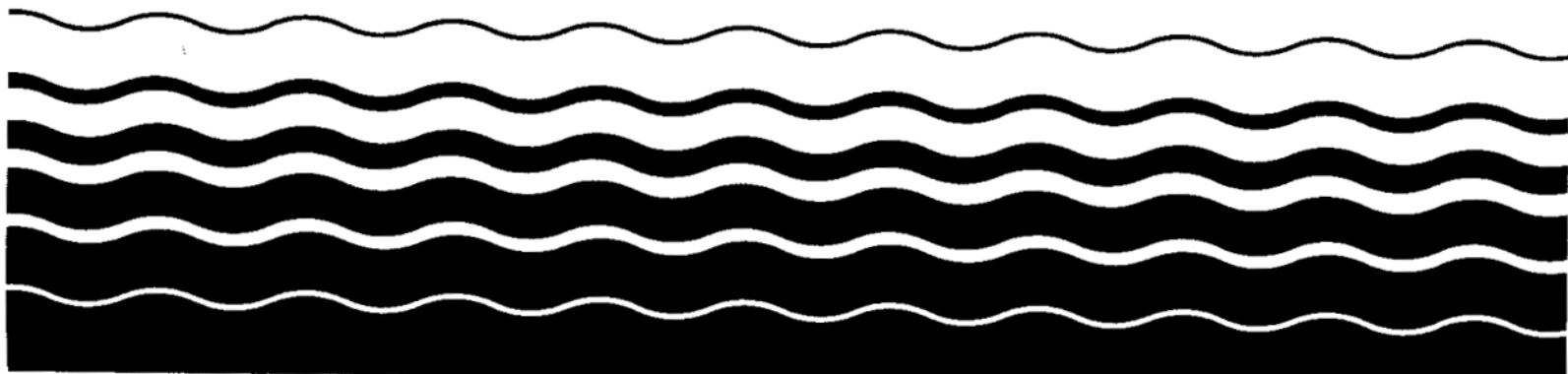




Pretreatment Compliance Monitoring and Enforcement Guidance



PRETREATMENT COMPLIANCE MONITORING
AND ENFORCEMENT GUIDANCE

OFFICE OF WATER ENFORCEMENT AND PERMITS

JULY 25, 1986

U.S. ENVIRONMENTAL PROTECTION AGENCY
401 M STREET, S.W.
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
WATER

JUL 25 1986

MEMORANDUM

SUBJECT: Pretreatment Compliance Monitoring and Enforcement Guidance

FROM: *James R. Elder*
James R. Elder, Director
Office of Water Enforcement and Permits (EN-335)

TO: Water Management Division Directors, Regions I-X
State Pretreatment Program Directors
Pretreatment Implementation Review Task Force

The Pretreatment Implementation Review Task Force (PIRT) in its Final Report to the Administrator recommended that the Agency develop an implementation guidance for Publicly-Owned Treatment Works (POTWs) with approved pretreatment programs. In response to that recommendation, the Office of Water Enforcement and Permits has developed the attached final, "Pretreatment Compliance Monitoring and Enforcement Guidance". Draft Guidance was distributed in January 1986 for review. This final guidance document responds to extensive comments received from EPA Regional Offices, States, several POTWs and PIRT.

POTWs must undertake a variety of new activities to successfully operate their approved pretreatment programs. This document is intended to be a comprehensive guide to pretreatment implementation, particularly on-going compliance monitoring and enforcement activities. This Guidance provides a detailed discussion of:

- 1) establishing monitoring requirements for industrial users,
- 2) sampling and inspecting industrial users,
- 3) reviewing industrial user reports,
- 4) determining industrial user compliance status,
- 5) setting priorities for enforcement actions, and
- 6) reporting progress to Approval Authorities.

It establishes a definition of Significant Industrial User (SIU) for use by Control Authorities in targeting primary implementation activities and recommends a definition of Significant Noncompliance (SNC) to be applied in evaluating industrial user performance in complying with effluent and reporting requirements as well as compliance schedules.

To evaluate and improve the effectiveness of the pretreatment program, reporting at all levels--industrial user, POTW and States--will be an on-going and significant activity. These reports will be a necessary component towards determining national compliance with pretreatment standards. As indicated, the Guidance establishes common definitions which can be used as the basis for consistent reporting and provides a recommended format for collection of data from Control Authorities on at least an annual basis.

The reporting system and the definitions of significant noncompliance and significant industrial user are issued as guidance. However, Approval Authorities and Control Authorities should understand that it is the goal of the Office of Water Enforcement and Permits to establish a national reporting system based on the concepts in this document. A Pretreatment Enforcement Tracking System is now under development which will be based on the Pretreatment Performance Summary found in the Guidance. Approval Authorities should anticipate such requirements and strongly consider requiring Control Authorities to begin full implementation of this reporting system and associated definitions.

To assist Control Authorities in gaining proficiency with compliance monitoring and enforcement activities, the Regional Offices and delegated States are encouraged to conduct training workshops providing practical examples of these activities. The Office of Water Enforcement and Permits (OWEP) is prepared to jointly develop and conduct such workshops with Regional Offices.

After issuing this Guidance, OWEP plans to work with several Control Authorities (and their States and Regional Offices) to implement the concepts identified in the Guidance. We will carefully review the results of these efforts along with the experiences of other Control Authorities, States and Regions to determine whether future revisions and/or additions are needed in the Guidance.

This Guidance is intended to assist the Control Authority in translating regulatory requirements into a workable, effective pretreatment program. Control Authorities may be unable to implement all aspects of the Guidance initially, but may adopt the recommended approaches on a phased basis. EPA may periodically issue additional guidance which defines annual priorities for pretreatment implementation.

If you have questions about this Guidance, please call J. William Jordan, Director, Enforcement Division, at (202) 475-8304 or Anne Lassiter, Chief, Policy Development Branch, at (202) 475-8307.

Attachment

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- B. Procedures for Inspections at Industrial Facilities
- C. Average Limitations
- D. Reporting Requirements Currently Approved by the
Office of Management and Budget (7/86)

SECTION 1.1 INTRODUCTION

The Pretreatment Implementation Review Task Force (PIRT), in its Final Report to the Administrator, recommended that the United States Environmental Protection Agency (USEPA) develop implementation guidance for Publicly Owned Treatment Works (POTWs) with approved pretreatment programs. In response to that recommendation, the USEPA has developed the "Pretreatment Compliance Monitoring and Enforcement Guidance" to provide to POTWs that act as Control Authorities with information about pretreatment implementation responsibilities.

This guidance is designed to provide a description of implementation responsibilities, with particular emphasis on compliance monitoring and enforcement activities. The guidance addresses: (1) Industrial User obligations to comply with pollution control requirements, conduct self-monitoring, and report on their compliance status; and (2) Control Authority responsibilities to implement the pretreatment program, sample and inspect industrial users, determine industrial user compliance status, take enforcement action, and report to Approval Authorities.

In addition to general descriptions of the various requirements, this guidance document assists and guides Control Authorities in implementing the pretreatment program by providing:

- ° A definition of Significant Industrial Users (SIUs)
- ° Recommended industrial user monitoring frequencies
- ° Guidance on semiannual reports by industrial users

- ° A description of EPA's "Enforcement Management System" as a guide for Control Authorities
- ° A definition of Significant Noncompliance (SNC) for industrial users
- ° A Pretreatment Performance Summary, that EPA recommends Approval Authorities make part of annual report requirements.

While the guidance describes examples of how to implement various aspects of the program, the usefulness of the processes and procedures described will vary somewhat, depending on the size of the Control Authority. A small pretreatment program may need less structure and may be able to operate less formally than a large Control Authority. Also, the Pretreatment Program is continuing to evolve, and the concepts and procedures recommended here may change with experience. Specific questions about this guidance or about implementation of a local pretreatment program should be addressed to the Approval Authority.

Discussion of specific requirements that must be met in order to comply with the laws of the State in which a particular Control Authority is located is beyond the scope of this document. For example, a neutral inspection plan (see Section 3.2) must meet Federal constitutional minimum requirements, as well as any specific State constitutional or statutory provisions. The Control Authority therefore should consult with its counsel to determine how to "personalize" its program.

Nothing in this Guidance shall effect EPA's authority to bring enforcement actions for pretreatment violations of Federal law.

SECTION 2.1
INDUSTRIAL USER PRETREATMENT REQUIREMENTS

The National Pretreatment Program's primary goal is to protect Publicly Owned Treatment Works (POTWs) and the environment from the adverse impact that may occur when toxic wastes are discharged into a sewage system. This protection is achieved by regulating the nondomestic users of POTWs that discharge toxic wastes or unusually strong conventional wastes. These regulated sources are called industrial users. Section 2 of this guidance identifies for the Control Authority pretreatment standards, Significant Industrial Users (SIUs), reporting requirements, and self-monitoring frequencies.

2.1.1 Pretreatment Standards

The General Pretreatment Regulations establish general and specific prohibited discharge standards (40 CFR §403.5(a) and (b)) that apply to all industrial users. These prohibitions apply whether or not the source is subject to other Federal, State, or local pretreatment standards. Specific prohibitions protect the treatment plant and operations by prohibiting the discharge of pollutants that:

- ° Create a fire or explosion hazard
- ° Are corrosive (with a pH lower than 5.0)
- ° Obstruct flow in the sewer system or interfere with operations
- ° Upset the treatment processes or cause a violation of the POTW's permit
- ° Increase the temperature of wastewater entering the treatment plant to above 104°F (40°C).

General prohibitions protect the treatment plant from any interference with its operations or any pass-through that would cause violation of effluent limits or other requirements of the POTW's National Pollutant Discharge Elimination System (NPDES) permit.

Section 403.5(c) requires Control Authorities to develop and enforce local limits to ensure that the general and specific prohibitions are met by industrial users. Local limits are the mechanism by which general and specific discharge prohibitions are applied in a technically based, defensible manner for individual, nondomestic users of the Control Authority system. Note that §403.5(d) of the General Pretreatment Regulations deems local limits to be pretreatment standards as defined in Section 307(d) of the Clean Water Act (CWA). As such, these requirements are federally enforceable.

At a minimum, the Environmental Protection Agency (EPA) has directed each Control Authority to determine the maximum allowable treatment plant headworks (influent) loading for cadmium, chromium, copper, nickel, lead, and zinc, to evaluate the need for local limits (memorandum from Rebecca W. Hanmer, Director of the Office of Water Enforcement and Permits to Regional Water Management Division Directors and NPDES State Directors, August 5, 1985). To aid in evaluating local limits, EPA has developed a computer program, PRELIM. For further information on this software, contact your Approval Authority or the EPA Regional Office.

Categorical standards are published by EPA as separate regulations and contain numerical limits for the discharge of pollutants from specified industrial categories. Categorical standards have been or will be developed for categories determined to be the most significant sources of pollutants. Table 2-1 shows the industrial categories with pretreatment standards, the date issued in the Federal Register, the effective date, and the compliance date for existing facilities. In addition, pretreatment standards

(Revised 4-22-86)

TABLE 2-1

INDUSTRIES SUBJECT TO CATEGORICAL PRETREATMENT STANDARDS

FINAL REGULATIONS

<u>Industry Category</u>	<u>Date Issued In Federal Register</u>	<u>Effective Date</u>	<u>PSES¹ Compliance Date</u>
Timber Products Processing	1-26-81	3-30-81	1-26-84
Electroplating ²	1-28-81	3-30-81	4-27-84
			(Nonintegrated)
			6-30-84
			(Integrated)
	7-15-83	8-29-83	7-15-86 (TTO)
Iron & Steel	5-27-82	7-10-82	7-10-85
Inorganic Chemicals ³			
-Certain Subparts	7-20-77		7-20-80
-Phase I	6-29-82	8-12-82	6-29-85
-Phase II	8-22-84	10-5-84	8-22-87
Petroleum Refining	10-18-82	12-01-82	12-01-85
Pulp and Paper Mills	11-18-82	1-03-83	7-01-84
Builders' Paper and Board Mills	11-18-82	1-03-83	7-01-84
Steam Electric Power Generating	11-19-82	1-02-83	7-01-84
Leather Tanning and Finishing	11-23-82	1-06-83	11-25-85
Porcelain Enameling	11-24-82	1-07-83	11-25-85
Coil Coating (Phase I)	12-01-82	1-17-83	12-01-85
-Steel Basis Material			
-Galvanized Basis Material			
-Aluminum Basis Material			
Electrical and Electronic Components (Phase I)	4-08-83	5-19-83	7-01-84
-Semiconductors			11-08-85(As)
-Electronic Crystals			
Metal Finishing	7-15-83	8-29-83	6-30-84 (Part 443 TTO)
			7-10-85 (Part 420 TTO)
			2-15-86 (Final)
Copper Forming	8-15-83	9-26-83	8-15-86
Pharmaceuticals	10-27-83	12-12-83	10-27-86
Coil Coating (Phase II) (Cannmaking)	11-17-83	1-02-84	11-17-86
Electrical and Electronic Components (Phase II)	12-14-83	1-27-84	7-14-87
-Cathode Ray Tube			
-Luminescent Materials			
Nonferrous Metals Manufacturing			
-Phase I	3-08-84	4-23-84	3-09-87 (Subparts A-M)
-Phase II	9-20-85	11-04-85	9-20-88 (Subparts N-AE)
Battery Manufacturing	3-09-84	4-23-84	3-09-87
Nonferrous Metals Forming and Metal Powders	8-23-85	10-7-85	8-23-88
Pesticide Chemicals	10-4-85	11-18-85	11-18-88
Metal Molding and Casting	10-30-85	12-13-85	10-31-88

(Revised 04-22-86)

TABLE 2-1 (continued)

INDUSTRIES SUBJECT TO CATEGORICAL PRETREATMENT STANDARDS

PROPOSED REGULATIONS

<u>Industry Category</u>	<u>Date Issued In Federal Register</u>	<u>Scheduled Promulgation Date</u>
Organic Chemicals and Plastics and Synthetic Fibers	3-21-83	12-86
Plastics Molding and Forming (Phthalates)	(4-86)	(7-87)

¹PSES-Pretreatment Standards for Existing Sources.

²Existing job shop electroplaters and independent printed circuit board manufacturers must comply with only the electroplating regulations. All other electroplating operations are now covered by the metal finishing standards.

³Final compliance date for Subparts A, B, L, AL, AR, BA, and BC is July 20, 1980. The compliance date for Subparts AJ, AU, BL, BM, BN, and BO, except for discharges from copper sulfate or nickel sulfate manufacturing operations, is August 22, 1987. The compliance date for discharges from copper sulfate and nickel sulfate manufacturing operations and for all Subparts in Part 415 not previously specified is June 29, 1985.

for the Organic Chemicals, Plastics, and Synthetic Fibers industry are scheduled to be promulgated in December 1986, and additional categories may be developed or subject to amendments. Industrial users required to meet the standards shown in Table 2-1 are referred to as categorical industries. In some cases, local limits will be more stringent than categorical standards, since they are based on local, site-specific situations. Where the limits can be compared for equivalence, the more stringent limit applies and is enforceable as a Federal standard; otherwise, both limits apply and are enforceable.

When determining whether local limits or categorical standards are more stringent, the comparison must be made at the same sampling point. Local limits generally apply to the industrial user's total discharge to the POTW. Categorical standards generally apply to specific wastestreams, and may need to be adjusted when applied to mixtures of regulated, unregulated, and dilution wastestreams. For example, a local limit for nickel of 3.5 mg/l (for the total industrial user's discharge) may appear to be more stringent than a categorical standard of 4.1 mg/l (for the electroplating wastestreams). However, if 25 percent of the discharge is noncontact cooling waters that do not contain nickel, the categorical standard measured at the discharge to the POTW would be $4.1 \times .75 = 3.1$ mg/l. In this example, the categorical standard is more stringent.

If a single maximum local limit is to replace a maximum daily and a monthly (or 4-day) average categorical standard, the local limit must be more stringent than both values and must apply each day that the monthly average would apply. If the single maximum

local limit is more stringent than the daily maximum contained in a categorical standard, but less stringent than the applicable long-term average (4-day or monthly average), the POTW must enforce both the local limit and the monthly (or 4-day) average.

2.1.2 Industrial User Reporting Requirements

General Pretreatment Regulations at 40 CFR 403.12 set forth five basic reporting requirements that apply to industrial users subject to specific categorical pretreatment standards. Categorical industrial users must comply with these Federal reporting requirements, even if the Control Authority has determined that the local limit(s) requirement is more stringent than the categorical standard. These requirements are as follows:

- ° Baseline Monitoring Report (403.12(b)), including a compliance schedule, when necessary, for meeting categorical pretreatment standards (403.12(c)).

Within 180 days after the effective date of a categorical standard or 180 days after a final decision on a category determination submission, whichever is later, an industrial user subject to the standard must submit to the Control Authority a report that indicates whether the industrial user meets the standard. The specific elements of the report are contained in 40 CFR 403.12(b)(1-7).

- ° Report on Progress in Meeting Compliance Schedules (40 CFR 403.12(c)).

Categorical industrial users who are required to submit compliance schedules in conjunction with their baseline monitoring reports must report their progress to the Control Authority within 14 days of each date in their schedule.

- ° Report on Compliance with Categorical Pretreatment Standard Deadline (403.12(d)).

Within 90 days following the date for final compliance with the applicable categorical standard (see Table 2-1 on page 2-3), the affected industrial user must submit to the Control Authority a report indicating the nature and concentration of all limited pollutants in the regulated discharges and the average and maximum daily flow for these discharges. The report also must indicate whether the pretreatment standards are being met consistently.

- Periodic Report on Continued Compliance (403.12(e)).

Categorical industrial users are required to report on their regulated waste discharges to the Control Authority at least semiannually. The regulations [Section 403.12 (e)(1)] state that the reports are to contain information "indicating the nature and concentration of pollutants in the effluent which are limited by such categorical pretreatment standards." For some categorical TTO standards, the categorical regulation provides for the use of a certification as a substitute for sampling and analysis results. In addition, this report shall include a record of measured or estimated average daily flows for the reporting period.

- Notice of Slug Loading (403.12(f)).

All industrial users must notify the Control Authority immediately of any slug loading. Slug loading is defined as any pollutant (including Biochemical Oxygen Demand (BOD)) released in a discharge at a flow rate or concentration which will cause interference with the operation of the treatment works. Slug loads are often defined in the local ordinance.

As stated earlier, the General Pretreatment Regulations require that categorical industrial users submit the above reports. (Note that the Notice of Slug Loading is required of any industrial user subject to general and specific prohibitions. New sources are required to submit all of the above reports except the report on progress in meeting compliance schedules.) Any request for one of the above reports should note the Office of Management and Budget approval number shown in Appendix D.

2.1.3 Definition of Significant Industrial User

The substantive requirements of the General Pretreatment Regulations are applicable to all industrial contributors to POTWs. While the General Pretreatment Regulations contain very specific reporting requirements for categorical industries, they are less clear about the obligations of noncategorical industries--those industries subject only to locally developed discharge standards

(local limits) and to general and specific discharge prohibitions. Proposed changes to the General Pretreatment Regulations may clarify the need for Control Authorities to set reporting requirements for significant noncategorical industrial users subject to other pretreatment standards. Amendments to these regulations are scheduled to be final in August 1987. This guidance recommends that Control Authorities impose the same periodic reporting requirements (as described in 2.1.2) on all significant industrial users. For purposes of this guidance, a Significant Industrial User (SIU) is defined as:

- ° All categorical industrial users
- ° Any noncategorical industrial user that
 - Discharges 25,000 gallons per day or more of process wastewater ("process wastewater" excludes sanitary, noncontact cooling and boiler blowdown wastewaters)
 - Contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic (BOD, TSS, etc.) capacity of the treatment plant
 - Has a reasonable potential, in the opinion of the Control or Approval Authority, to adversely affect the POTW treatment plant (inhibition, pass-through of pollutants, sludge contamination, or endangerment of POTW workers).

The Control Authority may decide to remove any noncategorical industrial user from the list of Significant Industrial Users if the industrial facility has no reasonable potential to violate any pretreatment standards (general and specific prohibitions or local limits). The Approval Authority may choose to review deletions and/or require additional facilities to be listed.

The above definition should also be useful to Control Authorities for setting priorities for monitoring and enforcement, and for determining requirements for self-monitoring. Since the definition

is designed to identify those users whose contribution is likely to have the most significant impact on treatment plant operations, it should provide the Control Authority with a mechanism for identifying the most effective use of its permitting, monitoring and enforcement resources. Additionally, the definition identifies the universe of industrial users that should be carefully evaluated to determine self-monitoring requirements, and for determining which IUs should be issued control documents.

In summary, for a Significant Industrial User, this guidance recommends:

- Self-monitoring frequencies (see Section 2.2)
- At least one inspection and/or sampling by the Control Authority per year (see Section 3.2.4)
- Industrial user reporting to the Control Authority twice per year (see Section 2.1.3)
- Enforcement actions for various types of violations (see Section 3.4)
- Annual reporting by the Control Authority summarizing the compliance status of and enforcement actions taken against Significant Industrial Users.

2.1.4 Periodic Reports

Section 403.12 of the General Pretreatment Regulations requires that categorical industries report to the Control Authority at least semiannually on their regulated wastewater discharges. When submitting a semiannual report, the industrial user should provide the following:

- Basic information identifying the industrial user name, address, and sampling period covered by the report
- Wastewater pollutant sampling and analysis data, including all regulated pollutants, concentrations, and sampling dates

- ° Where the industrial user must comply with an "average" standard (e.g., 4-day, 30-day, or monthly), calculation of the achieved averages must be made
- ° A record of measured or estimated average and maximum daily flow for the reporting period; this should include average flow data for each flow rate used in calculating the industrial user's limits (e.g., total flow and dilution flow)
- ° Where mass per day requirements are imposed by the Control Authority, the report must include information on the mass/day discharged
- ° When the industrial user is subject to a production-based standard, production information must be supplied
- ° If an industrial user has certified to a particular condition of a categorical regulation (e.g., control of TTO), a statement should be included acknowledging the continuing applicability of the certification
- ° The signature of an authorized representative that certifies the validity of the report.

In addition to the above information, the Control Authority may request other data, including:

- ° Identification of all occurrences of noncompliance
- ° An explanation of violations and corrective action taken
- ° Type of sample, sampling location, and analytical method
- ° Industrial user limits
- ° Industrial user code
- ° Telephone number of contact person
- ° Identification of any process or treatment changes
- ° Wastewater treatment plant receiving the industrial user's discharge (applicable when the Control Authority is the State or Region).

Detailed examples of reporting elements are presented in Appendix A, including a recommended format for recording and reporting industrial user effluent data for the semiannual report.

SECTION 2.2
INDUSTRIAL USER SELF-MONITORING FREQUENCIES

2.2.1 Establishing Industrial User Self-monitoring Frequencies

The General Pretreatment Regulations for Existing and New Sources of Pollution (40 CFR 403) require industrial users, subject to categorical pretreatment standards, to periodically report on the nature of their wastewater effluent. Specifically, Section 403.12(e) requires that any industrial user subject to a categorical pretreatment standard submit semiannual reports to the Control Authority indicating the nature and concentration of pollutants in its effluent controlled by categorical pretreatment standards. The regulations do not specify how the data for these reports are to be developed. Monitoring can be performed by the Control Authority or by the industrial user or a combination of both. However, given the resource demands of monitoring, most Control Authorities will choose to require the industrial user to self-monitor (in addition to Control Authority monitoring), and will establish monitoring frequencies for the industrial user.

Establishing monitoring frequencies that balance the expense of self-monitoring with the need for representative sampling data represents a major task for the Control Authority. In some cases, the Control Authority has been receiving industrial user self-monitoring reports or conducting industrial user sampling activities for several years and will have developed a pattern of monitoring that accurately reflects the industrial user's discharge. In such cases, Control Authorities should continue to use those sampling frequencies as long as the industrial user's discharge remains

relatively stable and compliance is maintained. However, when the Control Authority does not have experience with industrial user monitoring frequencies and industrial compliance data are not available, the Control Authority must establish suitable monitoring frequencies.

While establishing self-monitoring frequencies, the Control Authority should take into account a number of factors. First, the Control Authority should decide whether it wishes to perform all the monitoring for its industrial users. In general, all Significant Industrial Users should be required to self-monitor and/or be monitored by the Control Authority.

Major considerations in determining the frequency of monitoring are the following:

- ° Compliance history of the industrial user
- ° The ability to verify the compliance of the industrial user with pretreatment standards
- ° Impact on the operation of the treatment works, including sludge disposal options
- ° Water quality impact on receiving stream
- ° Industrial user discharge flow rate
- ° Monitoring expense to both the industrial user and the Control Authority.

The goal of the Control Authority is to establish a monitoring frequency that will produce sufficient sampling data to assess whether an industrial user is complying with discharge requirements.

To assist Control Authorities in setting self-monitoring frequencies, this guidance provides a table of suggested, flow-based,

self-monitoring frequencies (Table 2-2) which reflect typical monitoring frequencies costed by EPA when developing categorical standards and assessing potential economic impacts. The table, with recommended frequencies, is provided below:

TABLE 2-2

INDUSTRIAL FLOW (GPD)	RECOMMENDED INDUSTRIAL SELF-MONITORING FREQUENCIES DURING INITIAL COMPLIANCE PERIOD (FIRST YEAR)	
	CONVENTIONAL POLLU- TANTS, INORGANIC POLLUTANTS, CYANIDE, AND PHENOL	GC OR GC/MS ORGANICS
0-10,000	1/month	2/year
10,001-50,000	2/month	4/year
50,001-100,000	1/week	1/month
100,001-240,000	2/week	2/month
>240,000	3/week	4/month

(Note: Most industrial users required to meet a TTO requirement may elect to submit a toxic organic management plan and periodic certification statements in lieu of performing analyses.)

For pollutants that are not reasonably expected to be present, minimum analysis (twice per year) is recommended. For example, a metal finisher that discharges 150,000 gpd and does not use cadmium in any raw materials may be given minimal monitoring requirements for cadmium. Another option for Control Authorities is to require more frequent monitoring of a single "indicator" pollutant, which provides an indirect measure of the compliance status for other regulated pollutants. An example is an electroplater that discharges chromium, copper, and zinc. If the compliance history demonstrates that the controlling parameter is chromium (other violations occur only when chromium is violated), the Control Authority may decide to require more monitoring for chromium than the other parameters

(and perhaps require an immediate followup for the other pollutants each time the results of a chromium analysis indicate a violation).

These frequencies might be used for an initial evaluation period of 1 year, or as a basis for reevaluating existing monitoring frequencies. During the first year of use, the Control Authority and the industrial user would assess the adequacy of the monitoring program. At the end of the year, the Control Authority might reevaluate the frequencies in terms of the factors discussed earlier, and, if necessary, revise the frequencies.

The demonstrated compliance history of the industrial user should be a major consideration in deciding whether to adjust the monitoring frequency. If the industrial user has demonstrated consistent compliance over an extended time period (such as 1 year), the Control Authority may consider a step decrease in the required frequency for that industrial user. Industrial users that have demonstrated frequent noncompliance over a similar time period should be considered by the Control Authority for increased monitoring. As a result, the Control Authority's compliance monitoring and enforcement program can be focused more on those industrial users exhibiting continued noncompliance.

If the Control Authority has experienced interference, upset, or pass-through, or has limited sludge disposal options due to the elevated concentrations of particular pollutants, the Control Authority may consider increasing the monitoring frequency of those industrial users discharging these pollutants. Increased data would facilitate identification of the types and concentrations of

pollutants that may be causing the problem. In such a case, a reexamination of the adequacy of existing local limits may also be necessary to fully resolve these Control Authority problems.

Whether the Control Authority uses the frequencies recommended above or establishes different frequencies, self-monitoring frequencies should be incorporated into permits or other agreements existing between the Control Authority and each contributing industrial user. The permit or other mechanism should also provide for the opportunity to revise any self-monitoring requirements at the discretion of the Control Authority.

The recommended flow-based monitoring frequencies of Table 2-2 focus attention on the larger facilities and reduce the monitoring expense burden for small facilities. As stated earlier, the Control Authority may choose to reduce the industrial user monitoring frequency and associated expenses by considering an increase of its own monitoring activities of the industrial contributors. However, the combined monitoring effort should equal the level of monitoring necessary to produce representative samples that will allow the POTW to reliably determine compliance.

SECTION 3.1
GENERAL CONTROL AUTHORITY IMPLEMENTATION RESPONSIBILITIES

This section of the guidance document addresses implementation responsibilities of the Control Authority, with particular emphasis on the compliance monitoring and enforcement responsibilities. Section 3.1 identifies and briefly discusses certain of the general implementation responsibilities of Control Authorities.

3.1.1 Control of Industrial Dischargers Through Use of Permits, Contracts, etc.

Section 403.8(f)(1) of the General Pretreatment Regulations requires that POTWs control through permit, contract, order, or similar means, the contribution by each IU to ensure compliance with applicable pretreatment standards and requirements. This is essential to the effective implementation of the Control Authority's pretreatment program and to the smooth operation of the POTW. However, the existence of control mechanisms such as permits, contracts, etc., is not enough to ensure compliance by industrial users with applicable pretreatment standards. Control Authorities must be willing and able to act upon and effectively enforce the terms of these control mechanisms.

Most Control Authorities use a system in which they issue discharge or sewer use permits to industrial users. Some of the components of control mechanisms that Control Authorities may use are discussed below:

- A specified, limited period of duration (for comparison NPDES permits specify 5 years). Industrial users with a high potential to impact POTW operations or to undergo significant process and discharge changes could have shorter periods of permit duration. Limited duration of control mechanisms can enable the Control Authority to review

available data and issue control mechanisms that accurately reflect conditions and changes at the industrial facility. The Control Authority should require industrial users to update their control mechanism application (if such applications are required by the Control Authority) prior to reissuance of the control mechanism as another means to identify process and discharge changes.

- ° Applicable pretreatment standards (discharge limits). For categorical industrial users, these standards may consist of a combination of national prohibited discharge standards, national categorical pretreatment standards, and more stringent local pretreatment limits. These limits may be calculated through the use of the combined wastestream formula. For noncategorical industrial users, national prohibited discharge standards and local limits apply.
- ° Sampling protocol, including sampling frequency, sample type, sampling point, etc.
- ° Reporting requirements (discussed in Section 2 of this guidance document).
- ° A nontransferability clause, conditioning the applicability of the control mechanism to the specific owner and facility to which they were issued. An ownership change would render the existing control mechanism void for that particular facility and necessitate issuance of a new control mechanism applicable to the new owner. Nontransferability is a mechanism for Control Authorities to issue control mechanisms that accurately reflect changes under new ownership, such as different processes, different products, different chemicals used, different applicable limits, etc.
- ° Legal authority by the Control Authority to revoke the sewer discharge privileges of the industrial user. This revocation authority serves as a deterrent to illegal discharges, falsification of reports, refusal to allow access, etc.; such conditions for revocation may also be included in the control mechanism language.
- ° Legal authority by the Control Authority to modify the control mechanism if there are significant process or discharge changes, newly promulgated national categorical standards, or enactment of more stringent local limits.
- ° Compliance schedule, if appropriate. Compliance schedules (and interim limits) for categorical industrial users beyond the statutory compliance deadline do not relieve the industrial users of violating that deadline.

3.1.2 Procedures to Implement Responsibilities Cited in the General Pretreatment Regulations

Section 403.8(f)(2) identifies minimum procedures that a Control Authority must establish to ensure compliance with the requirements of a pretreatment program. These implementation responsibilities are to:

- Identify all industrial users and characterize their pollutant discharges that may be subject to pretreatment standards
- Notify all industrial users of applicable pretreatment standards (and RCRA requirements)
- Receive and analyze self-monitoring reports and other notices from industrial users (see Section 3.3)
- Randomly sample and analyze effluent from industrial users to independently assess compliance by industrial users (see Section 3.2)
- Investigate instances of noncompliance and take appropriate enforcement action (see Sections 3.3 and 3.4)
- Publish, at least annually, in the local newspaper with the largest circulation, a list of industrial users which, during the previous 12 month period, had significant violations of applicable pretreatment standards (see Section 3.4.2).

3.1.2.1 Maintaining the Industrial User Inventory

As part of developing a pretreatment program, the Control Authority conducted an Industrial Waste Survey (IWS), that identified industrial users and characterized their discharge of wastewater. For implementation of its program, the Control Authority should look for errors in or omissions from the Industrial Waste Survey, and must maintain and regularly update the industrial user inventory, particularly the characterization of wastewater discharges from each industrial user. Such updating is beneficial in determining the nature and quantity of pollutants entering the POTW, identifying changes in the industrial user population, issuing and modifying

effective control mechanisms, and prioritizing industrial users (e.g., the identification of Significant Industrial Users - see Section 2.1.3) to enable Control Authorities to more efficiently allocate resources and schedule pretreatment activities.

The Control Authority may use a variety of methods to identify and characterize the discharges of new industrial users in the area, as well as to identify significant process and/or discharge changes at existing industrial users. To identify new industrial users, Control Authorities should establish a structured procedure such as requiring new industrial users to complete applications for discharge or sewer use permits when they apply for business licenses.

Control Authority procedures for updating information on existing industrial users should include ongoing sampling and inspection activities by the Control Authority and permit requirements that the industrial user notify the Control Authority of significant changes in processes, discharge, and ownership.

In some cases, these procedures should also include periodic re-application of permitted industrial users and periodic completion of a questionnaire that helps to characterize the wastewater discharge of the industrial user.

3.1.2.2 Notification (to Industrial Users) of Applicable Pretreatment Standards and Requirements

Section 403.8(f)(2)(iii) requires Control Authorities to notify industrial users of applicable pretreatment (and RCRA) requirements, including the general and specific prohibitions of

the General Pretreatment Regulations, local limits, and categorical standards (see Section 2.1.1 and Table 2-1). In order for the Control Authority to provide industrial users with timely and effective notification of applicable pretreatment standards and requirements, the Control Authority must stay informed of recent changes or additions to national categorical standards, State standards, etc.

USEPA will attempt to provide some information about changes in standards and regulations through bulletins, meetings, and the trade press. States with authorized pretreatment programs are expected to transmit such information as well as modifications in State law requirements to Control Authorities.

Some large Control Authorities may also wish to subscribe to the Federal Register and assign one staff member to review newly issued standards and regulations. In many cases, the Code of Federal Regulations, Title 40, Parts 400 to end, may provide a good compilation of the requirements. These documents are issued once a year by the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 (202-783-3238). Additional sources of information regarding new regulations include looseleaf daily or weekly "regulatory reporters" issued by the private sector.

When specific questions concerning implementation of new regulations and regulatory modifications arise, the Control Authority should make a request or telephone call to the Approval Authority to ensure that correct interpretations are made. If a category determination request needs to be made, procedures specified in §403.6(a) of the General Pretreatment Regulations must be followed.

Two mechanisms that the Control Authority may use to notify industrial users of applicable pretreatment regulations are:

- ° Mailing of such notifications to affected industrial users by certified mail with return-receipt requested (to confirm that the industrial user has been notified, in the event that formal enforcement action is necessary)
- ° Timely amendments to the control mechanism (permit, contract, etc.) used; such amendments, acknowledged by signature of a company official, ensure that the industrial user is aware of new regulations and significant regulatory modifications.

Although notification by public notice of the general sewer use ordinance is legally sufficient, for Significant Industrial Users or those subject to pretreatment standards not contained in the general sewer use ordinance, individual notification should be made.

3.1.3 Providing Sufficient Resources to Implement the Program

Section 403.8(f)(3) of the General Pretreatment Regulations requires that each Control Authority provide sufficient resources and qualified personnel to implement the pretreatment program. The preliminary determination of sufficient budget and staffing allocations for each Control Authority should be contained in the Control Authority's final pretreatment program submission to the Approval Authority to secure program approval. The "Guidance Manual for POTW Pretreatment Program Development" (EPA, October 1983) contains a discussion of program organization, costs, and revenue sources. The Control Authority may find it necessary or desirable to alter these resource allocations as it gains more experience with implementing the pretreatment program. The Control Authority should notify the Approval Authority of any significant reductions in resource allocations for pretreatment.

3.1.4 Developing and Enforcing Local Limits

Section 403.5(c) of the General Pretreatment Regulations requires Control Authorities to develop and enforce specific local limits when necessary to implement the general prohibitions against pass-through and interference (Section 403.5(a)) and to implement the specific prohibitions discussed in Section 403.5(b).

At a minimum, each Control Authority should conduct a technical evaluation to determine the maximum allowable treatment plant headworks (influent) loading for each of the following pollutants: cadmium, chromium, copper, lead, nickel, and zinc, as well as for any other pollutants of concern (e.g., cyanide) at that facility. A procedure for performing this analysis is provided in the "Guidance Manual for POTW Pretreatment Program Development, USEPA, October 1983.

One special situation exists with regard to establishing local limits to which Control Authorities should be alerted. In the past, Control Authorities may have established user charge rate structures for conventional pollutant discharges and have allowed industrial users to discharge conventional pollutants at a level that exceeded design criteria for the treatment plant. At least two disadvantages may occur as a result of uncontrolled industrial contribution: (1) the wastewater treatment plant's future reserve capacity may be sacrificed in favor of present income from user charge fees; and (2) protection of the treatment plant from interference and pass-through may be compromised.

In establishing and implementing local limits, Control Authorities may wish to establish a maximum conventional pollutant

limitation that still allows for user charges for concentrations up to that limit. The maximum limit could be calculated from a wasteload allocation based on the plant's ability to treat the conventional pollutants and the NPDES conventional pollutant effluent limit. For example, a BOD or TSS maximum limit could be set at 1000 mg/l and the range of 300 to 1,000 mg/l could be used for application of user charges. The Control Authority could thus retain its user charge system and simultaneously establish and enforce any needed maximum concentration limitations.

3.1.5 Additional Implementation Responsibilities

The Control Authority's NPDES permit may contain other requirements for pretreatment program implementation. For example, the NPDES permit may require the Control Authority to submit to the Approval Authority annual (or more frequent) reports summarizing pretreatment program implementation activities, including the rate of Significant Noncompliance (SNC) of industrial users. Another example is a permit requirement specifying frequencies for inspections and sampling of industrial users.

The General Pretreatment Regulations and Control Authority's approved pretreatment program submission and NPDES permit also define the implementation responsibilities of the Control Authority. The Control Authority is responsible for carrying out all aspects of its approved pretreatment program.

Additional pretreatment program monitoring and reporting may be associated with removal credits,* fundamentally different factors

* EPA's removal credit regulation has been invalidated by an April 1986 court ruling. Until further court action or regulatory action restores the Agency's ability to provide removal credits, no removal credit applications will be processed.

variances, net/gross pollutant credits, etc. Control Authorities affected by these special factors should review the General Pretreatment Regulations and their own NPDES permit carefully to identify requirements specific to their situation.

SECTION 3.2 COMPLIANCE MONITORING BY A CONTROL AUTHORITY

Only through an effective pretreatment compliance monitoring program can the Control Authority evaluate the compliance status of industrial users in relation to applicable pretreatment standards. In addition, information obtained through a pretreatment compliance monitoring program can be of use in evaluating: (1) the quality of the POTW influent, effluent, and sludge; (2) the impacts on treatment processes, the receiving stream, and sludge disposal; and (3) the need for new or revised local industrial discharge limitations.

This section presents background information concerning compliance monitoring and general guidance that should be used by Control Authority personnel when conducting onsite inspection and sampling activities at industrial facilities. The intent is to assist Control Authority personnel in planning, collecting, and documenting sufficient information to determine compliance or noncompliance, particularly by all Significant Industrial Users, with all applicable Federal, State, and local pretreatment standards and requirements.

3.2.1 Regulatory Basis for Pretreatment Compliance Monitoring

The regulatory basis for Control Authorities to establish a pretreatment compliance monitoring system is set forth in Section 403.8(f)(1)(v) of the General Pretreatment Regulations, which requires that Control Authorities possess the legal authority to carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance independent of information provided by industrial users.

Sections 403.8(f)(2)(iv)-(vi) of the General Pretreatment Regulations require that Control Authorities develop and implement procedures to:

- ° Randomly sample and analyze industrial effluent and conduct inspections of industrial users to determine compliance independently from industrial self-monitoring reports
- ° Investigate instances of noncompliance, producing admissible evidence through sampling and inspections as necessary
- ° Receive and analyze industrial self-monitoring reports.

All of these activities can be characterized as compliance monitoring activities. The first two monitoring activities are discussed in the following subsections. Review of self-monitoring reports is discussed in Section 3.3.1 of this guidance manual in relation to a Control Authority's Enforcement Management System (EMS). A discussion of monitoring at the POTW to evaluate the adequacy of existing local pretreatment standards will be contained in a forthcoming guidance, which will cover many aspects of developing and implementing local limits.

Compliance monitoring activities include: (1) sampling of discharges, (2) receipt and review of self-monitoring reports, and (3) field inspections. The goals of compliance activities are to:

- ° Independently ensure that applicable pretreatment standards (Federal categorical and prohibited, State, and local) are being met by affected industrial users
- ° Independently verify that self-monitoring results reported by industrial users are representative of the pollutant concentrations in wastewater from these users
- ° Ensure that local ordinance provisions and industrial user permit provisions are being met
- ° Ensure that self-monitoring and reporting requirements (Federal, State, and local) are being met

- ° Maintain accurate knowledge of local industrial processes including changes, and the characteristics of industrial discharges to the POTW
- ° Identify the need for enforcement action to remedy existing conditions
- ° Accurately report compliance progress to the Approval Authority
- ° Maintain accurate knowledge of the adequacy of pretreatment equipment including its proper operation and maintenance, and of the need for additional equipment, etc.

The term "inspections," as used throughout this guidance manual, does not include sampling activities, although inspections and sampling activities may be concurrent (e.g., compliance sampling inspections). Inspections and sampling activities generally are used to obtain slightly different types of information. Sampling activities should provide information that can be used to directly determine compliance with applicable pretreatment standards and to confirm the representativeness of the sampling analyses reported in industrial self-monitoring reports. Inspections may be geared more towards evaluating compliance with construction schedules, identifying process changes, updating Control Authority information on the industrial facility, confirming that sampling points used can provide representative samples of regulated wastestreams, evaluating the adequacy of existing pretreatment equipment or need for additional equipment, etc.

3.2.2 Compliance Monitoring of Regulated Industrial Facilities

The scope and magnitude of a Control Authority compliance monitoring program will depend on a number of factors, including size of the Control Authority system, number and type of regulated industrial users, pollutant concentrations, discharge volumes, and available resources. A prerequisite to a good compliance monitoring

program is the accurate identification of industrial sources. This is usually accomplished initially by using an Industrial Waste Survey (see Section 3.3.1.2 of this guidance), which gathers information from all potential industrial dischargers in the service area. Once gathered, however, it is important to periodically update this information to maintain accuracy and permit a proper allocation of available resources.

The resources available to the Control Authority (including both personnel and equipment) will influence the type and amount of monitoring activities that can reasonably be accomplished. Resource constraints may dictate that monitoring activity focus on Significant Industrial Users, while only a minimum number of required monitoring events are initiated for other industrial users. Where resources allow, the Control and Approval Authorities may wish to conduct joint inspections of industrial users initially to ensure that Control Authority personnel develop and use appropriate procedures for such inspections.

Ultimately, however, a Control Authority must implement a compliance monitoring program that: (1) meets the requirements and intent of the General Pretreatment Regulations, (2) is effective and timely in determining compliance with categorical and local discharge limitations, (3) provides representative data required to meet Control Authority reporting requirements to the Approval Authority, and (4) provides sampling data that would be admissible in court, if such an enforcement action were undertaken.

3.2.3 Types of Inspection and Sampling Activities

Inspection and sampling activities at industrial facilities may be: (1) scheduled in advance with the industrial user; (2) unscheduled, with little or no prior notice to the industrial user; or (3) on demand, usually in response to a specific problem or emergency, such as a spill at an industrial facility or an upset at the treatment plant. Control Authorities should develop procedures to implement a neutral monitoring scheme, if possible, for routine inspection and sampling activities. A neutral monitoring scheme provides some objective basis for scheduling inspections and sampling visits by establishing a system for setting inspection priorities (whether a complex factor-based system or an alphabetical system) to ensure that industrial users are not unfairly selected for inspection.

In cases of demand monitoring, which, by definition, responds to an unplanned event or problem or where the Control Authority has a reasonable suspicion of violations, targeted monitoring should be carried out. This targeted monitoring may include sewer line and/or discharge monitoring at the industrial facility.

To ensure that all sampling data obtained will be admissible in court, each POTW must develop and document sampling and chain-of-custody procedures.

3.2.3.1 Scheduled Inspection and Sampling Activities

The Control Authority may wish to schedule inspections and/or sampling visits with prior notice to the industrial user. Depending on the size and type of industrial facility, the date and time of the planned visit should be mutually agreed upon 1 week to 1 month

in advance. In general, by notifying the industrial user in advance of the date of a pretreatment inspection or sampling visit, a meeting can be arranged with the industrial facility's management and/or a knowledgeable employee to:

- ° Conduct an onsite inspection and become familiar with plant processes that generate an industrial wastestream and any pretreatment facilities that may be present
- ° Collect information and/or obtain samples to evaluate compliance by industrial users with Federal, State, and local pretreatment standards and requirements
- ° Identify changes in industrial processes or operations that may affect the quality of the industrial discharges and subsequent permit limitations
- ° Maintain a cooperative, as well as a regulatory, presence with the industrial community
- ° Discuss problems and/or concerns of either the Control Authority or the industrial user related to the pretreatment program
- ° Update the Control Authority's information on regulated industrial users
- ° Verify self-monitoring reports submitted to the Control Authority by the industrial user.

3.2.3.2 Unscheduled Inspection and Sampling Activities

The term "unscheduled monitoring" refers to industrial inspections or sampling visits that are not scheduled in advance with the industrial user. Such unannounced monitoring of regulated industrial users is generally a useful means of determining the compliance status of these users; instances of noncompliance are often identified during unscheduled monitoring visits. For unscheduled monitoring, little or no prior notice is given to the industrial user except when some minimum notice is necessary to gain access to the property.

The Control Authority may have difficulty in ensuring beforehand, that an industrial facility will be in normal operation for an unscheduled monitoring visit. If there is strong evidence that the industrial facility is not in normal operation during an unscheduled visit, the Control Authority may wish to consider planning another unscheduled visit to the same facility. The advantages of such unscheduled monitoring visits greatly outweigh the possible difficulties that may be encountered during such visits.

Unscheduled monitoring visits by the Control Authority typically include:

- ° A confidential schedule known only to the Control Authority (and possibly to the Approval Authority). If access to the property of the industrial facility is needed, some minimum notification or a search warrant may be necessary.
- ° Brief inspection of facility operations and pretreatment activities, as necessary (a more thorough inspection can be conducted if problems are noted).
- ° Sampling of the wastewater effluent from industrial users performed on an unannounced basis, with the industrial user at normal operation.

3.2.3.3 Demand Inspection and Sampling Activities

Demand monitoring may be initiated in response to a known or suspected violation discovered as a result of a self-monitoring report, routine sampling visit or inspection, a public complaint, or any discharge of prohibited materials, violation of the Control Authority's NPDES permit requirements, POTW operating difficulties, unusual influent conditions observed at the waste treatment plant, or emergency situations (e.g., plant upsets, sewer line blockages, fires, explosions, etc.).

Demand monitoring is initiated to accomplish one or more of the following:

- ° Identify or verify (possibly through use of sewer line monitoring and/or onsite monitoring) the source of a discharge causing problems with treatment plant operations
- ° Determine the nature, duration, and degree of hazard of the discharge
- ° Assist in identifying corrective actions necessary to contain or halt the discharge
- ° Initiate corrective actions, if needed
- ° Gather information needed for followup compliance or enforcement actions.

In emergency situations, demand monitoring should be initiated immediately. Once the source is identified, Control Authority inspectors involved in an emergency situation should consider the following:

- ° Notifying other appropriate agencies (e.g., fire department, State hazardous waste response team, State water department, EPA, etc.)
- ° Making information readily available to the other agencies involved in the response effort
- ° Maintaining direct contact with the Control Authority managers in case
 - Special equipment is needed (e.g., sampling bottles, safety equipment)
 - Administrative warrants, injunctions, or legal opinions are needed
 - Management decisions are needed (whether service should be terminated, the extent of Control Authority response, etc.).

3.2.4 Frequency of Compliance Monitoring Activities

Control Authority personnel must determine the frequency with which industrial inspections and sampling will occur. Based primarily on the results of the industrial waste survey, the Control Authority

established an initial monitoring frequency for all regulated industrial users during its pretreatment program development. In most cases, the initial monitoring frequency, for both the whole community of industrial users and individual industrial users, was based on one or more criteria, possibly including:

- ° Volume of industrial discharge (most common criterion used)
- ° Type and concentrations of pollutants in the discharge
- ° POTW problems known or suspected to have been caused by an industrial user
- ° Past history of noncompliance problems with the industrial user
- ° Production variations, both daily and/or seasonal, at the industrial facility
- ° Type of resources (labor and equipment) available to the Control Authority.

Modifications to self-monitoring frequencies of regulated industrial users are discussed in Section 2.2.

In addition to establishing industrial self-monitoring frequencies, EPA recommends that the Control Authority conduct at least one inspection and/or one sampling visit (inspections and sampling visits may occur concurrently) annually to all Significant Industrial Users. Control Authorities may wish to consider conducting one unscheduled inspection and/or sampling visit. If the Control Authority elects to perform all the monitoring (no IU self-monitoring), then at least two sampling visits per year would be required. For visits that include sampling, the dates can generally be arranged with little notice to the industrial user to make them aware that compliance could be checked at any time. Samples taken by the Control Authority during these visits should be analyzed for all

pollutants for which that industrial facility is regulated (including local limits). There are many reasons for which more frequent monitoring of certain industrial users should be conducted, if possible. For example, if an industrial facility has exhibited a marked inability to achieve and maintain compliance, additional sampling of this facility by the Control Authority may be appropriate in anticipation of possible enforcement action.

Regardless of the initially planned monitoring frequency, the implementation phase of the program will provide the Control Authority with an opportunity to collect useful information concerning each industrial user. This information will allow the Control Authority to adjust the frequency of the Control Authority's monitoring of each industrial user, as well as to adjust the self-monitoring requirements for each industrial user. Such modifications should be made as necessary to adequately meet the need to determine compliance and make the best use of available resources. After a "compliance history" has been developed for each regulated industrial user, the Control Authority can re-allocate its own monitoring resources to focus on problem-causing industrial users, those industrial users that may be having difficulty with compliance, or those that are susceptible to variations in their processes or production cycles.

3.2.5 Inspection Procedures

Industrial inspections, if performed properly, should form the information base for any subsequent enforcement action against industrial users. Inspections generally examine information such as sampling locations, pretreatment equipment, spill control practices, water flow schematics, process change, etc. In addition,

industrial inspections serve to familiarize Control Authority personnel with the industrial facility and its processes, determine sampling points, and determine the need to use the combined wastewater formula for establishing applicable pretreatment standards, etc.

Appendix B describes recommended procedures for performing industrial inspections, with or without associated sampling activities. This appendix:

- ° Recommends that preinspection planning be conducted, including reviewing background information, preparing equipment, and notifying the industrial user, if appropriate
- ° Describes recommended entry procedures
- ° Recommends that an opening conference be performed, especially for the first inspection of the industrial facility by Control Authority personnel
- ° Describes the type of information that should be collected in the course of an industrial inspection
- ° Briefly describes the development of an inspection report.

3.2.6 Control Authority Sampling of Industrial Facilities

Sampling and analysis of the wastewater discharge from an industrial facility is generally conducted to accomplish one or more of the following objectives:

- ° Verify compliance with wastewater discharge limitations
- ° Verify user charges
- ° Confirm the representativeness of self-monitoring data
- ° Verify that parameters specified in the industrial user's permit are consistent with wastewater characteristics
- ° Support reissuance and revision of industrial user's permits.
- ° Support for enforcement action.

The Control Authority's sampling program may consist of any combination of in-house sampling and analytical capabilities or

contracted services. However, the Control Authority must ensure that the sampling program includes properly trained personnel, accepted entry procedures, accepted sampling procedures, and accurate recordkeeping to ensure the validity of the sampling results.

Section 3.2.6 presents guidelines and considerations for sampling and analysis of industrial dischargers. Industrial sampling and analysis can be conducted independently or in conjunction with a compliance inspection and performed by the same or different Control Authority personnel. If sampling and analysis are performed both by Control Authority inspection personnel and by other Control Authority personnel during different sampling visits, it is strongly recommended that those sampling personnel involved familiarize themselves with the inspection procedures and guidelines presented in Appendix B and sample at the same location if possible. Also, Control Authority personnel should ensure that sampling by the industrial user is conducted at that same sampling location.

3.2.6.1 Considerations in Preparing for Sampling Activities

The wide variety of conditions existing at different industrial users and different sampling locations require that some judgment be used regarding the methodology and procedure for collecting representative samples of wastewater.

Some general points to be considered in preparing for a sampling visit are:

- ° The inspectors should know what parameters will be sampled, what types of sample containers and preservatives are needed, and what sample volumes are needed for laboratory analyses.
- ° The inspectors should know what type of samples will be taken (grab, time-composite, or flow-composite). In general, composite samples are preferred and should be collected

during the industrial facility's normal hours of operation. Ideally, flow-proportioned composite samples should be collected; however, time-proportioned composite samples are acceptable where flow-proportional automatic sampling may not be feasible (prohibitive costs to install such sampling equipment, etc.). Time-composite samples should consist of samples collected preferably every hour or every 15 minutes if automatic sampling equipment is used. Depending on the types of analyses to be conducted and the needs of the Control Authority, the industrial user may be allowed to collect and report the results of a grab sample. Grab sampling should be employed where the pollutants being evaluated have relatively short maximum holding times (e.g., cyanide) due to sample degradation. Grab sampling may also be appropriate for sampling nonrandom sources of variation (i.e., scheduled batch discharges, etc.). The specific sample type for each pollutant should be specified in the permit issued to the industrial user.

- ° The inspectors should be aware of process and flow variations, recent shut-downs, etc. (i.e., weekends, holidays, seasonal production).
- ° Sampling equipment should be calibrated and tested to ensure that it functions properly and that the inspectors are familiar with its operation.
- ° All sampling "paperwork" should be filled out and all containers properly marked. This would include laboratory sheets, sample tags, marked containers, etc.
- ° The laboratory doing the analysis should be notified in advance of the number and type of samples expected in order to prevent extended holding times before samples are analyzed and to assist in overall laboratory planning.
- ° Chain-of-custody tags, sheets, etc., must be readied.

3.2.6.2 Guidelines for Approved Analytical Procedures

Amendments to the Agency's "Guidelines Establishing Test Procedures for the Analysis of Pollutants," 40 CFR 136, were published in the Federal Register on October 26, 1984, and amended on January 4, 1985. These guidelines, as amended and corrected, now include:

- ° Lists of approved test procedures for:
 - coliform and fecal streptococci
 - inorganic chemicals
 - nonpesticide organic chemicals
 - pesticides
 - radiological parameters

(These lists reflect the withdrawal of approval for outdated test procedures that had previously been approved for 30 compounds, as well as the inclusion of newly approved test procedures for these 30 compounds plus an additional 32 compounds for which there had not previously been approved test procedures.)

- ° References, sources, and costs for these approved test procedures
- ° Required containers, preservation techniques, and maximum holding times
- ° Appendices providing detailed descriptions of approved test procedures for a variety of organic chemicals.

For the pesticide industry, EPA has approved analytical methods for certain pesticides in the final pesticide regulations (50 FR 40672, October 4, 1985). EPA strongly recommends that each Control Authority and contract laboratory obtain and implement the most recent version of these guidelines for all sampling and analyses, including those related to the pretreatment program.

3.2.6.3 Considerations in Sample Collection and Analysis

Accurate sample collection and analysis are essential to determine an industrial user's compliance status with applicable pretreatment regulations. However, sample collection is the most likely area in which errors are made leading to analytical results that are not representative of the wastestream in question. Laboratory analyses can be conducted with a degree of accuracy that is generally not possible in field sampling.

Industrial users and Control Authorities are referred to the following publication for a comprehensive discussion of wastewater sampling:

U.S. Environmental Protection Agency, Handbook for Sampling and Sample Preservation of Water and Wastewater. (EPA Publication No. 600/4-82-029). Washington, DC: U.S. Environmental Protection Agency, September 1982. (NTIS Order No. PB83-124503).

This handbook is available from:

National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161

Control Authorities may also find the following publication useful as a guide in developing general inspection and sampling procedures:

U.S. Environmental Protection Agency, NPDES Compliance Inspection Manual. Washington, DC: U.S. Environmental Protection Agency, June 1984.

General principles can be suggested for both self-monitoring and Control Authority monitoring, as follows:

- A permanent sampling location(s) should be identified for use by both the Control Authority and the industrial user. This is typically accomplished during a Control Authority inspection of the industrial facility so that both parties agree and are familiar with the location(s).
- The sampling location should be easily accessible and provide a well-mixed representative sample of the wastestream being monitored. Caution should be exercised in selecting the best sampling point in recognition that local limits are generally end-of-pipe limits, whereas categorical standards are generally end-of-process limits. Rather than have separate sampling points for local limits versus categorical standards for one industrial facility subject to some combination of both types of limits, it is advisable to use one sampling point. This may necessitate the modification of the categorical standards to account for other wastestreams present at the end-of-pipe, or to determine local limits at the end-of-process. In any event, such calculations are necessary to determine whether local limits or categorical standards are more stringent for any one parameter. Section 3.4.5 of the "Guidance Manual for the Use of Production-Based Pretreatment Standards and the Combined Wastestream Formula" (U.S. EPA, September 1985) provides a detailed example of the process for comparing categorical standards to local limits for a facility.
- All samples must be properly collected and preserved until they are analyzed. It is important to use the right container for sample collection and storage (e.g., do not use a metal container to collect or store a sample that will later be analyzed for metals). Large samples should be divided for appropriate pollutant preservation as soon as possible, but no longer than 24 hours.

- ° Accurate records should be required indicating the time, date, location, type of sample, method of collection and preservation, name of person who collected the sample, and any pertinent comments. These records should be retained for at least the 3 year period required by Section 403.12(n)(2) of the General Pretreatment Regulations.

After an accurate sample has been obtained, several steps should be taken to ensure that the validity and objectivity of the monitoring operations are maintained. The sample should be properly preserved and promptly delivered to the laboratory to prevent sample degradation.

The industrial user will often be required to monitor its wastestream for several pollutant parameters, sometimes requiring different preservatives and/or storage conditions for each. Therefore, it may be necessary to take a relatively large sample so that adequate amounts are available for the various laboratory analyses. The recommended minimum sample volumes for different pollutant parameters can be found in the current edition of "Standard Methods."

As discussed previously, there is a definite need to obtain representative samples and analytical data that are admissible in court. Therefore, for laboratory analyses of industrial self-monitoring samples and samples collected by the Control Authority, the Control Authority should verify that: (1) the most recently approved sampling techniques used by EPA and State laboratories are also used by Control Authorities and (2) all individual analyses are performed according to the Federal requirements of 40 CFR 136. Direct dischargers classified as majors in the NPDES program are in the DMR Quality Assurance (QA) program; therefore, major POTW's with laboratories are currently subject to a QA review. Outside laboratories used for analyses should be certified (if a formal

certification program exists in your State) or should be checked by a knowledgeable Control Authority person. If the State does not have a laboratory certification program, the USEPA Regional Office may be able to provide some assistance in evaluating laboratory services to ensure that proper methods and techniques are being employed. Control Authorities may wish to split samples with the industry. (Note: Be sure that samples are well-mixed prior to splitting.) Comparing the analytical results from split samples could serve as a good check of quality assurance and quality control.

3.2.7 Followup Actions in Response to Inspections and/or Sampling of Industrial Users

Control Authority personnel should be aware that there are a wide range of possible results of inspections and/or sampling of industrial facilities. Among the possible findings of industrial inspections and sampling are:

- ° Complete compliance with applicable pretreatment effluent standards, reporting requirements, monitoring requirements, analytical procedures, permit conditions, etc.
- ° Minor or major violations of pretreatment effluent standards, reporting requirements, monitoring requirements, analytical procedures, permit conditions, etc., or any combination of these violations
- ° Evidence of negligence or intent associated with any of these violations
- ° Identification of significant changes in processes, pollutants discharged, discharge volumes, etc.

Unless inspections and sampling activities indicate that criminal offenses exists, the Control Authority should transmit the results of the inspections or sampling to the industrial facility. Where violations are identified, the Control Authority should require corrective action within a specified time period. In some

cases, the identified violation will indicate the need for a formal enforcement action by the Control Authority. Section 3.4 addresses the appropriate response to identified violations.

SECTION 3.3 ENFORCEMENT PRINCIPLES AND MECHANISMS

3.3.1 Principles of an Enforcement Management System

As indicated in Section 3.1, the Control Authority should establish requirements for industrial user pollution control, monitoring, and reporting, and incorporate these requirements into control mechanisms. Pollution control requirements should reflect Federal categorical standards, general pretreatment standards, and local limitations. The control mechanism should enable the Control Authority to monitor and control discharges to its sewer system, to implement its pretreatment program, and to meet the goals of the General Pretreatment Regulations. In order to administer the pretreatment program efficiently, the Control Authority should have a system to determine whether industrial users are complying with pretreatment standards and requirements in the control mechanisms and to determine how and when to respond to noncompliance by industrial users.

USEPA and approved States have similar responsibilities under the NPDES program for direct dischargers. EPA has developed a general system to plan, administer, and evaluate its enforcement program. The general system is known as the Enforcement Management System (EMS). The system is based on principles of management and internal controls that have been used successfully in the NPDES program, and the use of those principles should be transferable to the Control Authority's pretreatment program. This section describes the components of that enforcement system as it might be translated for use by the Control Authority. Each Control Authority is encouraged to develop its own written management system.

The principles identified below describe a process for obtaining and evaluating information on industrial user compliance; identifying noncompliance; selecting an appropriate enforcement action; and resolving noncompliance in a timely, fair, and consistent manner. The principles establish a framework for managing an enforcement process, while providing the flexibility for each Control Authority to develop management procedures that best suit its operations and resources. The principles are as follows:

- ° Establish responsibilities, procedures, and timeframes to provide information to all levels of the organization
- ° Maintain an industrial user inventory that is complete and accurate
- ° Collect and dispense information
- ° Conduct inspections and sampling of industrial users based on a systematic plan
- ° Ensure compliance screening of all relevant data
- ° Perform an enforcement evaluation, where appropriate
- ° Institute a formal enforcement action and followup, where necessary.

3.3.1.1 Responsibilities, Procedures, and Timeframes

Throughout the enforcement process, it is important for all levels of management to be able to assess the effectiveness of the program and identify progress or deficiencies. Consequently, the Control Authority's enforcement procedures should give management the information it needs to ensure that the program makes timely decisions and successfully implements its local program. For internal management control, an enforcement management system should provide for:

- ° The identification of the individuals or unit responsible for each element of the system.

- ° Procedures for collecting and disseminating information. This could include developing standardized reporting forms, computerizing data, and notifying industrial users of violations.
- ° A method of tracking program activities at any given time, including issuance of control mechanisms, compliance reviews, and enforcement actions.
- ° A system of evaluating specific activities in terms of their quality, timeliness, results, and accomplishment of program objectives.

3.3.1.2 Industrial User Inventory Data

The foundation of a compliance tracking and enforcement system is a complete and accurate compilation of the pertinent data on all industrial dischargers to the Control Authority. For this system, the Control Authority must maintain a current inventory of industrial users (403.8(f)(2)(i)). This inventory should include the name, location, identification number, effluent limits, basis for the limit (categorical standards, local limits, etc.), volume of discharge, control mechanism status, compliance dates and other special requirements, industrial category, and significant industrial user classification for each industrial user. The Industrial Waste Survey should provide most of the information required to develop the inventory, although some supplementary information might be required from other sources, such as the permit application or monitoring data.

A routine schedule and an identified process for updating the inventory of industrial users should be implemented, including the specific data available concerning each user. Sources of information that might be used in the process include data developed through inspections of the facility, a review of water use records and/or

building permit applications, and information on changes reported by the industrial user. Responsibility for maintenance of the inventory should be assigned to one specific individual or group, such as the data management staff, and the flow of information within the Control Authority should be organized to ensure that all relevant data are directed to that group.

The data inventory should provide an index of the nature and type of industrial users in the Control Authority system. The list can be used to plan monitoring, enforcement, and permitting activities. For each industrial user on the list, a separate backup file should be maintained to include descriptions of the facility, monitoring data, inspection reports, summaries of violations and enforcement actions, and other detailed, relevant information. This historical information should be maintained to evaluate the performance of industrial users and the success of enforcement actions.

3.3.1.3 Collect and Dispense Information

In order to ensure that its system has the needed information and that this information is current, the Control Authority should actively manage the flow of information into its system. For each industrial user, the Control Authority must determine what data are legally required or needed, as well as when and how they can be obtained. The original, signed self-monitoring report or compliance schedule report indicating noncompliance is usually sufficient evidence of a violation, if signed by an authorized signatory or corporate official. In some cases, photocopies may also be adequate to prove a violation occurred.

The Control Authority should specify reporting requirements for the industrial user in the permit or other control mechanism used. The Control Authority then must track the submission of reports. If the information submitted is deficient or late, the industrial user should be notified and required to complete the submission within a fixed time period.

Other sources of information exist that should be consulted routinely to update or add information. The Control Authority may monitor water and sewer usage, issuance of building permits, violations of other local ordinances, and local news outlets to identify changes that have occurred or are planned for an industrial user and may affect its wastewater contribution to the Control Authority. The Control Authority should plan the receipt, processing, and retaining routine and nonroutine data to ensure that they are available when needed to make decisions on compliance activities (such as inspections or meetings) and, if necessary, as evidence in enforcement proceedings.

Under any circumstances, the Control Authority must retain baseline monitoring reports, 90-day compliance reports, compliance schedule response reports (if required), and (semiannual) continuing compliance reports that it has received for at least 3 years (see 40 CFR 403.12(n)).

In addition to collecting data, the Control Authority needs to dispense certain information. Industrial users must be notified of applicable pretreatment standards and hazardous waste disposal requirements under the Solid Waste Disposal Act (40 CFR 260 et sequences). Feedback should be provided to the industrial user on

its compliance status, changes in pretreatment requirements, the results of inspections, and other pertinent information or guidance; and industrial users should be informed of enforcement principles and the general responses to noncompliance.

The Control Authority should also make a concerted effort to inform the public of the progress of its pretreatment program. As required by regulation ((40 CFR 403.8(f)(2)(vii)) and discussed in Section 3.4.2 of this guidance, it must publish a list of industrial users with significant violations in the newspaper. In addition, it might undertake public education efforts in such areas as proper disposal of household chemicals or used engine oil.

3.3.1.4 Conduct Sampling and Inspection of IUs

The Control Authority should have an inspection plan for scheduling field investigations, which may include site visits, sample collection, facility inspections, and flow monitoring. The Control Authority should use field investigations to verify the compliance status determined from industrial user self-monitoring activities, collect samples, initiate emergency or remedial actions, and gather additional information. Field investigations may be routine compliance monitoring or special monitoring in response to violations, technical problems, or support for permit modifications. As discussed in Section 3.2, the Control Authority should plan routine field investigations, and/or collection of wastewater samples, of each Significant Industrial User at least once a year. The Control Authority should develop checklists and procedures for these routine visits and ensure that the results of each visit are documented and that industrial users are advised of any deficiencies

found during an inspection. Special onsite investigations may require warrants (which must be obtained under State or Federal law), specialized sampling equipment, and additional resources. These investigations should be conducted according to established procedures. Warrants should be obtained with advice from legal counsel. The Control Authority should advise the Approval Authority of its routine and special field investigation activities each year. The Control and Approval Authorities inspectors should conduct some joint investigations of industrial users to promote consistency and technical understanding of the inspection activities.

3.3.1.5 Compliance Screening

The compliance screening process involves reviewing of all available information to sort out noncomplying dischargers for appropriate enforcement response. This initial review should assess, as appropriate, compliance with schedules, reporting requirements (including "slug" discharge notices), and applicable pretreatment standards. Since this step is designed primarily to identify apparent violations and not to determine the appropriate enforcement response, this review can usually be handled by non-technical personnel. In any case, the person responsible for screening should be clearly specified.

The screening process should verify that the reports are submitted on schedule, that they cover the proper time period, include all information required, and are properly signed. The reviewer should compare the parameters reported, the number of measurements for each parameter, the method of analysis, the sampling procedures, the discharge concentration (or mass per day), and

other information supplied by the industrial user with the requirements in the industrial user's permit or other control mechanism. Any discrepancy is a violation that the IU should be required to correct. If a report lacks a required signature, it is incomplete. All alleged violations (including those arising from inspections and private complaints) should be identified by the Control Authority and recorded in a Violation Summary specific to each industrial user. This summary will serve as a log for the compliance history of the industrial user and the enforcement responses of the Control Authority.

The compliance screening process may also include notifying an industrial user when certain types of obvious noncompliance are found. For example, the Control Authority might establish procedures for routinely notifying the industrial user when a report is not received. This notification should include a deadline by which the industrial user must respond. The Control Authority should have a timeframe for followup by screening personnel to ensure that the industrial user has complied.

3.3.1.6 Enforcement Evaluation

The violations and discrepancies that were identified during the compliance screening process should be reviewed to evaluate the type of enforcement response needed. This review should normally be conducted by technical personnel, although legal consultation may be necessary in some cases. USEPA uses an Enforcement Response Guide to assist in this evaluation for NPDES cases. The guide identifies types of responses that are appropriate, based on the nature of the violation (effluent--average or maximum limit; reporting--late or deficient; or compliance schedule--begin or

complete construction); the duration of the violation; the frequency of the violation (isolated or recurring); the potential impact of the violation (such as interference, pass-through, or POTW worker safety); and the attitude of the violator. These factors are discussed in more detail in Section 3.4.3.

Control Authorities are encouraged to develop a similar type of guide for use in managing enforcement against violating industrial users. An example of an Enforcement Response Guide that the Control Authority might use has been developed and is included in Section 3.4. The responses available will vary among Control Authorities depending on legal authority, but will normally include informal responses such as telephone contacts or written notices of violation, and formal responses such as administrative orders with or without penalties, judicial actions, and termination of sewer service. The guide should reflect the following concepts:

- ° All violations of requirements must be reviewed by the Control Authority.
- ° Generally, the Control Authority should notify the industrial user when a violation is found.
- ° If the industrial user repeats the analysis for an effluent violation, and no further noncompliance is identified, no further Control Authority response may be necessary.
- ° For most violations, the Control Authority should receive an explanation and, as appropriate, a plan from the industrial user to correct the violation within a specified time period.
- ° If the violations persist or the explanation and the plan are not adequate, the Control Authority response should become more formal and commitments (or schedules, as appropriate) for compliance should be established in an enforceable document.
- ° The enforcement response selected should be related to the seriousness of the violation, and enforcement response should be escalated if compliance is not achieved expeditiously after taking the initial action. A serious initial violation may require a formal enforcement action, as described in Section 3.3.2.

The Control Authority should set deadlines for the industrial user to respond to notification of violations and should ensure that unfulfilled due dates are noted in Violation Summaries. Frequently, direct contact with the industrial user may appear to resolve the problem. However, such contacts and commitments should be confirmed in correspondence between the parties and noted in the Violation Summary. Otherwise, there is no permanent record that would be necessary to enforce the commitment.

3.3.1.7 Formal Enforcement and Followup

A decision to seek formal enforcement is generally triggered by a failure to achieve compliance in a specified time period through less formal means, a review of the violation records, and in some cases, the advice of counsel. Formal enforcement should be considered for each violation or group of violations that meets the definition of Significant Noncompliance (SNC) (Section 3.4). The decision to pursue formal action should be supported by a well-documented record of the violations by the industrial user and any prior efforts to obtain compliance on the part of the Control Authority. The Control Authority should review all records to assure that proper procedures were used to collect the information and that all contacts with the industrial user are recorded. If the industrial user has received conflicting information regarding its compliance status, that status should be clarified in writing. The Control Authority should consider a special onsite review or inspection to verify the data available, including a review of original analysis records to confirm the accuracy of information contained in periodic reports, or a "show cause" meeting with the industrial user, before commencing formal enforcement action. This verification should be completed quickly (usually within 1 or 2 weeks).

The Control Authority should specifically designate responsibility for preparing a formal enforcement action or providing the necessary information to legal counsel and should develop guidance covering the form and substance of the formal enforcement action for use by the staff. Additionally, the guidance should cover procedures for escalating the action if compliance is not achieved expeditiously. The Control Authority needs to coordinate closely with the city solicitor or other counsel in developing and processing the action.

3.3.2 Informal and Formal Enforcement Mechanisms

In order to achieve a maximum degree of compliance by industrial users, Control Authorities will need to use a range of enforcement mechanisms. The range of enforcement mechanisms available to the Control Authority will depend on the specific legal authorities it has been given by city, county, or State legislatures. These mechanisms may range from a simple reminder call to imposing significant criminal penalties. In decisionmaking, the Control Authority should recognize that some egregious or intentional violations may constitute criminal violations of Federal (and State) law, and that under such circumstances, the Control Authority may seek the assistance of the Approval Authority. The purpose of this section is to describe the range of available enforcement mechanisms.

The specific enforcement mechanisms that will be available to a Control Authority will vary depending on whether the Control Authority is USEPA, a State, or a local authority. These mechanisms will also vary depending on State law and the legal authorities (e.g., city ordinance) on which a pretreatment program was approved. The mechanisms listed below are examples of activities that are

generally available to an approved pretreatment program. These responses should be used when needed, consistent with the provisions or limitations of State law and local ordinances or contracts that apply.

Informal Actions

- ° Informal notice to industrial user (i.e., telephone call or meeting with industrial user representatives)
- ° Informal meetings
- ° Warning letter
- ° Notices or meetings to show cause.

Formal Actions

- ° Administrative orders and compliance schedules
- ° Civil suit for injunctive relief and/or civil penalties
- ° Criminal suit
- ° Termination of service (revoke permit)
- ° Establishment of specific contract requirements.

Each of these categories of enforcement activity will be discussed in the following subsections.

3.3.2.1 Informal Notice to Industrial User

Informal notice is the least coercive of the enforcement mechanisms and rarely requires specific authority. Informal notice may consist of a telephone call or "reminder" letter to an appropriate official (e.g., plant manager, environmental coordinator) of an industrial user. Such a call or letter may be used to notify officials of a minor violation (e.g., a report submitted a few days late) and to seek an explanation, suggest the exercise of more due care, and/or notify the "violation" that subsequent violations of the same type may be dealt with more severely. Such informal notice

may be used to correct minor, inadvertent noncompliance and to demonstrate that the Control Authority will note and followup all instances of noncompliance.

3.3.2.2 Informal Meetings

If a telephone call does not produce compliance or an adequate explanation of the reason for the noncompliance, a meeting between officials of the Control Authority and the industrial user may produce the desired results. At such a meeting, Control Authority officials might emphasize the importance of maintaining compliance. If informal meetings are unsuccessful in obtaining the firm's commitment to complying with its pretreatment obligations, the Control Authority might inform the industrial user representatives of stronger enforcement mechanisms that are available. The Control Authority should record all informal contacts, notices, and meetings with representatives of industrial users on its Violation Summary.

3.3.2.3 Warning Letter

The warning letter is a written notice to the industrial user that the Control Authority has observed a violation of pretreatment standards or requirements and expects the noncompliance to be corrected and explained. The warning letter, consistent with State law, also can require specific corrective actions and schedules to which the Control Authority expects the industrial user to adhere and a statement that additional enforcement action may be pursued if corrective actions are not accomplished as scheduled. The letter should also make it clear that compliance with the requirements of the letter does not excuse previous violations.

Such warning letters should be sent by certified mail with return receipt requested. Copies should be maintained in the industrial user file. Certified mail will more likely bring the notice to the serious attention of appropriate officials. Moreover, the return receipt will serve as proof that the industrial user received the notice in the event that more formal enforcement proceedings are necessary.

3.3.2.4 Notices or Meetings to Show Cause

The Control Authority may wish to consider meeting with the industrial user or issue a notice to "show cause" by the industrial user prior to taking formal enforcement action and/or discontinuing service. Generally, the industrial user would be presented with the facts that the Control Authority believes demonstrate non-compliance and asked to "show cause" to the Control Authority as to why it should not initiate formal action or discontinue sewer service. However, this action is not a prerequisite to taking a formal enforcement action or to discontinue sewer service, as described in the following sections.

3.3.2.5 Administrative Orders and Compliance Schedules

Section 309(a)(3) of the Clean Water Act authorizes EPA to issue orders without notice or opportunity for prior hearing, known as Administrative Orders (AOs), requiring compliance with standards or other requirements developed under the authority of the Act. To the extent that their legal authorities allow, some Control Authorities may issue similar orders under Section 403.8(f)(1)(iii) of the General Pretreatment Regulations. Although the exact nature of these orders will vary among Control Authorities, they can be used to place an industrial user on an enforceable schedule to

comply with pretreatment standards (e.g., install treatment, operate and maintain facilities), including appropriate interim limits. If your Control Authority has such authority, materials prepared by EPA Headquarters on preparing §309(a) Clean Water Act orders may be of value to you or your counsel. Copies of such materials may be obtained through your Approval Authority.

3.3.2.6 Penalties

Penalties and fines are tools that the Control Authority may use to enforce its local pretreatment program. In addition, fee schedules for surcharges and delinquent payments are often published as part of the sewer use ordinance. Civil penalty amounts are generally limited through State or municipal laws. EPA's "Guidance Manual for POTW Pretreatment Program Development," pp. 3-7, October 1983 recommends that local programs have the ability to assess penalties of at least \$300 per day of violation. However, this limit may be inadequate for some spills and other short-term violations that interfere with treatment or passthrough the POTW. Here again, as with possible criminal prosecution, appropriate action may involve seeking the assistance of the Approval Authority for obtaining penalties under State or Federal law. Fines may be used in conjunction with billing procedures for minor violations that may be detected during inspections or compliance review of self-monitoring data. Such fines should appear as a separate item on a bill with the violation identified. Surcharges should generally recover the Control Authority's cost of treatment, but they should not be used to allow discharges of toxic pollutants that cause interference or pass-through. The amount of civil penalty imposed will depend on the specific authority available to the Control

Authority and the nature of the violation. The Control Authority should consider the range of options available under State authority to collect penalties, including small claims court.

3.3.2.7 Termination of Service

Approved pretreatment programs must have the authority to halt immediately any actual or threatened discharge to the Control Authority that may represent an endangerment to the public health, the environment, or the POTW, upon notifying the industrial user of a violation (see 40 CFR 403.8(f)(1)(vi)(B)). Additionally, the Control Authority can deny or condition new or increased discharges by an industrial user or changes in the nature of pollutants discharged to the Control Authority by the industrial user if the discharge does not meet applicable pretreatment standards or will cause the Control Authority to violate its NPDES permit. Use of these remedies can be effective in bringing recalcitrant users into compliance. Without sewer service, a firm may have to obtain an NPDES permit to discharge wastes directly to the waters of the United States, and thus be required to install treatment to achieve direct discharge limitations. However, for many facilities, it will not be practical to discharge directly and they may face closure.

3.3.2.8 Civil Suit for Injunctive Relief and/or Civil Penalties

Most approved pretreatment programs should have authority to file a civil suit against alleged violators of applicable pretreatment standards seeking injunctive relief and/or civil penalties. In a civil suit for injunctive relief, the Control Authority collects pertinent information sufficient to prove the violations at issue and turns the information over to the city solicitor (or appropriate

Control Authority counsel) for case filing. The city solicitor (or appropriate Control Authority counsel) asks the court to order a discharger to take specific actions (e.g., comply with pretreatment requirements) or refrain from specific actions (e.g., cease prohibited discharge). The civil suit for injunctive relief is used when the industrial user is unlikely to execute successfully the steps that the Control Authority believes are necessary to achieve or maintain compliance, when the violation is serious enough to warrant court action to deter future similar violations, or when the danger presented by an industrial user's noncompliance does not permit lengthy negotiation of a settlement. If the Control Authority is able to show irreparable harm to the POTW operation, its workers, or the receiving stream, as a result of an ongoing industrial user violation and is likely to succeed on the merits of the case, a court may issue a temporary restraining order or preliminary injunction restraining the industrial user from violating standards pending the outcome of the suit. Injunctive court relief may require such actions as installation of facilities needed to come into compliance or a court order cessation of prohibited discharges.

3.3.2.9 Criminal Suit

Section 309(c) of the Act authorizes the Federal Government to seek criminal punishment for any person who willfully or negligently violates pretreatment standards, among other standards, or any person who knowingly makes a false statement regarding any report, application, record, or other document required by the General Pretreatment Regulations. Approved pretreatment programs may contain similar authority for the Control Authority, and State

Approval Authorities have this option. A POTW with insufficient authority may seek the assistance of the Approval Authority in this matter.

USEPA considers several factors to determine when violations should be addressed through criminal actions. Control Authorities should review similar kinds of information. These factors include the willfulness of the violation, knowledge of the violation, nature and seriousness of the offense, need for deterrence, compliance history of the subject, adequacy of the evidence, and the adequacy of penalties and sanctions available through civil or administrative enforcement actions. For criminal cases, the United States must provide proof beyond a reasonable doubt that the violation occurred through "willful or negligent action" of the discharger. A sentence containing penalties would be assessed by the court based on, among other considerations, its perception of the harm, damage, or potential threat, attributable to the violation.

Examples of criminal violations include falsification of data, tampering with results or equipment, willful or negligent failure to provide notice of slug discharges, or willful violation of the discharge agreements. All suspected instances of criminal violation should be evaluated. Criminal action could be used, if needed, to deter future violations by the individual or the industrial user community at large. Parallel criminal and civil actions are usually possible for a set of violations, especially where immediate injunctive relief is needed. However, criminal actions require additional evidence and proof beyond a reasonable doubt of knowledge and intent of the violator to conceal a violation or fact. In some cases, criminal action may be needed to recover the cost of damages and time associated with the violation.

Many cases of willful or negligent noncompliance (e.g., late night dumping of toxic substances into the collection system) could seriously damage the Control Authority treatment system and the environment. Such acts should be punished severely when adequate proof exists. In considering the development of criminal cases, the Control Authority should work closely with the local prosecutor and the Approval Authority to obtain guidance.

3.3.2.10 Approval Authority and Public Intervention

The NPDES permit of the POTW typically requires that the Control Authority implement its approved pretreatment program. The Approval Authority and USEPA, if the Approval Authority is the State, have a responsibility to ensure that the Control Authority is effectively implementing its approved pretreatment program, including timely and appropriate enforcement of pretreatment requirements. In this role, the Approval Authority will routinely review the overall performance of the Control Authority in monitoring industrial users and in enforcing where violations are identified. The Approval Authority will evaluate performance based on POTW self-monitoring, written enforcement response procedures, audits, inspections, and pretreatment program reports. The Approval Authority will discuss the evaluation with the POTW. If the industrial user's noncompliance persists after notification, the Approval Authority may proceed to enforce directly against the industrial user and/or Control Authority, particularly if requested to do so by the Control Authority. The Approval Authority may take its own enforcement action where the Control Authority has not taken timely action or has failed to impose adequate sanctions. Timeframes for appropriate enforcement responses to violations are discussed in Section 3.4.

The Control and Approval Authorities may jointly decide that action by the Approval Authority is preferable in a given situation.

Also, EPA retains authority to take its own enforcement action even where the State is the Approval Authority if neither the Control or Approval Authority is willing to take timely or appropriate enforcement.

Finally, Section 505 of the Act permits citizens to file suit against a POTW that has failed to implement its approved pretreatment program as required by its NPDES permit. A citizen may sue the Control Authority to obtain judicial enforcement of that approved program. Thus, the Control Authority may be required to apply standards to industrial users, enforce violations of pretreatment standards, or otherwise implement its approved program by a court order.

3.3.2.11 Resources to Enforce the Program

Informal enforcement mechanisms require relatively few resources and, in many cases, can be effective. Formal judicial action, by contrast, can be very resource-intensive. In Section 3.4, factors are discussed that should be considered in determining the appropriate enforcement response to a particular noncompliance event.

SECTION 3.4 RESPONDING TO INDUSTRIAL USER NONCOMPLIANCE

The Enforcement Management System (Section 3.3.1) describes principles that can be applied by local Control Authorities to track the compliance of industrial users and enforce their local pretreatment program requirements. This section describes how the Control Authority should respond to violations. Legal authorities for enforcement may differ on specifics among POTWs. This discussion presumes that a Control Authority has an adequate legal basis to enforce the pretreatment regulations.

Section 3.4.1 provides a definition of Significant Noncompliance that can be used by the Control Authority to set priorities for enforcement and to report to the Approval Authorities on the performance of industrial users. Section 3.4.2 explains the need to publish a list in the newspaper of industrial users with Significant Violations. Unresolved instances of Significant Noncompliance deserve formal enforcement action and are highlighted in the sample Enforcement Response Guide presented in Section 3.4.3. The Guide describes a range of enforcement responses for different types of noncompliance. Section 3.4.4 describes the relationship between different levels of enforcement response, EMS, and penalties. Section 3.4.5 discusses aspects of the violation that should be considered in selecting the specific enforcement response from among the range identified in the Enforcement Response Guide.

3.4.1 Definition of Significant Noncompliance (SNC)

Any violation of pretreatment requirements (limits, sampling, analysis, reporting and meeting compliance schedules, and regulatory

deadlines) is an instance of noncompliance for which the industrial user is liable for enforcement, including penalties. However, there is a need to identify violations or patterns of violations by industrial users that are instances of Significant Noncompliance. This classification allows the Control Authority to establish priorities for formal enforcement actions. It is also the basis for reporting on Significant Industrial User performance in the Pretreatment Performance Summary. This Guidance establishes a definition of Significant Noncompliance patterned after criteria used in the NPDES program (40 CFR 123.45). Instances of SNC are industrial user violations which meet one or more of the following criteria:

1. Violations of wastewater discharge limits.

- a. Chronic violations. Sixty-six percent or more of the measurements exceed the same daily maximum limit or the same average limit in a 6-month period (any magnitude of exceedance).
- b. Technical Review Criteria (TRC) violations. Thirty-three percent or more of the measurements exceed the same daily maximum limit or the same average limit by more than the TRC in a 6-month period.

There are two groups of TRCs:

Group I for conventional pollutants (BOD, TSS, fats, oil, and grease)	TRC = 1.4
Group II for all other pollutants	TRC = 1.2

- c. Any other violation(s) of an effluent limit (average or daily maximum) that the Control Authority believes has

caused, alone or in combination with other discharges, interference (e.g., slug loads) or pass-through; or endangered the health of the sewage treatment personnel or the public.

- d. Any discharge of a pollutant that has caused imminent endangerment to human health/welfare or to the environment and has resulted in the POTWs exercise of its emergency authority to halt or prevent such a discharge.
2. Violations of compliance schedule milestones, contained in a local control mechanism or enforcement order, for starting construction, completing construction, and attaining final compliance by 90 days or more after the schedule date.
 3. Failure to provide reports for compliance schedules, self-monitoring data, or categorical standards (baseline monitoring reports, 90-day compliance reports, and periodic reports) within 30 days from the due date.
 4. Failure to accurately report noncompliance.
 5. Any other violation or group of violations that the Control Authority considers to be significant.

Appendix C provides guidance on how to evaluate compliance with categorical standards that contain 4-day or monthly average standards.

For an industrial user is in SNC, the Control Authority is directed to: (1) report information to the Approval Authority as part of the Pretreatment Performance Summary of industrial user noncompliance (see Section 3.5.3 of this guidance); (2) list the

industrial user in the newspaper as having significant violations (see Section 3.4.2 of this guidance); and (3) address Significant Noncompliance through appropriate enforcement action (and consider seeking penalties or contract damages), or document in a timely manner their reasons for withholding enforcement.

3.4.2 Publishing Lists of Industrial Users With Significant Violations

Section 403.8(f)(2)(vii) of the General Pretreatment Regulations requires that the Control Authority publish, at least annually, in the largest daily newspaper located in the municipality serviced by the Control Authority, a list of industrial users that were significantly violating applicable pretreatment standards and requirements during the previous 12 months. This section of the regulations defines a Significant Violation as:

"...a violation which remains uncorrected 45 days after notification of noncompliance; which is part of a pattern of noncompliance over a twelve month period; which involves a failure to accurately report noncompliance; or which resulted in the POTW exercising its emergency authority under Section 403.8(f)(1)(vi)[B]."

Despite the regulatory requirement to publish lists of industrial users with Significant Violations, many Control Authorities have not complied with this requirement. This regulatory requirement, which subjects the violator to public scrutiny, should be used by the Control Authority as an effective deterrent to continued noncompliance.

Although the definition of Significant Noncompliance differs from that for Significant Violation, there are some similarities.

TABLE 3-1
COMPARISON: SIGNIFICANT VIOLATION TO SIGNIFICANT NONCOMPLIANCE

<u>Significant Violation</u>	<u>Significant Noncompliance</u>
° A violation that remains uncorrected 45 days after notification of noncompliance.	
° That is part of a pattern of noncompliance over a 12 month period.	Chronic Violations. Sixty-six percent or more of the measurements exceed the same daily maximum limit or the same average limit in a 6-month period. Technical Review Criteria (TRC) Violations. Thirty-three percent or more of the measurements exceed the same daily maximum limit or the same average limit by more than the TRC in a 6-month period.
° That involves a failure to accurately report noncompliance.	Failure to provide reports for compliance schedules, self-monitoring data, permit application data, or categorical standards (baseline monitoring reports, 90-day compliance reports, and periodic reports) within 30 days from the due date.
° That resulted in the POTW exercising its emergency authority under Section 403.8(f)(1)(vi)(B).	Any discharge of a pollutant that has caused imminent endangerment to human health/welfare or to the environment and has resulted in the POTW's exercise of its emergency authority to halt or prevent such a discharge. Any other violation(s) of an effluent limit (average or daily maximum) that the Control Authority believes has caused, alone or in combination with other discharges, interference (e.g., sludge loads) or pass-through, or endangered the health of the sewage treatment personnel or the public.

Significant Violation

Significant Noncompliance

Violations of compliance schedule milestones, contained in a local control mechanism or enforcement order, for starting construction, completing construction, and attaining final compliance by 90 days or more after the schedule date.

Any other violation or group of violations that the POTW considers to be significant.

As guidance, EPA recommends that any violation(s) during the previous 12 months that resulted in an industrial user being in Significant Noncompliance, should be considered a Significant Violation.

EPA would prefer to use the single definition of Significant Noncompliance for both establishing enforcement principles and publishing a list of noncompliant industrial users in the newspaper. However, Significant Violation is defined in the General Pretreatment Regulations and must be used for the purpose of newspaper publications. This definition, which uses the activities of an Industrial User over a full year, is not usable in defining the violators to receive priority attention. In the future, EPA plans to propose to amend the General Pretreatment Regulations to remove the term Significant Violation and simply require publication of those industrial users in Significant Noncompliance.

EPA recommends that the published list of industrial users with Significant Violations include additional information such as duration of violation, parameters and/or reporting requirements violated, compliance action taken (if any), whether the industrial user is currently complying with a compliance schedule, and whether

the industrial user has returned to compliance. At the discretion of the Control Authority, the type of enforcement action undertaken may also be reported. Appendix A contains an example of a published listing of industrial users with Significant Violations. The Approval Authority may require that a copy of the published listing accompany an annual (or more frequent) report from the Control Authority regarding pretreatment program implementation activities.

3.4.3 Enforcement Response Guide

This guide was developed as an example for Control Authority officials to use who are responsible for determining the appropriate enforcement response to a specific violation of pretreatment requirements and related sections of the Clean Water Act. The guide is intended to serve two main purposes:

1. It covers enforcement responses that may be appropriate in relation to the nature and severity of the violation and the overall degree of noncompliance
2. It provides a guide to encourage a uniform application of enforcement responses to comparable levels and types of violations, and it can be used as a mechanism to review the appropriateness of responses by an enforcement agency.

This Guidance strongly recommends that each Control Authority develop an Enforcement Response Guide to include the types of violations that may be expected and tailored to include a range of enforcement responses available to the Control Authority. In any particular case, these factors may lead to a response that differs from that contained in a guide. When making determinations on the level of the enforcement response, the technical and legal staff

should consider the degree of variance from the pretreatment standards or legal requirement, the duration of the violation, previous enforcement actions taken against the violator, and the deterrent effect of the response on the similar facility in the regulated community. Equally important are considerations of fairness, equity, consistency, and the integrity of the pretreatment program.

A key element in all enforcement responses is the timeliness with which they are initiated and affect compliance. Given many types of violations, applicable legal enforcement procedures, and the variance in resources available to the Control Authorities, no specific timeframe is established in which to initiate and complete a given response. However, specific timeframes to initiate a response should be developed by the Control Authority. For example, within 30 days of the identification of any violation, the appropriate response should be determined, and any action taken (or not taken) should be documented. If Significant Noncompliance continues beyond what is considered to be a reasonable time period, appropriate formal enforcement action should be initiated.

This sample guide (Table 3-2) addresses a broad range of pretreatment violations. It is not intended to cover all types of violations. The responses in this guide are suggested responses; Control Authorities may have alternative enforcement responses that are equally effective. The measure of the effectiveness of an enforcement response includes:

- ° Whether the noncomplying source returns to compliance as expeditiously as possible
- ° Whether the enforcement response establishes the appropriate deterrent effect for the particular violator and for other potential violators

- Whether the enforcement response promotes fairness of government treatment as between comparable violators, as well as between complying and noncomplying parties.

This guide has been developed for guidance and is not intended to create legal rights or obligations, or to limit the enforcement discretion of any of the administering agencies.

TABLE 3-2
ENFORCEMENT RESPONSE GUIDE

SAMPLING, MONITORING, AND REPORTING

<u>NONCOMPLIANCE</u>	<u>CIRCUMSTANCES</u>	<u>RANGE OF RESPONSE</u>
Failure to sample, monitor, or report (routine reports, BMR's).	Isolated or infrequent.	Phone call or written letter of violation (LOV) requiring a report within 10 days. If no response is received, issue an Administrative Order (AO).
Failure to sample, monitor, report, or notify.	IU does not respond to letters, does not follow through on verbal or written agreement, or frequent violation—SNC.**	AO or judicial action, including penalties if no response is received. Request criminal investigation.
Failure to notify of effluent limit violation or slug discharge.*	Isolated or infrequent. No known effects.	Phone call or LOV. If no response within 10 days, issue an AO.***
Failure to notify of effluent limit violation or slug discharge.*	Frequent or continued violation—SNC.	Show cause meeting, AO, or judicial actions, including penalties.
Failure to notify of effluent limit violation or slug discharge.*	Known environmental or POTW damage results—SNC.	Judicial action and penalties. Sewer ban.
Minor sampling, monitoring, or reporting deficiencies (computational or typographical errors).	Isolated or infrequent.	Phone call or LOV. Corrections to be made on the next submittal. AO if continued.
Major or gross sampling, monitoring, or reporting, deficiencies (missing information, late reports).	Isolated or infrequent.	LOV or AO. Corrections to be made on the next submittal.
Major or gross reporting deficiencies.	Continued. Remains uncorrected 30 days or more—SNC.	AO or judicial action.

TABLE 3-2 (continued)
ENFORCEMENT RESPONSE GUIDE

COMPLIANCE SCHEDULES (Construction phases or planning)

<u>NONCOMPLIANCE</u>	<u>CIRCUMSTANCES</u>	<u>RANGE OF RESPONSE</u>
Reporting false information.	Any instance—SNC.	Request for criminal investigation. Judicial action, penalties, sewer ban.
Missed interim date.	Will not cause late final date or other interim dates.	LOV.
Missed interim date.	Will result in other missed interim dates. Violation for good or valid cause.	LOV or AO.
Missed interim date.	Will result in other missed interim dates. No good or valid cause—SNC.	LOV, AO, or judicial action, including penalty.
Missed final date.	Violation due to force majeure (strike, act of God, etc.).	Contact permittee and require documentation of good or valid cause; show cause.
Missed final date.	90 days or more outstanding. Failure or refusal to comply without good or valid cause.	AO or judicial action, including penalty.
Failure to install monitoring equipment.	Continued—SNC.	AO to begin monitoring (using outside contracts, if necessary) and install equipment within minimal time. Temporary sewer ban.

EFFLUENT LIMITS

<u>NONCOMPLIANCE</u>	<u>CIRCUMSTANCES</u>	<u>RANGE OF RESPONSE</u>
Exceeding final limits (categorical local or prohibited).	Infrequent or isolated minor violations.	LOV.
Exceeding final limits.	Infrequent or isolated major violations exceed the limits by TRC of a single effluent limit.	LOV, AO (judicial action if environmental harm resulted, including penalty).
Exceeding final limits.	Violation(s) that are SNC.	AO or judicial action, including penalty.

TABLE 3-2 (continued)
ENFORCEMENT RESPONSE GUIDE

EFFLUENT LIMITS (cont.)

<u>NONCOMPLIANCE</u>	<u>CIRCUMSTANCES</u>	<u>RANGE OF RESPONSE</u>
Exceeding interim limits (categorical or local).	Without known damages.	LOV or AO.
Exceeding interim limits.	Results in known environmental or POTW damage—SNC.	AO or judicial action, including penalty.
Reported slug load.	Isolated without known damage.	Show cause or AO.
Reported slug load.	Isolated with known interference, pass-through, or damage—SNC.	AO or judicial action, including penalty.
Reported slug load.	Recurring—SNC.	Judicial action, including penalty. Sewer ban.
Discharge without a permit or approval.	One time without known environmental or POTW damage.	AO.
Discharge without a permit or approval.	One time that results in environmental damage or continuing violation—SNC.	AO or judicial action and penalty. Request for criminal investigation.
Discharge without a permit or approval.	Continuing violation with known environmental or POTW damage—SNC.	Judicial action and penalty. Request for criminal investigation. Disconnect from sewer.

NONCOMPLIANCE DETECTED THROUGH INSPECTIONS OR FIELD INVESTIGATIONS

<u>NONCOMPLIANCE</u>	<u>CIRCUMSTANCES</u>	<u>RANGE OF RESPONSE</u>
Minor violation of analytical procedures.	Any instance.	LOV.
Major violation of analytical procedures.	No evidence of intent.	LOV or AO.
Major violation of analytical procedures.	Evidence of negligence or intent—SNC.	AO or judicial action and penalty (possible criminal action).
Minor violation of permit condition.	No evidence of negligence or intent.	LOV. Immediate correction required.

TABLE 3-2 (continued)
ENFORCEMENT RESPONSE GUIDE

NONCOMPLIANCE DETECTED
THROUGH INSPECTIONS OR
FIELD INVESTIGATIONS

<u>NONCOMPLIANCE</u>	<u>CIRCUMSTANCES</u>	<u>RANGE OF RESPONSE</u>
Minor violation of permit condition.	Evidence of negligence or intent—SNC.	AO or judicial action and penalty (possible criminal action).
Major violation of permit condition.	Evidence of negligence or intent—SNC.	AO or judicial action and penalty (possible criminal action). Sewer ban.

- * Proposed revisions on June 12, 1986, (51 FR 21454) to the General Pretreatment Regulations include a requirement to repeat effluent analysis after each violation and provide the information to the Control Authority within 21 days.
- ** SNC. This denotes that the circumstances of a particular violation are severe enough to meet the criteria specified on pages 3-52 and 3-53 for Significant Noncompliance (SNC).
- *** Whenever a letter of violation is issued that requires a response and the industrial user fails to respond, the Control Authority should issue an administrative order to require the industrial user to respond and return to compliance immediately.

3.4.4 Levels of Response

There are three possible levels of response to all violations available to the Control Authority--no response, an informal response, or a formal response. For any violation, the Control Authority must review the violation and determine the appropriate response. For some violations, the response may be no action necessary at this time. The Response Guide includes a range of informal and formal responses. The informal enforcement response can be an inspection, phone call, informal meeting, or a letter of violation to the industrial user. The letter of violation can be limited to a notification of the violation or can require the IU to take certain steps within specific timeframes. The formal enforcement response must be one of the following (see Section 3.3.2):

- ° Administrative orders and compliance schedules
- ° Civil suit for injunctive relief and/or civil penalties
- ° Criminal suit*
- ° Termination of service (revoke permits)
- ° Collection of contract damages.

The terms major and minor violations are used in the Response Guide to describe violations of effluent limits, sampling, monitoring, and reporting requirements. Major violations are those that exceed the limits frequently and/or by a large quantity (e.g., the technical review criteria under Section 3.4.1); impede the determination of

* These tools may, under certain circumstances, be more appropriately exercised by the Approval Authority.

compliance status; have the potential to cause or may have actually caused adverse environmental effects, health problems, or interfered with the POTW treatment capability. Any violation that meets the definition of Significant Noncompliance (Section 3.4.1) should be considered a major violation.

Monetary penalties and collection of contract penalties may also be used as part of the enforcement response. USEPA has identified four goals that should be considered in assessing penalties. These goals are:

- ° Penalties should recover the economic benefit of noncompliance plus some amount for the gravity of the violation
- ° Penalties should be large enough to deter future noncompliance
- ° Penalties should be uniform or reasonably consistent for similar instances of noncompliance
- ° A logical basis for the calculation of penalties should exist.

EPA issued a Clean Water Act Penalty Policy (February 11, 1986) to implement these principles for Clean Water Act violations and provide a systematic approach for calculating penalties.

3.4.5 Factors in Selecting the Appropriate Response

As indicated, industrial user violations of monitoring, reporting, and treatment requirements may range from the relatively minor violations (reports submitted a week late) to major violations described in the discussion above. Each instance of noncompliance is a violation and sound enforcement policy would be to review each and respond appropriately. However, selection of the appropriate enforcement response will relate to whether the violation is major or minor and such other factors as duration of the violation,

compliance history, good faith of the violator, and the harm caused by the violation. For example, if a semiannual report is late by about a week, the Control Authority may not consider that a serious violation. In most cases, a telephone call or notice of violation for the Control Authority requesting an explanation will bring the problem to the attention of the industrial user's management. Frequently, such a notification is sufficient to correct the problem. For each type of violation in the Response Guide, a range of responses is shown. The Control Authority should select the appropriate response after considering factors such as those below.

3.4.5.1 Duration of the Violation and Compliance History of the Industrial User

The Control Authority should review the Violation Summary to evaluate the duration of the violation and the compliance history of the industrial user. A violation occurs whenever an industrial user exceeds an applicable effluent limit or fails to meet the deadlines and conditions for reporting, monitoring, or treatment. The Control Authority should also consider the effectiveness of the enforcement response that was used for the previous violation.

Isolated violations will usually be attributed to a relatively simple problem that can be easily corrected. Although the tendency is to assume that minor exceedances are unimportant, the persistence of minor violations could indicate a more serious problem and necessitate an escalated enforcement response. Categorical pretreatment standards account for routine variations in treatment system performance. When several minor exceedances occur, either consecutively or several months apart, it may suggest that operating practices are inadequate to meet the limits and additional controls are needed.

More aggressive enforcement actions should normally be taken against facilities that frequently exceed numerical pretreatment standards than those that report isolated exceedances (unless the isolated exceedances are large and troublesome). Informal meetings or a written notice of violation should seek specific explanations of the causes of frequent exceedances. If inadequate operating practices are found to be the cause, the Control Authority should seek specific commitments and deadlines to improve operating practices. If additional treatment is required, an enforceable compliance schedule should be issued to the industrial facility.

3.4.5.2 Apparent Good Faith of Responsible Industrial User Personnel

If industrial user personnel appear to be attempting in good faith to comply with pretreatment requirements, Control Authority enforcement actions should be on a more cooperative level than if industrial user personnel do not appear to be attempting to comply in good faith.

However, Control Authority personnel should be aware that the Clean Water Act requires extraordinary efforts to comply with its requirements in a timely way. Good faith must be measured against this standard. Congress clearly expresses the efforts that are expected:

The Act requires industry to take extraordinary efforts if the vital and ambitious goals of the Congress are to be met. This means that business-as-usual is not enough. Prompt, vigorous, and in many cases, expensive pollution control measures must be initiated and completed as promptly as possible. In assessing the good faith of a discharger, the discharger is to be judged against these criteria. Moreover, it is an established principle, which applies to this act, that administrative and judicial review are sought on the discharger's own time.

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Thus, if a facility challenges a permit, contract, or applicable pretreatment standard and delays progress toward compliance, the facility assumes the risk that the permit, contract, or standard will be upheld on judicial review. If the facility begins aggressively to come into compliance only after a decision is made adverse to its interests, it cannot be considered to have acted in good faith. Likewise, if a facility follows business-as-usual procedures, it cannot be considered to have acted in good faith.

However, if measured against the high standards cited above, a facility appears to be acting in good faith to comply, the Control Authority may choose an enforcement response that is not as coercive as one it would choose against a facility not acting in good faith.

3.4.5.3 Noncompliance That Causes Interference or Pass-Through

Industrial user noncompliance might cause interference with treatment plant performance or pass-through of pollutants. Such violations should be addressed through formal enforcement action and penalties to ensure that adequate treatment and compliance is achieved promptly. In some cases, injunctive measures will also be appropriate.

SECTION 3.5
CONTROL AUTHORITY RECORDKEEPING AND REPORTING TO APPROVAL AUTHORITY

3.5.1 Recordkeeping Requirements

The General Pretreatment Regulations (40 CFR 403.12(n)) require that Control Authorities maintain records of program activities for a minimum of 3 years. These records include the reports submitted by industrial users, results of Control Authority inspections and sampling of industrial users, and information about Control Authority enforcement action. Virtually all Control Authorities have developed administrative systems for management of NPDES information. Some Control Authorities, however, may be unfamiliar with the rules of evidence for records that may be used for formal enforcement action. Such Control Authorities should consult appropriate legal counsel to determine applicable local, State, and Federal law.

3.5.2 Reporting Requirements

The requirements for annual reporting by a Control Authority to the Approval Authority are usually established by the NPDES permit. The one exception to this is the State-operated pretreatment program where there are no local Control Authorities and USEPA acts as the Approval Authority. In this case, reporting requirements will be established in the State/EPA Enforcement Agreement. In general, the Control Authority will be required to report at least annually and, in some cases, quarterly. (Proposed amendments to the General Pretreatment Regulations include a new proposed 40 CFR 403.12(i) (51 FR 21480, June 12, 1986), which would impose a requirement for all Control Authorities to submit a report at least annually to their Approval Authorities.)

The Approval Authority will use these annual reports, in conjunction with pretreatment compliance inspections and audits, to evaluate the effectiveness of pretreatment program implementation by the Control Authority. While the specific information requested may vary among Control Authorities, in general, the report should cover all requirements specified in the NPDES permit and approved pretreatment program. Table 4-1 provides a listing of annual report elements currently found in annual reports. Control Authorities that have received removal credits are required to report on a semiannual basis the results of their monthly influent/effluent analyses to verify that consistent removal is achieved.

3.5.3 Data for an Annual Pretreatment Program Report

Experience has demonstrated that there is a great deal of variation in the type and quantity of information required from POTWs. To ensure some degree of consistency and adequacy of reports, a set of minimum information needs to be defined. To the extent that this information is captured in a standardized format using a common set of definitions, it can become a basis for evaluating the effectiveness of pretreatment program implementation on a nationwide basis and for comparing the activities among Control Authorities. Further, such minimum data can be the primary basis for an automated pretreatment data system. For these reasons, this guidance recommends a format for a Pretreatment Performance Summary that addresses the minimum compliance information needs of an annual pretreatment report. The Pretreatment Performance Summary (or equivalent information) should be part of all annual reports. Modification of annual report requirements is the responsibility of the Approval Authority; therefore, adoption of the Pretreatment Performance Summary or any other change should be made as directed by the Approval Authority.

TABLE 4-1
ANNUAL REPORT ELEMENTS

1. Summary of POTW Monitoring Efforts
 - Influent/Effluent and Sludges
2. Updated Industrial User Survey (annual)
3. Summary of Control Mechanism Efforts
 - Issuance of Control Mechanisms
 - Revisions to IU Limits
4. Inspection and Monitoring Efforts
 - Summary of Previous Year Activities
 - Proposed Schedule for Next Year
5. Reporting Frequency
6. Compliance Status
 - Description of Each Significant Industrial User
 - Notification of Substantial Changes in Volume or Characteristics of Pollutants
 - Identification of All New Pollutants
 - List of Industrial Users in Significant Noncompliance
 - List of Industries not in Compliance With Reporting Requirements
 - List of Interference/Upset/Permit Violation Incidents
 - Summary of Compliance Status
 - Summary of Compliance of Nonsignificant Industrial Users
7. Notification Efforts
 - IUs Without Compliance Schedules
 - IUs With Compliance Schedules
8. Summary of Enforcement Action
 - Dates of Violations and Enforcement Response
 - Date Compliance Achieved
9. Program Evaluation
 - Evaluation of Program Effectiveness
 - Evaluation of Local Limits
 - Evaluation of Resources
 - Notification of Proposed Changes
 - Notification of Changes to Program
10. Summary of Public Participation Efforts

As designed, the proposed format directs the Control Authority to report on its activities only as they affect Significant Industrial Users (see definition in Section 2.1.3). The 1 page format provides the Approval Authority with the basic information needed to evaluate Control Authority performance and to report program status and industrial user compliance data to USEPA Regions and Headquarters.

Part I contains general information that identifies the Control Authority, the appropriate contact person, permit numbers covered by the approved program, and the total number of categorical and significant noncategorical industrial users.

Part II requests summary information on industrial user compliance with reporting requirements and pretreatment standards. The first three entries request the number of industrial users that submitted reports (BMR, 90-Day Compliance, and Semiannual Reports) compared to the number of industrial users required to submit reports during the period. The fourth question seeks to identify the number of SIUs meeting compliance schedules as compared to the number actually required to meet schedules. One of the more significant pieces of information is the rate of Significant Non-compliance by industrial users. This (fractional) rate is developed by identifying the total number of Significant Industrial Users that are in Significant Noncompliance as the numerator, and by identifying the total number of Significant Industrial Users (see Significant Noncompliance definition in Section 3.4.1) as the denominator.

PRETREATMENT PERFORMANCE SUMMARY

SAMPLE

I. <u>General Information</u>	
Control Authority Name _____	I certify that the information contained is complete and accurate to the best of my knowledge. _____ / / Authorized Representative Date
Address _____	
City _____ State/Zip _____	
Contact Person _____	
Contact Telephone Number _____	
NPDES Nos. _____	
Reporting Period _____	
Total Categorical IUs _____	
Total Significant Noncategorical IUs _____	

II. <u>Significant Industrial User Compliance</u>	SIGNIFICANT INDUSTRIAL USERS	
	Cate-gorical	Noncate-gorical
1) No. of SIUs Submitting BMRs/No. Required	/	NA
2) No. of SIUs Submitting 90-Day Compliance Reports/No. Required.....	/	NA
3) No. of SIUs Submitting Semiannual Report/No. Required	/	/
4) No. of SIUs Meeting Compliance Schedule/No. Required to Meet Schedule	/	/
5) No. of SIUs in Significant Noncompliance/Total No. of SIUs	/	/
6) Rate of Significant Noncompliance for all SIUs (categorical and noncategorical)	/	

III. <u>Compliance Monitoring Program</u>		
1) No. of Control Documents Issued/No. Required	/	/
2) No. of Nonsampling Inspections Conducted	_____	_____
3) No. of Sampling Visits Conducted	_____	_____
4) No. of Facilities Inspected (nonsampling)	_____	_____
5) No. of Facilities Sampled	_____	_____

IV. <u>Enforcement Actions</u>		
1) Compliance Schedules Issued/Schedules Required	_____	_____
2) Notices of Violations Issued to SIUs	_____	_____
3) Administrative Orders Issued to SIUs	_____	_____
4) Civil Suits Filed	_____	_____
5) Criminal Suits Filed	_____	_____
6) Significant Violators (attach newspaper list)	_____	_____
7) Amount of Penalties Collected (total dollars/IUs assessed)	_____	_____
8) Other Actions (sewer bans, etc.)	_____	_____

Part III summarizes the compliance monitoring program of the Control Authority. The Control Authority should complete the table with the number of control documents (i.e., permits) issued to industrial users and the number required; the number of sampling and nonsampling inspections conducted; and the number of facilities inspected (sampling and nonsampling).

Part IV summarizes enforcement responses taken by the Control Authority to industrial user noncompliance. The Control Authority should identify the total number of each type of enforcement action taken in the period covered by this report. The actions taken should include only those that were in writing. A notice of violation given by telephone should not be included. The Control Authority should also attach the list of Significant Violators published in the newspaper as a part of its response to Part IV. (Failure to publish the newspaper list is a violation in itself and makes the Control Authority subject to an enforcement response by the Approval Authority.)

To assist in determining the rate of Significant Noncompliance, worksheets and procedures (and an example newspaper violations listing) are included in Appendix A.

APPENDIX A
Example Reporting Procedures

Example procedures for:

	<u>Page</u>
° Industrial User Reports	A-1
° Evaluation of IU Compliance	A-9
° Summary of Industrial User Compliance	A-13
° POTW Reports to the Approval Authority	A-17
° Newspaper Listing of Significant Violations	A-19

APPENDIX A EXAMPLE REPORTING PROCEDURES

This appendix explains the recommended pretreatment reporting process, beginning with a summary of industrial sampling data, through evaluation of IU compliance and reporting to the Approval Authority, and finishing with a public notice of Significant Violations in the newspaper. Reporting at all intervals--industrial user, POTW, and States--will be an ongoing and significant activity in pretreatment program operations. USEPA must rely on regular status reports to develop national reports on industrial compliance with pretreatment standards. In order for the national report to be credible and verifiable, all facets of the reporting system should be based on common definitions. The definition of Significant Noncompliance provides the criteria for evaluating industrial user compliance against pretreatment standards. Most NPDES permits either currently contain or soon will be modified to contain language that establishes regular timetables for reporting pretreatment compliance status information to the Approval Authority.

1. Industrial User Reports

This section provides the Control Authority with a recommended method of handling industrial user sampling and analysis information. Other methodologies are available and some Control Authorities already have procedures. If an existing procedure contains all of the fundamental elements discussed within, there may be no need to modify that system. The fundamental elements of an industrial report are listed in this section. These elements are then shown in the context of a recommended Industrial Monitoring Report format. The example reporting format is shown for a job shop electroplater (Chrome Bumpers, Inc., is a hypothetical job shop electroplater).

A. The following identifies the fundamental elements of an industrial user report:

- ° Basic Information: Name of IU, address, and reporting period.
- ° Daily Pollutant Concentrations: The pollutants monitored, the units in which pollutants are recorded, the date samples were taken, and concentration of pollutants (analysis).
- ° Average Pollutant Concentrations: Because categorical industrial users are often subject to meeting average concentrations, the report should provide a reading of such averages at the appropriate frequencies.
- ° Mass Per Day: The Control Authority may alter the units as it deems necessary. If limits are expressed in mass per day, IUs must submit reports in mass per day along with the supporting concentration and flow data.
- ° Flow Data Reporting: By regulation, IUs subject to categorical standards must submit average and daily maximum flow data. These should include flow data for each flow rate used in calculating the industrial user's limits (e.g., total flow and dilution flow).
- ° Certification Statement: If an industrial user has certified to a particular condition of a categorical regulation, a statement should be included acknowledging the continuing applicability of the certification. For example, Metal Finishers and Electroplaters would provide the following:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewater has occurred since filing of the last semiannual compliance report. I further certify that this facility is implementing the toxic organic management plan submitted to the Control Authority."
- ° Signature of Authorized Representative: A signed statement by an authorized representative, that certifies the validity of the report.

Reporting Production-based Standards

When the Industrial User is subject to a production-based standard, production information must be supplied. For example:

PRODUCTION RATE

<u>Production Factors</u>	<u>Units</u>	<u>Average Production Rate for the Reporting Period</u>
Common Metals	Sq.m.-op.	1,940
Electroless Plating	Sq.m.-op.	1,560
Coatings	Sq.m.-op.	780

or daily information can be provided.

PRODUCTION RATE

<u>Production Factor</u>	<u>Units</u>	<u>7/5/86</u>	<u>7/13/86</u>	<u>7/21/86</u>	<u>7/29/86</u>
Common Metals	Sq.m.-op.	1,980	2,590	1,110	2,080
Electroless Plating	Sq.m.-op.	1,590	2,080	900	1,680
Coatings	Sq.m.-op.	790	1,040	450	840

For a more detailed understanding of production-based standards, see "Guidance Manual for Use of Production-Based Pretreatment Standards and the Combined Wastestream Formula," available through USEPA Regional Offices.

B. Recommended Industrial User Reporting Format

Section 403.12 of the General Pretreatment Regulations requires that categorical industries report semiannually on their regulated waste discharges. A recommended format for recording and reporting the industrial user's effluent data for that report is provided on page A-5. (This format may be modified by the Control Authority to obtain additional information, or the Control Authority may use its own form to obtain at least equivalent information for this report.) This sample format, called the Industrial Monitoring Report, can be

used by: (1) industrial users to record and report self-monitoring activities, and (2) the Control Authority to record scheduled, unscheduled, and demand monitoring activities of the industrial user. To complete the format, the industrial user or Control Authority should follow the instructions shown on page A-6(a)-(c). Two semiannual Industrial Monitoring Reports completed for Chrome Bumpers, Inc. (a hypothetical electroplater subject to daily and 4-day average maximum standards), are provided on pages A-7 and A-8. (Appendix C describes the procedures for reporting on the electroplating category's 4-day averages.)

INDUSTRIAL MONITORING REPORT

IU NAME _____ IU CODE _____
 ADDRESS _____ WTP DISCHARGED TO _____
 CITY _____ STATE _____ ZIP _____
 PRODUCTION RATE _____

I HEREBY CERTIFY THAT THIS REPORT IS
 ACCURATE TO THE BEST OF MY KNOWLEDGE

PARAMETERS	UNIT	LIMITS MAX/AVG.	Authorized Representative												Date
			SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	AVERAGE
FLOW, TOTAL	gpd		mo day yr	mo day yr	mo day yr	mo day yr	mo day yr	mo day yr	mo day yr	mo day yr	mo day yr	mo day yr	mo day yr	mo day yr	mo day yr
FLOW, DILUTE	gpd		SELF	SELF	SELF	SELF	SELF	SELF	SELF	SELF	SELF	SELF	SELF	SELF	mo day yr
BOD ₅ @ 20°C	mg/l		SCHEDUL	SCHEDUL	SCHEDUL	SCHEDUL	SCHEDUL	SCHEDUL	SCHEDUL	SCHEDUL	SCHEDUL	SCHEDUL	SCHEDUL	SCHEDUL	to
COD	mg/l		UNSCHEDE	UNSCHEDE	UNSCHEDE	UNSCHEDE	UNSCHEDE	UNSCHEDE	UNSCHEDE	UNSCHEDE	UNSCHEDE	UNSCHEDE	UNSCHEDE	UNSCHEDE	mo day yr
TSS	mg/l		DEMAND	DEMAND	DEMAND	DEMAND	DEMAND	DEMAND	DEMAND	DEMAND	DEMAND	DEMAND	DEMAND	DEMAND	mo day yr
TS	mg/l														
pH															
OIL, GREASE	mg/l														
AMMONIA, NH ₃	mg/l														
NO ₂ - NO ₃	mg/l														
TOTAL PHOS	mg/l														
CYANIDE, CN	mg/l														
PHENOL	mg/l														
SULFIDE, S ²⁻	mg/l														
FLUORIDE, F	mg/l														
SILVER, Ag	mg/l														
ALUMINUM, Al	mg/l														
ARSENIC, As	mg/l														
CADMIUM, Cd	mg/l														
HEXA CHROM	mg/l														
TOTAL CHROM	mg/l														
COPPER, Cu	mg/l														
IRON, Fe	mg/l														
MERCURY, Hg	mg/l														
MANGANESE, Mn	mg/l														
NICKEL, Ni	mg/l														
LEAD, Pb	mg/l														
SELENIUM, Se	mg/l														
ZINC, Zn	mg/l														
TOTAL METAL	mg/l														
TOT. TOX. ORG.	mg/l														

INSTRUCTIONS FOR COMPLETING THE INDUSTRIAL MONITORING REPORT

- ° Identify the industry name, address, and the wastewater treatment plant to which it discharges. If the industrial user must comply with production-based standards, the rate of production should be shown (in units consistent with the standard), along with the date the production rate was determined. The sampling period covered by the report should also be identified.
- ° For industrial users recording self-monitoring samples and analysis, the date each sample was taken should be shown in the "Sample" column and the type of sample indicated (if different from the sample type required by the ordinance, permit, or categorical standard). Because all samples taken by the industrial user are self-monitoring samples, the box indicating self-monitoring ("SELF") should always be checked.
- ° For Control Authorities recording industrial user monitoring samples and analysis, the date each sample was taken should be shown in the "Sample" column. Because the Control Authority can collect one of three types of monitoring samples, the appropriate box (scheduled, unscheduled, or demand) should be checked. (Section 3.2 explains the scheduled, unscheduled, and demand monitoring types.)
- ° By regulation, 403.12(c), semiannual reports should include a record of measured estimated average and maximum daily total flows (and dilute flows when appropriate) for the reporting period. Space is provided to record flow measurement on the day each sample was taken. If the industrial user maintains utility records of water usage, copies of such records may be substituted (if no major additional flow or loss is regularly occurring at the discharge point).

Industrial users subject to the combined wastestream formula must report flow rates for all wastestreams that were necessary to use the formula.

- ° The industrial user should record the numerical local limits and categorical standards applicable to the industrial user in the column titled "Limits." (This information can be obtained from the permit, ordinance, contract, or categorical standard applicable to the industrial user.)
- ° Analytical results of each sample are to be recorded in the column and row appropriate to the sample and pollutant type. Analytical results should be provided in units consistent with the "units" column. The Control Authority may alter the units as it deems necessary. For example, if limits are in mass per day, IUs must submit reports in mass per day as well as concentration units.

(If more than eight samples are taken during the sampling period, additional pages will be needed.)

- ° Industries subject to categorical pretreatment standards must comply with the daily maximum concentration and the average sample concentration (either 4-day or a monthly average), depending on the industry category. As an example, the daily maximum and 4-day average requirements are applied to electroplaters. In the column labeled "Average Conc.," the beginning and end dates of the consecutive samples to be averaged for calculation of a 4-day and monthly average should be indicated. Where applicable, the average value must be calculated and recorded in the column under "Average Conc."

- ° If an industrial user has certified to a particular condition of a categorical regulation, a statement must be included acknowledging the continued applicability of the certification.
- ° The report must be signed by an authorized representative of the industry. The industrial user conducting self-monitoring activities, should submit the Industrial Monitoring Report to the Control Authority at 6-month intervals (or more frequently, if required by the Control Authority).
- ° The industrial user's self-monitoring information can be combined with the Control Authority's monitoring information to complete the minimum compliance reporting requirements discussed in Section 3.5.

EXAMPLE INDUSTRIAL MONITORING REPORT

IU NAME Chrome Bumpers, Inc.
 ADDRESS 555 Main Street
 CITY Anytown STATE XX ZIP 55555
 PRODUCTION RATE _____

I HEREBY CERTIFY THAT THIS REPORT IS
 ACCURATE TO THE BEST OF MY KNOWLEDGE

John Doe 6/30/86
 Authorized Representative

WMTP DISCHARGED TO _____
 IU CODE 1020C

PARAMETERS	UNIT	LIMITS MAX/AVG.	SAMPLE 1/5 /86				SAMPLE 3 /6 /86				SAMPLE 6 /1 /86				SAMPLE / /				SAMPLE / /				AVERAGE												
			mo	day	yr	SELF	SCHEDUL	UNSCHEDE	DEMAND	24,000	mo	day	yr	SELF	SCHEDUL	UNSCHEDE	DEMAND	20,000	mo	day	yr	SELF	SCHEDUL	UNSCHEDE	DEMAND	22,000	mo	day	yr	SELF	SCHEDUL	UNSCHEDE	DEMAND	to	
FLOW, TOTAL	gpd																																		
FLOW, DILUTE	gpd																																		
BOD ₅ @20°C	mg/l																																		
COD	mg/l																																		
TSS	mg/l																																		
TS	mg/l																																		
pH																																			
OIL, GREASE	mg/l																																		
AMMONIA, NH ₃	mg/l																																		
NO ₂ - NO ₃	mg/l																																		
TOTAL PHOS	mg/l																																		
CYANIDE, CN	mg/l	1.9/1.0								1.5									1.0																
PHENOL	mg/l																																		
SULFIDE, S ²⁻	mg/l																																		
FLUORIDE, F	mg/l																																		
SILVER, Ag	mg/l																																		
ALUMINUM, Al	mg/l																																		
ARSENIC, As	mg/l																																		
CADMIUM, Cd	mg/l	1.2/0.7								<.01																									
HEXA CHROM	mg/l																																		
TOTAL CHROM	mg/l	7.0/4.0								7.4									2.8																
COPPER, Cu	mg/l	4.5/2.7								<.01																									
IRON, Fe	mg/l																																		
MERCURY, Hg	mg/l																																		
MANGANESE, Mn	mg/l																																		
NICKEL, Ni	mg/l	4.1/2.8								1.4									2.0																
LEAD, Pb	mg/l	0.6/0.4								<.01																									
SELENIUM, Se	mg/l																																		
ZINC, Zn	mg/l	4.2/2.6								1.3									1.7																
TOTAL METAL	mg/l	10.5/6.8								10.1									6.5																
TOT. TOX. ORG.	mg/l																																		

*Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that to the best of my knowledge and belief, no dumping of concentrated toxic organics has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the Control Authority.

EXAMPLE
INDUSTRIAL MONITORING REPORT

IU NAME Chrome Bumpers, Inc. I HEREBY CERTIFY THAT THIS REPORT IS
 ADDRESS 555 Main Street ACCURATE TO THE BEST OF MY KNOWLEDGE
 CITY Anytown STATE XX ZIP 55555 IU CODE 1020C
 PRODUCTION RATE _____

John Doe 12/30/86

PARAMETERS	UNIT	LIMITS MAX/AVG.	SAMPLE 8/4/86				SAMPLE 10/1/86				SAMPLE 12/1/86				SAMPLE 1/5/86			
			no day yr	SELF	SCHEDULED	DEMAND	no day yr	SELF	SCHEDULED	DEMAND	no day yr	SELF	SCHEDULED	DEMAND	no day yr	SELF	SCHEDULED	DEMAND
FLOW, TOTAL	gpd																	
FLOW, DILUTE	gpd																	
BOD ₅ @20°C	mg/l																	
COD	mg/l																	
TSS	mg/l																	
TS	mg/l																	
pH																		
OIL, GREASE	mg/l																	
AMMONIA, NH ₃	mg/l																	
NO ₂ - NO ₃	mg/l																	
TOTAL PHOS	mg/l																	
CYANIDE, CN	mg/l	1.9/1.0				0.9			1.1		1.2							
PHENOL	mg/l																	
SULFIDE, S ²⁻	mg/l																	
FLUORIDE, F	mg/l																	
SILVER, Ag	mg/l																	
ALUMINUM, Al	mg/l																	
ARSENIC, As	mg/l																	
CADMIUM, Cd	mg/l	1.2/0.7				<0.1												
HEXA CHROM	mg/l																	
TOTAL CHROM	mg/l	7.0/4.0				2.5		3.8		4.3								
COPPER, Cu	mg/l	4.5/2.7				<0.1												
IRON, Fe	mg/l																	
MERCURY, Hg	mg/l																	
MANGANESE, Mn	mg/l																	
NICKEL, Ni	mg/l	4.1/2.8				1.9		1.6		1.5								
LEAD, Pb	mg/l	0.6/0.4				<0.1												
SELENIUM, Se	mg/l																	
ZINC, Zn	mg/l	4.2/2.6				2.4		2.8		2.6								
TOTAL METAL	mg/l	10.5/6.8				6.8		8.6		8.4								
TOT. TOX. ORG.	mg/l	2.13/				*												

*Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that to the best of my knowledge and belief, no dumping of concentrated toxic organics has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the Control Authority.

2. Evaluation of IU Compliance

Control Authorities must evaluate industrial user compliance with pretreatment standards. In this guidance, EPA has defined the term "Significant Noncompliance" for setting enforcement priorities and for Control Authority reports (see pages 3-50 to 3-52).

To assist in determining Significant Noncompliance, an example worksheet is included. There is no requirement to use or submit this worksheet unless required by the Approval Authority in the NPDES permit. The worksheet is provided to illustrate to the Control Authority a method for organizing data so as to be able to determine Significant Noncompliance. To complete this form, the Control Authority should:

- ° Identify each industrial user by name (or a four-digit code, using the letter "C" to succeed the code for any categorical industrial user).
- ° Insert the date of the industrial user's semiannual report.
- ° Compare the monitoring results to the applicable limits.
For each parameter, enter (in the TOT column) the total number of daily maximum samples (and averages for the Average section) required by the Control Authority. In the EXC1 column, enter the number of times that the limit was exceeded. In the EXC2 column, enter the number of times that the limit was exceeded by TRC.
- ° At this point, the exceedances must be reviewed to determine whether the EXC1 violations were greater than or equal to 66 percent of the TOT, and whether the EXC2 violations were greater than or equal to 33 percent of the average TOT.

- ° After recording the complete data for each industrial user, the industrial user's overall compliance status should be evaluated. If there is any violation(s) that meets the criteria of Significant Noncompliance, the industrial user must be counted as in Significant Noncompliance. Circle all SNC violations.

A blank worksheet is provided on page A-11. Page A-12 illustrates the use of the worksheet to evaluate Significant Noncompliance. Based on the worksheet, Chrome Bumpers, Inc., was not in Significant Noncompliance for the first semiannual report, but was in Significant Noncompliance for the second semiannual report (100 percent violations of the 4-day average for cyanide and total metals). Admittedly, there is only one 4-day average, but as stated previously, this example industrial user should be subject to increased monitoring requirements.

INDUSTRIAL USER COMPLIANCE EVALUATION WORKSHEET

PARAMETERS	DAILY						AVERAGE					
	DAILY			AVERAGE			DAILY			AVERAGE		
	TOT	EXC1	EXC2	TOT	EXC1	EXC2	TOT	EXC1	EXC2	TOT	EXC1	EXC2
FLOW, TOTAL												
FLOW, DILUTE												
BOD ₅ @20°C												
COD												
TSS												
TS												
pH												
OIL, GREASE												
AMMONIA, NH ₃												
NO ₂ - NO ₃												
TOTAL PHOS												
CYANIDE, CN												
PHENOL												
SULFIDE, S ²⁻												
FLUORIDE, F												
SILVER, Ag												
ALUMINUM, Al												
ARSENIC, As												
CADMIUM, Cd												
HEXA CHROM												
TOTAL CHROM												
COPPER, Cu												
IRON, Fe												
MERCURY, Hg												
MANGANESE, Mn												
NICKEL, Ni												
LEAD, Pb												
SELENIUM, Se												
ZINC, Zn												
TOTAL METAL												
TOT. TOX. ORG.												
FAILURE TO REPORT												
COMP. SCHED. VIOLATIONS												

INDUSTRIAL USER COMPLIANCE EVALUATION WORKSHEET

PARAMETERS	CHROME BUMPERS, INC.						CHROME BUMPERS, INC.					
	1/1/86 to 6/30/86						7/1/86 to 12/30/86					
	DAILY			AVERAGE			DAILY			AVERAGE		
	TOT	EXC1	EXC2	TOT	EXC1	EXC2	TOT	EXC1	EXC2	TOT	EXC1	EXC2
FLOW, TOTAL												
FLOW, DILUTE												
BOD ₅ @20°C												
COD												
TSS												
TS												
pH												
OIL, GREASE												
AMMONIA, NH ₃												
NO ₂ - NO ₃												
TOTAL PHOS												
CYANIDE, CN	3	0	0	0			3	0	0	1	1	0
PHENOL												
SULFIDE, S ²⁻												
FLUORIDE, F												
SILVER, Ag												
ALUMINUM, Al												
ARSENIC, As												
CADMIUM, Cd	1	0	0	0			1	0	0	0	0	0
HEXA CHROM												
TOTAL CHROM	3	1	0	0			3	0	0	1	0	0
COPPER, Cu	1	0	0	0			1	0	0	0	0	0
IRON, Fe												
MERCURY, Hg												
MANGANESE, Mn												
NICKEL, Ni	3	0	0	0			3	0	0	1	0	0
LEAD, Pb	1	0	0	0			1	0	0	0	0	0
SELENIUM, Se												
ZINC, Zn	3	0	0	0			3	0	0	1	0	0
TOTAL METAL	3	0	0	0			3	0	0	1	1	0
TOT.TOX.ORG.							*					
FAILURE TO REPORT	NO						NO					
COMP. SCHED. VIOLATIONS	NO						NO					

* Certification provided

3. Summary of Industrial User Compliance

To summarize the industrial compliance worksheets discussed above to provide the compliance information requested by Section II of the Pretreatment Performance Report, the Control Authority may use the Control Authority Summary of Industrial User Compliance format on page A-15. This is not a required form, and the Control Authority may summarize IU performance using any number of methods, including automatic data management systems. In any case, the Control Authority should have some easily accessible summary that indicates the level of IU compliance with both categorical standards and local limits.

Instructions for Completing the IU Summary

1. Identify each industrial user by the four-digit code number in the spaces provided, as shown.
2. In the TOT column, enter the total number of samples collected and analyzed during the reporting period for each parameter sampled.
3. Under the STAT column, identify the compliance status of each parameter monitored by using the following grading system:
 - C - Consistent compliance, 100 percent compliance for all samples collected.
 - I - Infrequent noncompliance, any measure of compliance less than 100 percent but not SNC.
 - SNC - Significant noncompliance, see definition on pages 3-50 to 3-52.

In the heading box, indicate the rate of Significant Noncompliance for all IUs in the POTW. The rate should be a fraction. The denominator should represent the total number of Significant Industrial Users in the POTW, and the numerator should identify the total number of Significant Industrial Users in Significant Noncompliance. Note: The rate (fraction) should be consistent with the rate to be included on the Pretreatment Performance Summary, page A-18.

In the example on page A-16, a hypothetical Control Authority (containing Chrome Bumpers, Inc.--IU #1020C) had the following industrial compliance summary:

Consistent compliance	2
Infrequent noncompliance	4
Significant Noncompliance	1
TOTAL IUs	7

CONTROL AUTHORITY SUMMARY OF IU COMPLIANCE

SIGNIFICANT NON-
COMPLIANCE RATE
THIS PAGE ONLY

PORT NAME

DATE

PAGE

OF

INDUSTRIAL USERS BY CODE											
PARAMETERS	TOT	STAT	TOT	STAT	TOT	STAT	TOT	STAT	TOT	STAT	TOT
FLOW, TOTAL											
FLOW, DILUTE											
BOD ₅ @20°C											
COD											
TSS											
TS											
pH											
OIL, GREASE											
AMMONIA, NH ₃											
NO ₂ - NO ₃											
TOTAL PHOS											
CYANIDE, CN											
PHENOL											
SULFIDE, S ⁻²											
FLUORIDE, F											
SILVER, Ag											
ALUMINUM, Al											
ARSENIC, As											
CADMIUM, Cd											
HEXA CHROM											
TOTAL CHROM											
COPPER, Cu											
IRON, Fe											
MERCURY, Hg											
MANGANESE, Mn											
NICKEL, Ni											
LEAD, Pb											
SELENIUM, Se											
ZINC, Zn											
TOTAL METAL											
TOT. TOX. ORG											
FAILURE TO											
REPORT											
COMP. SCHE.											
VIOLATIONS											

CONTROL AUTHORITY SUMMARY OF IU COMPLIANCE

SIGNIFICANT NON-COMPLIANCE RATE THIS PAGE ONLY

PAGE 1 OF 1

1/7

DATE 1 / 27/87

POTW NAME Madison Township

PARAMETERS	INDUSTRIAL USERS BY CODE											
	1020C		1040C		1060C		1840		1860		1880	
	TOT	STAT	TOT	STAT	TOT	STAT	TOT	STAT	TOT	STAT	TOT	STAT
FLOW, TOTAL			12	C			12	C	12	C	12	C
FLOW, DILUTE							12	C	12	C	12	C
BOD ₅ @20°C							12	C	12	C	12	C
OD							12	C	12	C	12	C
TSS												
TS												
pH	6	C	12	I	12	I			12	I	12	C
OIL, GREASE							12	I				
AMMONIA, NH ₃												
NO ₂ - NO ₃												
TOTAL PHOS												
CYANIDE, CN	6	SNC	12	C	2	C						
PHENOL												
SULFIDE, S ⁻²												
FLUORIDE, F												
SILVER, Ag												
ALUMINUM, Al												
ARSENIC, As												
CADMIUM, Cd	2	C	12	C	2	C						
HEXA CHROM												
TOTAL CHROM	6	I	12	C	2	C						
COPPER, Cu	6	C	12	C	2	C						
IRON, Fe												
MERCURY, Hg												
MANGANESE, Mn												
NICKEL, Ni	6		12	C	2	C						
LEAD, Pb	2	C	12	C	2	C						
SELENIUM, Se												
ZINC, Zn	6	C	12	C	2	C						
TOTAL METAL	6	SNC	12	I	2	C						
TOT. TOX. ORG	1	*	1	*	1	*						
FAILURE TO REPORT												
COMP. SCHE. VIOLATIONS												

* Certification Provided

4. Pretreatment Performance Summary

In addition to receiving industrial user reports and evaluating compliance, Control Authorities must submit reports to the Approval Authority as required by their NPDES permit. The Pretreatment Performance Summary format on page 3-71 shows the type of compliance monitoring and enforcement information that will generally be required. The report format reflects the minimum amount of information for such a report and the specific requirements for reporting to a particular Control Authority will be defined by the Approval Authority.

The following example of a completed Pretreatment Performance Summary includes six other Significant Industrial Users (in addition to Chrome Bumpers, Inc.). These additional SIUs were not in Significant Noncompliance.

PRETREATMENT PERFORMANCE SUMMARY

SAMPLE

I. General Information		SIGNIFICANT INDUSTRIAL USERS	
		Cate- gorical	Noncate- gorical
Control Authority Name <u>Madison Township</u>		I certify that the information contained is complete and accurate to the best of my knowledge.	
Address <u>100 Main Street</u>			
City <u>Madison</u> State <u>USA</u> Zip <u>55555</u>			
Contact Person <u>John Doe</u>			
Contact Telephone Number <u>(555)555-5555</u>			
NPDES Nos. <u>XX55555</u>			
Reporting Period <u>January 1, 1986 to December 31, 1986</u>			
Total Categorical IUs <u>3</u>			
Total Significant Noncategorical IUs <u>4</u>			
		John Doe 1/27/87 Authorized Representative Date	
II. Significant Industrial User Compliance			
1) No. of SIUs Submitting BMRs/No. Required	-/-	NA	
2) No. of SIUs Submitting 90-Day Compliance Reports/No. Required.....	-/-	NA	
3) No. of SIUs Submitting SemiAnnual Report/No. Required	3/3	4/4	
4) No. of SIUs Meeting Compliance Schedule/No. Required to Meet Schedule	-/-	-/-	
5) No. of SIUs in Significant Noncompliance/Total No. of SIUs	1/3	0/4	
6) Rate of Significant Noncompliance for all SIUs (categorical and noncategorical)	1/7		
III. Compliance Monitoring Program			
1) No. of Nonsampling Inspections Conducted	3	4	
2) No. of Sampling Visits Conducted	4	10	
3) No. of Facilities Inspected (Nonsampling).....	3	4	
4) No. of Facilities Sampled	3	4	
IV. Enforcement Actions			
1) Compliance Schedules Issued/Schedules Required	0	0	
2) Notices of Violations Issued to SIUs	7	9	
3) Administrative Orders Issued to SIUs	1	0	
4) Civil Suits Filed	0	0	
5) Criminal Suits Filed	0	0	
6) Significant Violators (attach newspaper list)	1	0	
7) Amount of Penalties Collected (total dollars/IUs assessed)	*71	0	
8) Other Actions (sewer bans, etc.)	0	0	

* Penalty assessed on IU # 1020C, not yet collected.

5. Example Newspaper Listing

PUBLIC NOTICE
OF SIGNIFICANT INDUSTRIAL
POLLUTION VIOLATION(S)

Listed below are significant industrial wastewater discharge violations of the requirements of 40 CFR Part 403 (General Pretreatment Regulations) occurring over the past 12 months:

#1 Industry name: Chrome Bumpers, Inc.

Address: 123 Main Street, Madison Twsp., USA

Violation: Exceeded cyanide and total metals 4-day average limitation based on four samples from 1/5/86 to 8/4/86, and exceeded the daily maximum chromium limitation on 1/5/86. These violations constitute significant noncompliance.

Actions Taken: After two notices of violation from the City, Chrome Bumper, Inc., has not taken the appropriate reponse to comply with the Federal standard.

Schedule of Compliance: No agreement currently reached between the City and Chrome Bumpers as to when consistent compliance can be obtained.

Penalties: City of Madison Twsp. has assessed a \$20,000 penalty against Chrome Bumpers for violation of Federal Pretreatment Standards and potential damage to human health, receiving stream aquatic life, and inhibition to the waste treatment plant.

APPENDIX B
PROCEDURES FOR INSPECTIONS AT INDUSTRIAL FACILITIES

This appendix provides indepth guidance for those Control Authority personnel responsible for conducting the onsite inspection of an industrial facility. In particular, this section provides the recommended procedures for conducting the initial inspection of an industrial facility. Such inspections, if performed properly, will provide the information to form the basis for future compliance monitoring during pretreatment program implementation. This section addresses the role of the Control Authority personnel before, during, and after an inspection of an industrial facility.

1. Preinspection Preparation

Preinspection planning is necessary to ensure that a compliance monitoring visit to an industrial facility is properly focused and is conducted smoothly and efficiently. This planning generally involves:

- ° Review of background information related to the industrial user
- ° Preparation of necessary sampling and safety equipment
- ° Notification to the industrial user, when necessary.

A. Review of Background Information on the Industrial Facility

Collection and analysis of available background information on the industrial facility is often essential to the effective planning and overall success of pretreatment compliance monitoring. Materials obtained from the files of Federal, State, and local agencies; technical libraries; the industrial user; the original Industrial Waste Survey (IWS); any industrial discharge permits; and other information sources, should enable the Control Authority inspection

personnel to become familiar with the industrial user and its facility operations. Reviewing background information related to the industrial user will also allow Control Authority personnel to conduct the inspection in a timely and efficient manner, minimize inconvenience to the industrial user caused by requesting data that have been previously submitted, clarify technical and legal issues before the inspection, and develop a sound and factual inspection report. Review of such background information will also enhance the regulatory credibility of the Control Authority inspector. However, Control Authority personnel may wish to exercise discretion in judiciously displaying the full extent of their understanding of the facility's operations; some facility personnel may be reluctant to discuss or exhibit operations to inspectors who seem too well-informed.

There are many factors affecting the amount of background information necessary. The Control Authority staff's familiarity with the industrial facility and its processes is probably the most significant factor, but such things as the exact type of inspection and/or sampling to be performed, the reason for the inspection (routine vs. enforcement case preparation), and other issues also influence the background information needed.

Many of the types of background information that may be available for review are summarized in Table B-10.

B. Preparation of Sampling and Safety Equipment

After the background information for an industrial user is gathered and reviewed, Control Authority personnel should have a clear understanding of the types of equipment necessary to

TABLE B-1
BACKGROUND INFORMATION FOR REVIEW PRIOR TO IU INSPECTIONS

° General IU Facility Information

- Maps and schematics showing facility location and layout, points of discharge to the POTW, and geographic features
- Names, titles, and phone numbers of appropriate facility officials
- Any special entry requirements
- Nature of IU processes, operation, and wastewater characteristics
- Production levels (past, present, and projected)
- Water use and disposal data
- Changes in facility conditions or operations since previous inspection/permit application
- Available photographs
- Sources, volume, and characterization of waste discharge(s).

° Applicable Requirements, Regulations, and Limitations

- Copies of applicable ordinance, contract, statutes, joint agreements, permits, and regulations (including Federal, State, and local discharge limitations). Also, any conditions placed on discharges including compliance schedules, monitoring and reporting requirements, existing monitoring stations, and analytical methods used by the IU.
- Special exemptions and waivers, if any.
- Previous facility applications for water, air, or solid waste permits that may contain useful data not provided elsewhere.

° Facility Compliance and Enforcement History

- Federal, State, and local IU compliance files
- Correspondence between an IU and local, State, and Federal agencies
- Complaints and reports about an IU, including followup studies and findings

TABLE B-1 (continued)
BACKGROUND INFORMATION FOR REVIEW PRIOR TO IU INSPECTIONS

- Previous IU inspection or self-monitoring reports and correspondence concerning past violations
- Status of past, current, and pending litigation against an IU.
- ° Pollution Control and Pretreatment Systems
 - Description of and design and operation data for any existing pollution control or pretreatment systems utilized by an IU
 - Available bypasses for existing pollution control system components.
- ° Miscellaneous Information
 - IU spill contingency plans
 - Previous EPA, State, local, and consultant studies and reports regarding an IU
 - Technical reports, documents, and references to provide generic information on industrial process operations, as well as pertinent specific data on available pretreatment/control techniques applicable to an IU.

effectively meet the objectives of the compliance monitoring visit. The necessary types of equipment may vary according to the industrial user and the type of compliance monitoring to be performed by the Control Authority. For example, if the Control Authority wished to perform sampling of an industrial user's wastewater discharge in conjunction with the onsite inspection, sampling and possibly safety equipment would need to be prepared in advance of the site visit.

Considerations related to selection and preparation of the required sampling equipment--if the compliance monitoring of an industrial user will include sample collection--include:

- ° The number of different discharge points to be sampled
- ° The type(s) of sample(s) to be collected (i.e., grab or composite)
- ° The pollutant parameters to be analyzed in each of the samples collected
- ° The sample container and preservation requirements for those pollutant parameters to be analyzed in each sample
- ° The quality assurance and control samples to be taken for particular pollutant parameters.

Control Authority staff performing any compliance monitoring activity, whether inspections or sampling, should be properly equipped for the safety hazards that may exist at an industrial facility. Safety equipment and requirements are important, not only for safety reasons, but also to ensure that Control Authority personnel are not denied entry to an industrial facility or to specific sections within the facility during inspection or sampling. Table B-2 lists the typical safety equipment that an inspection team should have readily available if necessary.

TABLE B-2

TYPICAL SAFETY EQUIPMENT FOR
INDUSTRIAL INSPECTION AND SAMPLING TEAMS

Oxygen/combustion/H₂S meter with alarm

Air blower with 15 ft. hose

Safety harness and tripod

Safety rope

Hard hat

Rubber boots

Safety glasses

Rubber boots

Rubber gloves

Coveralls

Flashlight (explosion-proof)

Manhole hook or pick

First aid kit

Fire extinguisher

Safety ladder (aluminum, chain, or rope)

Safety cones

Warning flags

Particulate masks

Self-contained breathing apparatus

Traffic diversion devices

C. Notification to the Industrial User

Notify the industrial user prior to visiting the facility is recommended primarily in the following two instances:

- ° Before monitoring an industrial user for the first time, the industrial user should be notified and arrangements made for a tour of the facility to familiarize the Control Authority personnel with the operations of the facility
- ° Prior to a scheduled monitoring visit of the industrial facility during subsequent pretreatment program implementation.

In the first instance, it is recommended that the industrial user be informed by letter that the Control Authority plans to visit its facility as a part of pretreatment program implementation. Several weeks notice is advisable in most cases. Especially for the initial inspection, it is important that the industrial user be informed of the reason for the inspection (and sampling, if applicable), what information the Control Authority is interested in collecting, which Control Authority personnel will be involved in the inspection, and how the information and data collected will be used by the Control Authority. The Control Authority should followup the notification letter (if used as the initial means of notification) with a telephone call to discuss any questions or concerns the industrial user may have and to finalize dates, times, meeting places, etc. The followup telephone call also provides a good opportunity to request information regarding onsite safety requirements of the industrial user, thus avoiding possible problems concerning lack of appropriate safety equipment by Control Authority personnel as reason for denial of access at the time of inspection.

The second instance where notifying an industrial user is advisable is when the Control Authority plans to conduct a scheduled monitoring visit of an industrial facility as part of its pretreatment

program implementation. Generally, the same notification procedures used for the initial inspection are recommended (i.e., notification letter followed by a telephone call).

For all other types of monitoring (i.e., unscheduled or demand), prior notification of the industrial user is not recommended. There may be instances, however, where notification just prior to the inspection or sampling activity may be necessary to gain access to the industrial facility. The concern that physical conditions may be altered prior to monitoring or that records may be destroyed justifies an unannounced inspection in the case of unscheduled or demand monitoring. Section 403.8(f)(2)(v) of the General Pretreatment Regulations requires that random monitoring be used to spot-check industrial discharges to the Control Authority system.

2. Entry Procedures for Control Authority Personnel

Section 403.8(f)(1)(v) of the General Pretreatment Regulations for Existing and New Sources requires that POTW's have the authority to carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance with applicable standards and requirements, independent of information supplied by the industrial user. This authority is required to be at least as extensive as provided in Section 308 of the Clean Water Act, which states:

"...the EPA Administrator or his authorized representative, upon presentation of his credentials shall have a right of entry to, upon, or through any premises in which an effluent source is located or in which any records required to be maintained...and may at reasonable times have access to and copy any records, inspect any monitoring equipment or method... and sample any effluents which the owner or operator of such source is required to sample..."

The authority to enter an industrial facility will normally be secured in a Control Authority's local sewer use ordinance, or in the case of a State, in State statutes. Control Authority monitoring personnel should be familiar with the legal authorities belonging to the Control Authority for entering an industrial user, so that the appropriate reference can be made during any monitoring visit.

In many instances, the Control Authority employs an independent contractor to perform all or certain aspects of the inspection and sampling of the industrial facility. Control Authority personnel should confirm with local legal counsel that the Control Authority may designate such contractor personnel as inspectors and that the designation meets the requirements of applicable State laws.

The inspector should arrive at the facility during normal working hours unless circumstances require otherwise. The facility owner or agent-in-charge should be located as soon as the inspector arrives on the premises, notified of the Control Authority's intent (i.e., scheduled, unscheduled, or demand inspections, and/or sampling), and asked for consent to the activity.

When the proper facility officials have been located, inspection personnel should introduce themselves as inspectors for the Control Authority and present the proper credentials (or other indications of authority), and, if required by local law, also present any notices or other required documents. The credentials indicate that the holder is a lawful representative of the Control Authority and is authorized to perform pretreatment monitoring. As a matter of establishing credibility, the credentials should be presented

whether or not identification is requested, even if presentation of credentials is not required under the statute or ordinance that authorizes the inspection and/or sampling.

After facility officials have acknowledged the credentials, they may wish to telephone the Control Authority for verification of the personnel identification. Credentials should never leave the sight of inspection personnel.

Consent to inspect and sample on the premises must be given by the owner or operator at the time of the inspection unless a search warrant has been obtained. As long as Control Authority personnel are allowed to enter, entry is considered voluntary and consensual, unless the personnel are expressly told to leave the premises. Generally, express consent is not necessary; absence of an express denial constitutes consent. However, if the inspector has any question as to the propriety of an inspection, he or she should consult with supervisory personnel at the Control Authority or with the Control Authority's legal counsel.

If Control Authority personnel are refused entry into a facility for the purpose of authorized monitoring, certain procedural steps must be followed. The following procedures have been developed in response to the 1978 U.S. Supreme Court decision in Marshall v. Barlow's, Inc.:

1. Make certain that all credentials and notices have been properly presented to the facility owner or agent-in-charge.
2. If entry is not granted, ask why. Tactfully probe the reason for the denial to see if obstacles (such as misunderstandings) can be cleared. If resolution is beyond the authority of the Control Authority personnel,

he or she may tactfully suggest that the officials seek advice from their attorneys on clarification of the scope of monitoring authority under the Control Authority's local ordinance or State law.

3. If entry is still denied, personnel should withdraw from the premises and contact their supervisor. The supervisor may confer with attorneys to discuss the desirability of obtaining an administrative warrant.
4. All observations pertaining to the denial should be thoroughly noted by the personnel in a field notebook as soon as possible. Include facility name and exact address, name and title of person(s) approached, authority of person(s) who refused entry, date and time of denial, detailed reasons for denial, facility appearance, any reasonable suspicions that refusal was based on a desire to cover up regulatory violations, etc. All such information will be important should a warrant be sought.
5. Under no circumstances should the Control Authority personnel discuss potential penalties or do anything that may be construed as coercive or threatening.
6. Control Authority personnel should use discretion and avoid any situations that may be potentially threatening or inflammatory. In the event of a threatening confrontation, personnel should document the event and report it immediately to their supervisor. If feasible, statements from witnesses should be obtained and included in the documentation.

Following are some additional situations that the Control Authority may be subject to:

- ° Withdrawal of Consent During Monitoring. If Control Authority personnel are requested (or told) to leave the premises after monitoring has begun, such personnel should leave as soon as possible, following the procedures above for denial of entry. All activities and evidence obtained prior to the withdrawal of consent are valid. Control Authority personnel should ensure that all personnel and Control Authority equipment are removed from the facility.
- ° Denial of Access to Some Areas of the Facility. If, during the course of the inspection or sampling, access to some parts of the facility is denied, Control Authority personnel should make a notation of the circumstances surrounding the denial of access and of the portion of the inspection or sampling that could not be completed. Personnel should then proceed with the remainder of the monitoring. After leaving the facility, personnel should contact the Control Authority supervisor to determine whether a warrant should be obtained to complete the monitoring.

As an alternative to conducting an inspection with the consent of the facility, inspectors may conduct inspections under a search warrant. If a search warrant is obtained prior to the inspection, the inspection may be conducted whether or not facility officials consent. The Supreme Court decision in the Barlow case, noted earlier, authorizes issuance of administrative warrants to inspect facilities without showing that a violation is probably occurring (probable cause requirement). The entity (such as a Control Authority) seeking an administrative warrant must, however, show that it has comprehensive legal rights to inspect, such as those contained in Section 308 of the Clean Water Act. Obtaining such an administrative warrant may be an appropriate part of the pre-inspection preparation when the Control Authority suspects that entry may be denied either absolutely or temporarily until processes can be altered, records can be tampered with, or other action taken to obscure violations of applicable pretreatment standards, reporting requirements, or recordkeeping requirements.

3. Opening Conference

If Control Authority personnel are inspecting or sampling an industrial user for the first time, after credentials have been presented and legal entry has been established, it is recommended that an opening conference be held for all those personnel involved (Control Authority personnel and industrial facility personnel). Subsequent inspection and sampling activities at an industrial facility during pretreatment program implementation may not require a detailed opening conference, as described below, or require any conference at all. This is due to the fact that future compliance monitoring will require only updating existing information, and

personnel at the industrial facility will already be familiar with pretreatment program requirements and the Control Authority's intent. The purpose of an opening conference is to allow Control Authority personnel to outline the monitoring plans with the officials and personnel of the industrial facility. At the opening conference, Control Authority personnel should describe the purpose of the inspection, authorities under which the compliance inspection and/or sampling is being conducted, and the procedures that will be followed. The following points should be discussed during the opening conference, as necessary:

- ° Inspection Objectives. An outline of monitoring objectives will inform facility officials of the purpose and scope of the visit and may help avoid misunderstandings.
- ° Order of Inspection. A discussion of the order in which the Control Authority personnel would like to conduct the inspection will help eliminate wasted time by allowing officials time to make records available and possibly startup intermittent operations.
- ° Meeting Schedules. A schedule of meetings with key facility personnel will allow the facility personnel to allocate sufficient time to spend with the inspection personnel.
- ° List of Records. A list of records to be inspected will allow officials to gather and make the records available for the inspection personnel.
- ° Accompaniment. A facility official should accompany Control Authority personnel during the inspection, not only to describe the plant and its principal operating characteristics, but also for safety and liability considerations.
- ° Permit Verification. If the Control Authority uses a permit system to control the discharge of its regulated industrial users, the inspection personnel should verify all information addressed in the facility's discharge permit. This would include correct facility name and address, process description, pollutants regulated, discharge points, sampling location and frequency, etc.
- ° Safety Requirements. Control Authority personnel should determine what OSHA and other facility safety regulations will be involved in monitoring an industrial facility and should be prepared to meet the requirements.

- ° New Requirements. The inspection personnel should discuss any new rules and regulations that might affect the industrial user and answer questions pertaining to these rules and regulations. If inspection personnel are aware of proposed rules that might affect the industrial facility, they may wish to encourage facility officials to obtain a copy.
- ° Split Samples. Facility officials should be informed during the opening conference of their right to receive a split of any samples collected for laboratory analysis. At this point, officials should indicate the desire to receive split samples so that arrangements can be made to secure the adequate samples during the inspection.
- ° Photographs. Photographs can be used to prepare a more thorough and accurate inspection report and to better explain conditions found at the plant. An industrial user may object to the use of cameras on their property. If a mutually acceptable solution cannot be reached and photographs are considered essential to the inspection, Control Authority supervisory and legal staff should be contacted for advice. Facility personnel may also request that any photographs taken during the visit be considered confidential. The Control Authority is obliged to comply with this request pending further legal determination.

4. Information and Data Collected During an Inspection

During the inspection portion of compliance monitoring, the Control Authority will collect or confirm detailed information concerning an industrial facility and its processes, as well as evaluate the facility's compliance with applicable pretreatment standards and requirements. The types of information and data that should be collected during an inspection of the industrial facility are listed in Table B-3. The type of information collected (as well as the form of the inspection) may vary with the type of facility inspected. For example, an inspector would probably have a core of basic questions to answer for all facilities in addition to variety of questions specified for whatever specific type of facility is inspected.

TABLE B-3
INFORMATION THAT MAY BE COLLECTED DURING AN IU INSPECTION

- ° Facility name, site address, correspondence address.
- ° Facility contact name, title, and telephone number.
- ° General background information about the facility to include items such as:
 - Applicable Standard Industrial Classification (SIC) codes
 - Number of shifts used
 - Number of employees per shift
- ° A schematic of the water flow through the facility and the location of all wastewater discharge lines that flow to the POTW system; the schematic should also include the layout of major plant features.
- ° A description of each discharge (including any batch discharges), including the amount, chemical nature, frequency, and destination of each discharge.
- ° A description and process flow diagram of each major product line and process used within the plant, particularly processes that may be subject to Federal Categorical Pretreatment Standards.
- ° A detailed description and appropriate sketches of existing pretreatment facilities, including operating data, if available.
- ° A list of pollutants of interest at the facility. The list should be divided into two categories: (1) pollutants that come into direct contact with the water that is discharged to the POTW; and (2) pollutants that do not come into direct contact, but have a potential to enter the wastewater due to spills, machinery malfunctions, etc.
- ° Identification of appropriate sampling locations.
- ° Availability of sampling results performed by the facility.
- ° Proximity of chemical storage to floor drains and whether floor drains discharge to storm or sanitary sewers.
- ° A description of spill control practices the facility uses. Information should be included about past spills, unusual discharges, or temporary problems with any of the process units that may affect the wastewater discharge.
- ° A description of air pollution control equipment that may generate a wastestream, pollutants that are likely to be found in the wastestream, the discharge or disposal method, and location.

TABLE B-3 (continued)
INFORMATION THAT MAY BE COLLECTED DURING AN IU INSPECTION

- ° A description of how waste residuals (solids) are handled, stored, and/or disposed.
- ° A description of proposed or recent changes to the facility's processes that would affect the discharge characteristics or sampling locations.
- ° A description of any operational problems or shut-downs of pretreatment facilities.
- ° Other information, as may be necessary.

The notes taken by inspection personnel during an inspection are the core of all documentation relating to an inspection of an industrial user. Normally, field notes will be written in a field notebook and/or on a prepared report form developed by the Control Authority to ensure collection of all pertinent information. In order to provide the maximum assistance in recollecting information, it is important to date all documents and prepare the final report shortly after the inspection and/or sampling event. An inspection report form should be used in conjunction with a field notebook by inspection personnel to provide accurate and inclusive documentation of all inspection activities. Field notebooks should be bound. Together, the inspection report form and field notebook will form the basis for written reports and should only contain pertinent data and observations. The Control Authority's legal counsel should be consulted for advice on preparing notes so that they may be read or introduced as independent evidence, if civil or criminal enforcement action is necessary.

Such information includes sampling results, flow measurements, etc., and possibly production rates to the extent necessary to determine compliance with applicable mass-based standards. Representatives of the industrial facility may request that any or all information collected by inspectors be treated as confidential business information. The Control Authority must honor all such requests until or unless appropriate legal counsel (e.g., the City Attorney) determines otherwise and notifies the industrial facility of his or her determination. The procedures for making final determinations as to the validity of such claims of confidentiality are a matter of State law. Confidential business information must

not be disclosed to competitors or to any other person who does not need to have access to the information to evaluate compliance with pretreatment obligations. The Control Authority, if it does not already have procedures in place, will need to set up a process for safeguarding these materials, including obtaining locked files, designating responsible parties, etc. Federal law requires that information describing the effluent discharge to the sewer system, however, may not be treated as confidential information whether it is collected by the Control Authority or by the industrial user.

5. Inspection Report

The adequacy of compliance followup to correct problems or deficiencies noted during an inspection depends in large part on the quality of the inspection report package prepared by the inspection personnel. The preceding sections detailed the procedures for collecting and substantiating this information. Once collected, however, the material must be organized and arranged in a manner that will allow compliance personnel to make optimum use of the information.

The inspector is responsible for reporting all compliance inspection activities by completing an inspection report as soon as possible after the inspection. The objective of an inspection report is to organize and coordinate all inspection information in a comprehensive, usable manner. Although specific information requirements for an inspection report will vary, most compliance inspection reports will include the same basic elements: supplementary narrative information, and documentary support.

A. Supplementary Narrative Information

Supplementary narrative information could be a memorandum, in the case of routine inspections, or could be a narrative report where major violations are detected. When a narrative report is necessary to fully describe a compliance inspection, the contents of the report should focus on supporting or explaining the information provided in the inspection report. The narrative report should be a concise, factual summary of observations and activities, organized in a logical, legible manner, and supported by specific references to accompanying documentary support.

B. Documentary Support

All documentation that is produced or collected by the inspector to provide evidence of suspected violations should be included in the inspection report. Types of documentation may include the inspection report form, field notebook, statements, photographs, drawings and maps, printed matter, mechanical recordings, and copies of records. (See Section 4 and Table B-3 for a further discussion of inspection documentation.)

APPENDIX C AVERAGE LIMITATIONS

Average Limitations

Categorical standards establish daily maximum limitations and, in most cases, also set maximum average limitations. The structure of these average limits varies among categories. For example, in the Electroplating category, there is a 4-day average, while the Metal Finishing category establishes a monthly average. These two types of averages apply to numerous industrial users.

Four Day Average

In developing the Electroplating 4-day average, the Agency performed a statistical analysis that examined independent groups of 4 consecutive sampling days. Implementation of the Electroplating 4 day average calls for comparison of the standard with independent results from 4 consecutive sampling days. For the sampling days to be independent, each calculated 4-day average should not include sampling data used in another 4-day average. For example, if there were 11 days of sampling, samples 1, 2, 3, and 4 constitute a 4-day average; samples 5, 6, 7, and 8 produce the next 4-day average; and samples 9, 10, and 11 will have to wait until an additional sample is taken so that the next 4-day average can be calculated. These sampling days are not necessarily calendar days, but reflect the sampling frequency; namely, weekly sampling produces a 4-day average every 4 weeks, and monthly sampling produces a 4-day average every 4 months.

Monthly Average

A monthly average is used in the Metal Finishing category and many other categories, such as Porcelain Enameling, Coil Coating,

Battery Manufacturing, Copper Forming, and Aluminum Forming. In developing these monthly averages, the Agency performed a statistical analysis based on a fixed number of samples being taken per month (10 for Metal Finishing). To implement these regulations, the average of the samples taken in a calendar month constitutes the monthly average and should be compared to the standard. This could mean a monthly average based on only 1 sample or as many as 31 sampling events. As stated in the preamble to the Metal Finishing rule, 48 FR 32478 (July 15, 1983):

Although it is not anticipated that a monitoring frequency of 10 times per month will always be required, the cost of this frequency of monitoring is presented in the economic impact analysis to the metal finishing regulation. That frequency was selected because if facilities sample 10 times per month, they can expect a compliance rate of approximately 99 percent, if they are operating at the expected mean and variability. Plant personnel, in agreement with the Control Authority, may choose to take fewer samples if their treatment system achieves better long term concentrations or lower variability than the basis for the limits, or if plant personnel are willing to accept a statistical possibility of increased violations.

APPENDIX D
CURRENTLY APPROVED REPORTING REQUIREMENTS BY
THE OFFICE OF MANAGEMENT AND BUDGET (7/25)

<u>Description</u>	<u>40 CFR Containing Requirement</u>	<u>Approval No.</u>	<u>Expiration Date</u>
Baseline Monitoring Report	403.12(b)	2040-0012	10/31/87
IU Compliance Attainment Report	403.12(d)	2040-0011	6/30/87
IU Self-Monitoring Report	403.12(e)	2040-0024	6/30/87
IU Compliance Schedule Report	403.12(c)	2040-0014	6/30/87
IU Slug Load Notification	403.12(f)	2040-0023	6/30/87
IU (TTO) Certification of Exemption		2040-0033	6/30/89