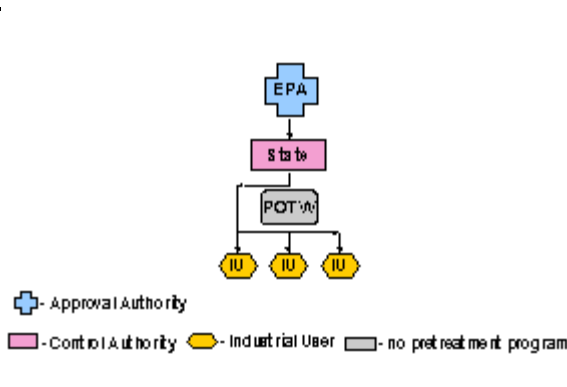
Approval Authority vs. Control Authority



Delegated States



Non-Delegated States



States Assuming Direct Responsibility

Approval Authority Responsibilities

The EPA Regional Office or an approved State administer a pretreatment program. The principal tasks for which an Approval Authority (EPA Regional Office or delegated State) is responsible are the following:

- Reviewing and approving POTW pretreatment programs and major modifications (see "Control Authority Responsibilities" for what Control Authority program development entails)
- Overseeing POTW program implementation, i.e., conducting Pretreatment Compliance Inspections (PCIs), audits, and annual report reviews
- Providing POTWs with technical assistance on the requirements of the General Pretreatment Regulations, categorical pretreatment standards, and POTW pretreatment program requirements
- Notifying POTWs of new and existing program requirements
- Determining SIU and POTW compliance with all applicable Federal requirements
- Applying and enforcing pretreatment standards and requirements at industries discharging to POTWs that do not have an approved local pretreatment program
- Initiating enforcement action against noncompliant POTWs or industries.

Part 403.10 of the General Pretreatment Regulations identifies the requirements a State must meet to receive approval of the pretreatment program as part of its NPDES authority, that is, to become an Approval Authority. For States preferring to assume the responsibility of directly regulating industries discharging to POTWs and, hence, being considered the Control Authority in lieu of POTWs within the State, 40 *CFR* 403.10(e) provides that option.

Control Authority Responsibilities

Before a Control Authority pretreatment program is approved, the Approval Authority (EPA or state) is the Control Authority for industries discharging to the POTW. After program approval, the Control Authority becomes responsible for implementing the requirements specified in the General Pretreatment Regulations [40 *CFR* 403.8(f)], the POTW pretreatment program, and the requirements of the NPDES permit. Note the permittee must comply with the permit regardless of program approval. To fully implement the pretreatment program throughout the entire service area, the Control Authority has responsibilities related to several specific areas:

- Legal authority
 - Deny or place a new or increased discharge condition

- Require industrial users (IUs) to comply with applicable pretreatment standards and requirements
 - Require development of compliance schedules
 - Carry out all inspection, surveillance, and monitoring procedures to determine industrial user compliance
 - Enter premises of industrial users
 - Apply Federal pretreatment standards to IUs
 - Seek injunctive relief for noncompliance
 - Seek or assess civil or criminal penalties of at least \$1,000 a day per violation
 - Immediately halt a discharge that presents or appears to present an imminent endangerment to the health or welfare of persons or to the environment or that threatens to interfere with the POTW's operation
 - Comply with confidentiality requirements
 - Develop and enforce an adequate sewer use ordinance
 - Control through permit order, or similar means, the contribution to the POTW by each industrial user. Individual control mechanisms that contain minimum required elements must be issued to significant industrial users.
- Pretreatment standards
 - Identify and locate all possible industrial users that may be subject to the pretreatment program
 - Identify the character and volume of pollutants contributed to the POTW
 - Establish and periodically reevaluate local limits to ensure protection of the POTW from interference or pass through and to ensure the use or disposal of POTW sludge
 - Notify all industrial users of appropriate pretreatment standards, any changes to the regulations, and requirements of the Resource Conservation and Recovery Act (RCRA)
 - Update the industrial survey to identify new industries that should be regulated by the POTW pretreatment program, and identify changes in manufacturing processes and wastewater discharge characteristics at existing facilities
 - Comply with public participation requirements.

- Industrial user compliance and enforcement
 - Establish reporting, inspection, and monitoring requirements and procedures to enable evaluation of compliance, including proper QA/QC and chain-of-custody procedures for sampling and analysis
 - Inspect and sample industrial users. At a minimum, significant industrial users must be sampled and inspected at least once a year
 - Evaluate each significant industrial user at least once every 2 years for the need for a slug discharge control program
 - Perform sampling and analysis in a manner to produce evidence admissible in enforcement proceedings or in judicial actions.
 - Develop and implement an enforcement response plan to guide compliance evaluation and enforcement activities
 - Evaluate industry compliance by reviewing and analyzing industrial user self-monitoring reports and Control Authority monitoring data
 - Investigate instances of noncompliance
 - Initiate appropriate enforcement action to bring users into compliance
 - Establish other procedures as required and/or determined to be needed to regulate the significant industries discharging to the POTW.
- Public participation
 - Publish at least annually, in the local newspaper with the greatest circulation, a list of the industrial users that were in significant noncompliance within the past 12 months as defined in 40 *CFR* 403.8(f)(2)(vii)
 - Notify the public of any changes to the sewer use ordinance or local limits after approval by the Approval Authority
 - Submit pretreatment program modifications to Approval Authority.
- Data management
 - Maintain records of pertinent industrial user activities and compliance status
 - Maintain a current understanding of the categorical pretreatment standards and General Pretreatment Regulations, and notify industries of any changes
 - Provide the Approval Authorities with any reports required.

- Resources
 - Provide adequate resources and qualified personnel for program implementation

As pretreatment needs change, the Control Authority may need to revise the approved program. When this occurs, the Control Authority should submit the modifications to the Approval Authority for review and approval.

Industry Responsibilities

Industrial dischargers to POTWs must comply with the following:

- Prohibited discharge standards—The general and specific prohibited discharge standards (40 *CFR* 403.5) noted in Table 9-1.
- Appropriate pretreatment standards—Categorical pretreatment standards (40 *CFR* Parts 405-471), State requirements, or locally developed discharge limitations as per 40 *CFR* 403.5.
- Reporting requirements—As specified in 40 *CFR* 403.12 and/or by the POTW. The requirements provided in 40 *CFR* 403.12 are summarized in Table 9-1.

The types of industrial facilities that are categorical industries are listed in Table 9-2. EPA has developed categorical pretreatment standards for these industries based on the type of wastes produced by the manufacturing processes at each type of industry, the wastewater control technologies available to the industry, and economic considerations. The categorical pretreatment standards developed apply to the wastewaters from specific manufacturing processes. The standards apply at the point of discharge from the pretreatment unit for the regulated process, or if there is no pretreatment unit, they apply at the end of the regulated process.

Where the Control Authority has determined that specific limitations for certain pollutants of concern are needed to protect the POTW from interference, pass through, and sludge contamination, the Control Authority must develop and enforce such limitations. These local limitations generally are applied at the point where the industrial facility discharges to the POTW.

An industry must meet the more stringent pretreatment standard for each pollutant. For a categorical industry, this will be the categorical pretreatment standard or a local limit for each pollutant regulated. If the point at which the Control Authority's limitation applies is not the same as the point at which the categorical pretreatment standard applies, the control authority will have to either compare a calculation to adjust the categorical pretreatment standard to the discharge limitations or sample at both points so that they can determine compliance with categorical standards and local limits.

When evaluating the pretreatment standards to determine the appropriate limitation, the inspector should note that different categorical pretreatment standards were developed for each type of industry. If the industry combines the flows from more than one regulated process or

combines a regulated process flow with other flows before these wastes are treated, the Control Authority and the industry must adjust the categorical pretreatment standard using the Combined Wastestream Formula (CWF). The equation is provided in 40 *CFR* 403.6(e) of the

General Pretreatment Regulations. If the wastewaters are mixed after treatment, the categorical pretreatment standards must still be adjusted, in this case by flow weighted averaging of all flows introduced prior to the sample point. In either case, the resulting alternative limit cannot be set below the level of detection for that pollutant. Additional information on the combined wastestream formula and the flow weighted averaging formula is provided in EPA's *Guidance Manual for Implementing Production-Based Pretreatment Standards and the Combined Wastestream Formula* (1985).

Categorical industries have specific reporting requirements as per 40 *CFR* 403.12. A summary of the reports that categorical industries are required to submit is provided in Table 9-2. A Control Authority may require additional reports from all industries discharging to the system, including categorical industries.

Table 9-1

Summary of the General Pretreatment Regulations

403.1	Purpose and Applicability
403.2	Objectives of General Pretreatment Regulations
403.3	Definitions
403.4	State or Local Law
	The Federal General Pretreatment Regulations are not meant to affect any State or local regulatory requirements as long as these requirements are at least as stringent as the Federal regulations.
403.5	National Pretreatment Standards: Prohibited Discharges
	This section specifies general and specific prohibited discharge standards that Control Authorities must incorporate into their pretreatment programs. The general prohibitions specify that pollutants introduced into POTWs by a nondomestic source shall not pass through the POTW or interfere with the operation or performance of the works. The section provides that Control Authorities required to develop local pretreatment programs and POTWs where interference and pass through are likely to recur develop and enforce specific limitations (local limits) to implement the general prohibitions against interference, pass through, and sludge contamination.
	The specific prohibitions specify prevention of discharge of pollutants that cause any of the following at the POTW:
	<ul style="list-style-type: none"> • Fire or explosion hazard, including no discharge with a closed-cup flashpoint of less than 60°C (140°F) using test methods in 40 CFR 261.21 • Corrosive structural damage (no pH<5.0) • Obstruction to the flow in the POTW • Interference • Heat causing inhibition of biological activity and temperatures at the POTW treatment plant to exceed 40°C (104°F) • Petroleum oils, nonbiodegradable cutting oils, or products of mineral oils in amounts that will cause interference or pass through • Fume toxicity or reactivity • Trucked or hauled pollutants except at designated discharge points.
	Additionally, industrial users are provided with an affirmative defense (if specified conditions are met) for actions brought against them for alleged violations of the general or specific prohibitions contained in this section.

Table 9-1**Summary of the General Pretreatment Regulations
(Continued)**

403.6	National Pretreatment Standards: Categorical Standards
	This section discusses development and implementation of categorical pretreatment standards including, but not limited to, compliance deadlines, concentrations and mass limits, prohibition of dilution as a substitute treatment, and the Combined Wastestream Formula (CWF) to determine discharge limitations.
403.7	Revision of Categorical Pretreatment Standards to Reflect POTW Removal of Pollutants
	This section (referred to as the removal credits provision) provides the criteria and procedures to be used by a POTW in revising the pollutant discharge limits specified in categorical pretreatment standards to reflect removal of pollutants by the POTW.
403.8	Pretreatment Program Requirements: Development & Implementation by POTW
	This section covers the requirements for pretreatment program development by a Control Authority. Included in this section are criteria for determining which POTWs must develop pretreatment programs, incorporation of approved programs and compliance schedules into NPDES permits, deadlines for program approvals, and program and funding requirements. 403.8(f) sets out the requirements of a POTW program. Specifically, it requires the Control Authority to have sufficient legal authority to enforce the approved pretreatment program. The section also discusses that all Control Authorities with approved programs, or programs under development, must develop and implement procedures to ensure compliance with the requirements of a pretreatment program.
403.9	Control Authority Pretreatment Programs and/or Authorization to Revise Pretreatment Standards: Submission for Approval
	This section discusses requirements and procedures for submission and review of Control Authority pretreatment programs. Included in this section are discussions of conditional program approval, approval authority action, and notification where submissions are defective.
403.10	Development and Submission of NPDES State Pretreatment Programs
	This section discusses requirements and procedures for submission and review of NPDES State pretreatment programs. Included in this section are discussions of approvals and deadlines for State programs, legal authority, program and funding requirements, and contents of program submissions.
403.11	Approval Procedures for Control Authority Pretreatment Programs and Revision of Categorical Pretreatment Standards
	This section provides the administrative procedures for the review and approval or denial of Control Authority pretreatment program submissions and requests for removal credit authority.

Table 9-1

**Summary of the General Pretreatment Regulations
(Continued)**

403.12	<p>Reporting Requirements for POTW s and Industrial Users</p> <p>This section presents reporting requirements for Control Authorities and industrial users. Reports required by industrial users include the following:</p> <ul style="list-style-type: none"> • <u>Baseline Monitoring Report (BMR)</u>. Due to the Control Authority within 180 days of the effective date of the categorical pretreatment standards (40 <i>CFR</i> 403.6). In addition, new source BMR reporting requirements are discussed in this section. • <u>Compliance schedule progress reports</u>. Due to the Control Authority within 14 days of completion of compliance schedule milestones or due dates. • <u>90-day compliance report</u>. Due to the Control Authority within 90 days of the compliance date of the categorical standards. • <u>Periodic reports on continued compliance</u>. Due to the Control Authority at least semiannually, usually in June and December after the compliance date. • <u>Notices of potential problems including slug loadings</u>. Due to the Control Authority immediately upon identification of discharges, including slug loadings that could cause problems to the POTW for both noncategorical and categorical industries. • <u>Notice of changed discharge</u>. Due to the Control Authority from categorical and noncategorical users in advance of any significant change in volume or character of pollutants discharged. • <u>Notice of violation and resampling</u>. Notification due to the Control Authority within 24 hours of noting a violation; results of resampling due within 30 days. • <u>Notification of hazardous waste discharge</u>. Notification to the POTW, EPA, and State Hazardous Waste authorities of the hazardous wastes discharges to the POTW. <p>Reports required from Control Authorities include the following:</p> <ul style="list-style-type: none"> • Compliance schedule (for development of pretreatment programs) progress reports • Annual POTW reports. <p>Also discussed in detail in this section are monitoring requirements for industrial users and signatory and recordkeeping requirements for Control Authorities and industrial users.</p>
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Table 9-1

**Summary of the General Pretreatment Regulations
(Continued)**

403.13	<p>Variations from Categorical Pretreatment Standards for Fundamentally Different Factors</p> <p>This provision allows an industrial user, or any interested person, to request a variance for the establishment of limits either more or less stringent than that required by a categorical pretreatment standard. The primary criterion required for approval of this variance is that the factors relating to the industrial user's discharges be fundamentally different from factors considered by EPA in establishing categorical pretreatment standards for these discharges.</p>
403.14	<p>Confidentiality</p> <p>This section covers confidentiality requirements and prohibitions for EPA, States, and Control Authorities. Effluent data are available to the public without restriction.</p>
403.15	<p>Net/Gross Calculation</p> <p>This provision provides for adjustment of categorical pretreatment standards to reflect the presence of pollutants in the industrial user's intake water.</p>
403.16	<p>Upset Provision</p> <p>This provision is consistent with the NPDES regulations and allows an upset of an industry's pretreatment system (which meets the conditions of an upset as specified in this provision) to be an affirmative defense to an action brought for noncompliance with categorical pretreatment standards. The industrial user shall have the burden of proof for such a defense.</p>
403.17	<p>Bypass</p> <p>This provision requires industrial users to operate their treatment systems at all times and includes criteria for allowing a bypass to occur and notification procedures for both an anticipated and unanticipated bypass.</p>
403.18	<p>Modification of Control Authority Pretreatment Programs</p> <p>This provision specifies procedures and criteria for "minor" and "substantial" modifications to approved Control Authority pretreatment programs and incorporation of substantial modifications into the Control Authority.</p>
403.19	<p>Provisions of specific applicability to the Owatonna Waste Water Treatment Facility</p> <p>This section provides specific regulatory requirements for the Owatonna Waste Water Treatment Facility and its participating Industrial Users to implement a project under the Project XLC program in Steele County, Minnesota. This project requires includes legal authorities and requirements that are different than the administrative requirements otherwise specified in 40 CFR Part 403.</p>
403.20	<p>Pretreatment Program Reinvention Pilot Projects Under Projects XL</p> <p>This section provides administrative procedures to allow any POTW with a final "Project XL" agreement to implement a Pretreatment Program that includes legal authorities and requirements that are different than the administrative requirements otherwise specified in 40 CFR Part 403.</p>

Table 9-1

**Summary of the General Pretreatment Regulations
(Continued)**

Appendix A	<p>Program Guidance Memorandum</p> <p>This memorandum summarizes the Agency's policy on the use of construction grants for treatment and control of combined sewer overflows and storm water discharges.</p>
Appendix B	[Reserved]
Appendix C	[Reserved]
Appendix D	<p>Selected Industrial Subcategories Considered Dilute for Purposes of the Combined Wastestream Formula (previously titled "Selected Industrial Subcategories Exempted from Regulation Pursuant to Paragraph 8 of the <u>NRDC v. Costle Consent Decree</u>")</p> <p>The Appendix D published on January 21, 1981, provided a list of industrial subcategories that had been exempted (pursuant to paragraph 8 of the <u>NRDC vs. EPA Consent Decree</u>) from regulation by categorical pretreatment standards. Appendix D was revised on October 9, 1986, to update the list of exempted industrial categories and to correct previous errors by either adding or removing various subcategories or by changing the names of some categories or subcategories. Each of the subcategories, as indicated by the revised Appendix D title, contains wastestreams that are classified as dilute for purposes of applying categorical pretreatment standards to other wastestreams and for using the combined wastestream formula to adjust these standards.</p>
Appendix E	<p>Sampling Procedures</p> <p>This appendix provides a general description of composite and grab sampling procedures.</p>
Appendix F	[Reserved]
Appendix G	Pollutant Eligible for a Pollutant Credit

Table 9-2

Categorical Pretreatment Standards

Industrial Categories With Categorical Pretreatment Standards in Effect	Effluent Guidelines Currently Under Development*
N Aluminum Forming (Part 467) E N Battery Manufacturing (Part 461) E N Builder's Paper and Board Mills (Part 431) E N Carbon Black Manufacturing (Part 458) E N Centralized Waste Treatment (Part 437) N Coil Coating (Part 465) E N Copper Forming (Part 468) E N Electrical and Electronic Components (Part 469) E Electroplating (Part 413) E N Fertilizer Manufacturing (Part 418) N Glass Manufacturing (Part 426) N Grain Mills Manufacturing (Part 406) N Ink Formulating (Part 447) N Inorganic Chemicals (Part 415) E N Iron and Steel Manufacturing (Part 420) E N Leather Tanning and Finishing (Part 425) E N Metal Finishing (Part 433) E N Metal Molding and Casting (Part 464) E N Nonferrous Metals Forming and Metal Powders (Part 471) E N Nonferrous Metals Manufacturing (Part 421) E N Organic Chemicals, Plastics, and Synthetic Fibers (Part 414) E N Paint Formulating (Part 446) N N Paving and Roofing Materials (Part 443) E N Pesticide Chemicals (Part 455) E N Petroleum Refining (Part 419) E N Pharmaceutical Manufacturing (Part 439) E N Porcelain Enameling (Part 466) E N Pulp, Paper, and Paperboard (Part 430) N Rubber Manufacturing (Part 428) N Soap and Detergent Manufacturing (Part 417) E N Steam Electric Power Generating (Part 423) E N Timber Products Processing (Part 429) E N Transportation Equipment Cleaning (Part 442) Waste Combustors (Part 444) E N	<ul style="list-style-type: none"> • Metal Products and Machinery • Pulp, Paper, and Paperboard, Phases 2 and 3 • Meat Products • Aquatic Animal Production

E = Standards in effect for existing sources.

N = Standards in effect for new sources.

*From August 2000, Effluent Guideline Plan [304(m)].

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9. B. Pretreatment Compliance Inspections (PCIs) and Audits

Scope of PCIs and Audits

The Pretreatment Compliance Inspection (PCI), the pretreatment program audit, and the program performance report (submitted at least annually by the POTW) provide an opportunity for EPA and State officials to assess the program and determine compliance of the Control Authority's pretreatment program.

EPA uses the PCI to evaluate Control Authority compliance monitoring and enforcement activities. The inspector also determines whether any changes have been made to the Control Authority program since the last PCI, audit, performance report (i.e., annual report), or Control Authority modification request for approval. The NPDES inspector collects information on Control Authority program implementation for further evaluation by compliance personnel.

The inspector may conduct the PCI in conjunction with other NPDES inspections to conserve travel resources and allow integration of information on a POTW's operations. PCIs are compatible with Compliance Evaluation Inspections (CEIs), Compliance Sampling Inspections (CSIs), Performance Audit Inspections (PAIs), Diagnostic Inspections (DIs), and other nonroutine inspections, such as Toxics Sampling Inspections, and Compliance Biomonitoring Inspections. The inspector may combine a PCI with a site visit regarding sludge compliance as discussed in Chapter Ten.

Note that the POTW personnel involved in a CSI may be different from the ones involved in a PCI. Also, PCIs and audits rely heavily on file and record reviews to evaluate the Control Authority's pretreatment program. These records may have little bearing on the sampling inspection of the treatment facility. This distinction of a PCI to a CSI should be addressed during planning for the inspection.

Audits provide as a comprehensive review of the Control Authority pretreatment program. The audit addresses all of the items covered in a PCI but in greater detail. Consequently, the audit is more resource intensive than the PCI.

Procedures for conducting PCIs and audits are similar. In general, there are three major components:

- Pre-visit preparation for the PCI or audit
 - Coordination with the EPA Regional or State Pretreatment Coordinator
 - Review of background information: approved program, Control Authority annual reports (if available), NPDES permit compliance status, Control Authority fact sheet, previous inspection reports, and program modification requests from the Control Authority

- Notification of Control Authority (if appropriate).
- Onsite
 - Entry (presenting credentials)
 - Opening conference with Control Authority officials
 - Review of pretreatment files
 - Industrial inspections (optional)
 - Interview of officials using PCI or audit checklist
 - Tour of POTW (optional)
 - Closing conference.
- Follow-up
 - Preparation of report
 - Water Enforcement National Data Base (WENDB) data entry into PCS
 - Reportable Noncompliance/Significant Noncompliance (RNC/SNC) determination
 - Follow-up letter to the Control Authority
 - Enforcement action (when necessary)
 - NPDES permit or program modifications (when necessary).

If a PCI is conducted with an unannounced NPDES inspection, it also may be unannounced, but the Control Authority officials should be notified of the PCI upon arrival of the inspection team. At many POTWs, personnel responsible for implementing the program may not be the same as those operating the treatment plant.

The protocol involved in the onsite portion of the inspection is comparable to that of other NPDES inspections. The Pretreatment Program PCI or audit includes a tour of industrial facilities discharging to the POTW. This aspect is unique to the Pretreatment Program. The tour is optional for PCI, but mandatory for audits and may be included to evaluate the Control Authority's procedures for properly categorizing, monitoring and inspecting industries. For more detailed information on conducting PCIs and audits, refer to EPA's *Guidance for Conducting a Pretreatment Compliance Inspection* (September 1991), and *Control Authority Pretreatment Audit Checklist and Instructions* (May 1992).

See the PCI and audit guidance manuals, respectively for detailed checklists.

PCI Checklist Components

EPA developed the PCI checklist to assist NPDES inspectors in conducting and documenting the PCI. The checklist consists of the following sections:

- Cover page—Provides space for Control Authority name, address, and representatives present, as well as the date(s) of the inspection and inspectors' names, titles, and telephone numbers.
- Section I: Industrial User File Evaluation—This section documents problems or deficiencies noted during review of industrial user files. Generally, the inspector reviews the files to determine whether the Control Authority has notified the industrial user of applicable categorization and requirements, issued an adequate control mechanism,

properly applied pretreatment standards, conducted sufficient compliance monitoring activities, and taken appropriate enforcement actions for violations.

- Section II: Supplemental Data Review/Interview—The inspector completes this section by interviewing the appropriate Control Authority personnel and enables the inspector to determine compliance with program requirements not easily determined by the file review or to acquire additional information. This section contains questions on the following six pretreatment program areas:
 - Control Authority Pretreatment Program Modifications
 - Industrial User Characterization
 - Control Mechanism Evaluation
 - Application of Pretreatment Standards and Requirements
 - Compliance Monitoring
 - Enforcement.
- Section III: Evaluation and Summary—This section consists of the same six pretreatment program areas listed above and allows the inspector to summarize deficiencies noted and any corresponding required and/or recommended corrective actions.
- Attachment A: Pretreatment Program Status Update—This section provides an update of the pretreatment program's status. It should be updated prior to the PCI, based on information from the most recent PCI or audit and latest pretreatment program performance report and should be revised during the inspection based on information obtained during the PCI, if necessary.
- Attachment B: Pretreatment Program Profile—This section provides information on the Control Authority's approved pretreatment program, NPDES permit conditions, and applicable pretreatment regulations.

- Attachment C: Worksheets
 - WENDB Data Entry Worksheet—The WENDB data elements provide information to be entered in the Pretreatment Permits and Enforcement Tracking System (PPETS). This management information system tracks the permit compliance and enforcement status of approved pretreatment programs.
 - Reportable Noncompliance (RNC) Worksheet—This worksheet evaluates whether the Control Authority is in RNC for failure to implement its approved pretreatment program.
 - IU Site Visit Report—This report documents any industrial user site visits that were conducted as part of the PCI.
 - IU File Evaluation Worksheets—These optional worksheets assist the inspector in documenting and quantifying the Control Authority's performance in applying standards, compliance monitoring, and enforcement activities.

In addition to the completed checklist, the inspector will include other materials collected during the PCI in the final report as appendices, e.g.,:

- Example of Control Authority control mechanism or enforcement actions
- Names of industries that were not sampled or inspected in the past year
- Control Authority's Enforcement Response Plan (ERP)
- Annual list of industrial users in significant noncompliance.

See the EPA's *Guidance for Conducting a Pretreatment Compliance Inspection* (September 1991) the PCI checklist. The manual goes through each checklist section individually and explains the intent of the questions. As noted earlier, the manual provides more detailed information concerning the procedures for conducting the PCI.

Summary of Audit Checklist Components

The audit checklist has been developed to assist with a detailed review of a POTW pretreatment program, including pretreatment program modification, legal authority, industrial user characterization, control mechanism evaluation, application of pretreatment standards and requirements, compliance monitoring, enforcement, data management/ public participation, resources, and environmental effectiveness/pollution prevention. The audit checklist is divided into the following sections:

- Cover page
- Section I: Industrial User File Evaluation
- Section II: Data Review/Interview/Industrial User Site Visits
- Section III: Findings
- Attachment A: Pretreatment Program Status Update
- Attachment B: Pretreatment Program Profile
- Attachment C: Worksheets
 - Industrial User Site Visit Data Sheet
 - WENDB Data Entry Worksheet

- RNC Worksheet.

The audit checklist collects more detailed information than the PCI checklist and, as with the completed PCI checklist, also may be augmented by additional audit data:

- NPDES pretreatment permit conditions
- Control Authority enforcement documents with pretreatment requirements (i.e., administrative order, consent decree)
- Locally developed discharge limitations as included in the approved program (or any limits that have been changed by the Control Authority)
- Copy of sewer use ordinance if different from that in the approved program
- Control Authority sampling and inspection schedule for regulated industries
- List of industries not sampled or inspected in the past year
- Control Authority chain-of-custody form
- List of noncompliant industries and history of enforcement actions taken
- Annual list of industrial users in significant noncompliance.

The audit checklist is part of the *Control Authority Pretreatment Audit Checklist and Instructions* (May 1992). The manual provides specific guidance on conducting an audit and using the checklist.

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9. C. References

EPA's *Guidance for Conducting a Pretreatment Compliance Inspection* (September 1991) contains a comprehensive list of reference materials (publications and memorandums) available from U.S. EPA or the Pretreatment Coordinator in your Region. **References published since the publication of the Pretreatment Guidance are listed below.**

Checklists for conducting pretreatment compliance inspections and audits are provided in EPA's *Guidance for Conducting a Pretreatment Compliance Inspection* (September 1991) and *Control Authority Pretreatment Audit Checklist and Instructions* (May 1992). The checklist provides a list of questions that should be considered during an audit or PCI. The inspector should contact the Regional or State Pretreatment Coordinator before a PCI or an audit is done.

References

Memoranda

Applicability of pH Waivers to Pretreatment Standards (May, 13, 1993).

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