# NPDES COMPLIANCE MONITORING INSPECTOR TRAINING MODULE

## **OVERVIEW**

U.S. ENVIRONMENTAL PROTECTION AGENCY

ENFORCEMENT DIVISION
OFFICE OF WATER ENFORCEMENT AND PERMITS
ENFORCEMENT SUPPORT BRANCH

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## **DISCLAIMER**

This module has been reviewed by the Office of Water Enforcement and Permits, U.S. Environmental Protection Agency, and approved for publication. This module represents EPA's introductory training on selected topics related to conducting NPDES compliance inspections. Failure on the part of any duly authorized official, inspector, or agent to comply with its contents shall not be a defense in any enforcement action, nor shall failure to comply with this guidance alone constitute grounds for rendering evidence obtained thereby inadmissible in a court of law. The mention of trade names or commercial products constitutes neither endorsement nor recommendation for use.

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## **ACKNOWLEDGMENTS**

This document represents an update of a module originally developed in June 1980 by the Enforcement Division of the Office of Water Enforcement and Permits (OWEP). The module was revised under the direction of Virginia Lathrop and Gary Polvi of OWEP with extensive input from the NPDES Inspection Materials Work Group. In addition, the EPA Regions provided many valuable comments, most of which have been incorporated into this module. Science Applications International Corporation (SAIC) updated this module under EPA Contract Nos. 68-01-7050 and 68-C8-0066, Work Assignment Nos. E2-8 and C-1-2(E).

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#### **FOREWORD**

This document is one of five training modules developed by the Office of Water Enforcement and Permits (OWEP), U.S. Environmental Protection Agency (EPA) to introduce the National Pollutant Discharge Elimination System (NPDES) program to new inspectors. Information in each module provides training to an inspector unfamiliar with the NPDES program. The modules address the following topics:

- The Overview Module presents an overview of the entire NPDES program and briefly summarizes different types of inspections conducted under this program
- The Legal Issues Module and provides legal information to assist inspectors in performing their duties and discusses the legal issues which must be addressed during an inspection
- The Biomonitoring Module outlines the principles of biomonitoring and the role of biological testing in the inspection program
- The Sampling Procedures Module details procedures to be used when conducting a sampling inspection
- The Laboratory Analysis Module outlines procedures and information necessary to perform an effective evaluation of a permittee's laboratory.

The modules are best used in a classroom setting where there is a discussion between students and instructors and where questions can be asked. Yet, they can also stand alone as reference sources. A general discussion of the topics covered in these modules appears in EPA's NPDES Compliance Inspection Manual.

These training modules were developed primarily for in-house training of Regional and State NPDES Inspectors. However, they are available as well to other interested parties such as other program offices, facility owners and operators, attorneys, and members of the general public.

Regional and State personnel are encouraged to provide EPA Headquarters with changes or information which would improve these modules. The content of the modules will be updated and revised periodically. Comments, information, and suggestions to improve the modules should be addressed to:

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## 1. INTRODUCTION

#### 1.1 OVERVIEW OF THE NPDES PROGRAM

The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act (CWA) of 1977 and by the Water Quality Act of 1987, specifies the objectives of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters. The Act provides broad authority to the U.S. Environmental Protection Agency (EPA) to:

- Establish the National Pollutant Discharge Elimination System (NPDES) program and the National Pretreatment Program
- Define pollution control technologies and establish effluent limitations based thereon
- Collect information through reports and compliance inspections
- Take enforcement actions, both civil and criminal, when violations of the Act occur.

The NPDES program, mandated by Section 402 of the Act, regulates the discharge of pollutants from point sources--such as municipal wastewater treatment plants, industries, animal feedlots, aquatic animal production facilities, and mining operations. Each point source is required to obtain a NPDES permit in order to discharge. The NPDES permit should contain effluent limits, a compliance schedule, monitoring and reporting requirements, and any other terms and conditions necessary to protect water quality.

To determine whether these NPDES permit conditions are being met, Section 308 of the Act authorizes inspections and monitoring of permittee facilities. Section 308 requires two types of monitoring: self-monitoring to be conducted by the permittee and compliance monitoring to be performed by the permit-issuing agency. According to the Act, an inspection may be conducted wherever there is an existing NPDES permit or where a discharge exists or is likely to exist and no permit has been issued.

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Compliance with NPDES permit conditions is often monitored by States. Sections 308 and 402 of the Act allow the transfer of Federal program authority to conduct NPDES permit compliance monitoring to State agencies. Currently, over 75 percent of the States and territories are approved by EPA to implement State NPDES programs.

#### 1.2 PURPOSE OF THE NPDES COMPLIANCE MONITORING PROGRAM

The purposes of the NPDES compliance monitoring program (and the various inspections conducted under the program) are:

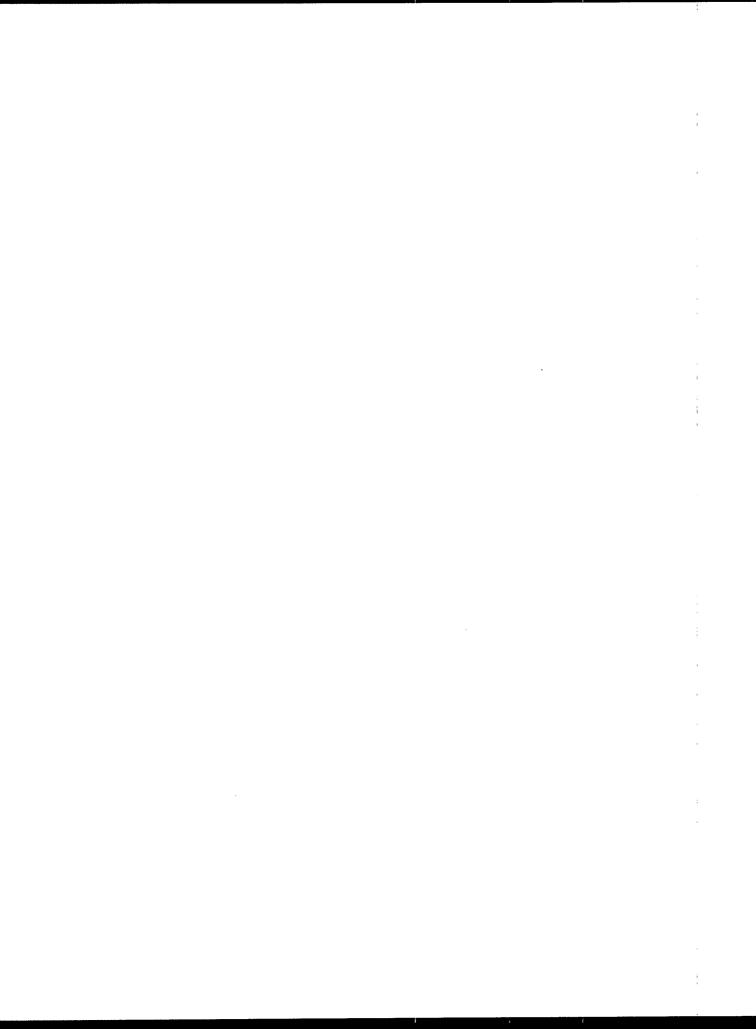
- To evaluate the compliance of dischargers with permit limitations and conditions
- To gather evidence to support enforcement actions
- To furnish information which supports permitting
- To assess compliance with orders or consent decrees.

The compliance evaluation involves two aspects: (1) collection of samples of a permittee's effluent by a NPDES inspector [as occurs during a Compliance Sampling Inspection (CSI), a Toxics Sampling Inspection (XSI), or a Compliance Biomonitoring Inspection (CBI)]; and (2) evaluation of a permittee's self-monitoring procedures [as takes place in a Performance Audit Inspection (PAI) or a Compliance Evaluation Inspection (CEI)]. Under certain circumstances, the inspection may also evaluate the industrial monitoring and enforcement efforts conducted as part of a municipality's pretreatment program. This type of inspection is known as a Pretreatment Compliance Inspection (PCI).

This module briefly examines the scope and nature of some compliance inspections conducted under the NPDES program. It discusses both the general steps and special considerations that an inspector must take into account while conducting compliance inspections. Additional information on conducting inspections can be found in the NPDES Compliance Inspection Manual. A glossary of the terms used in this module appears in

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Appendix A, while Appendix B lists references which inspectors may wish to consult for more information on the topics discussed. Appendix C contains questions that should be completed by each inspector after reviewing this module in order to test his/her understanding of NPDES compliance inspections. Answers to these questions also are in Appendix C. Appendices D through H provides additional reference material for NPDES inspectors.



## 2. NPDES COMPLIANCE ACTIVITIES

Under the NPDES program, there are two primary types of activities by which EPA or State personnel may evaluate the compliance status of a permittee with the requirements and conditions of its NPDES permit: (1) compliance reviews; and (2) compliance inspections. These two activities are the subject of this chapter.

#### 2.1 COMPLIANCE REVIEWS

Compliance reviews involve the review of records and reports submitted by permittees. These reviews are intended to screen permittees for compliance problems and to establish, where necessary, (based on the findings of each review) the need for follow-up in the form of compliance inspections or, if warrented, enforcement actions. According to EPA policy, compliance reviews should be performed to assess accurately the need for conducting compliance inspections.

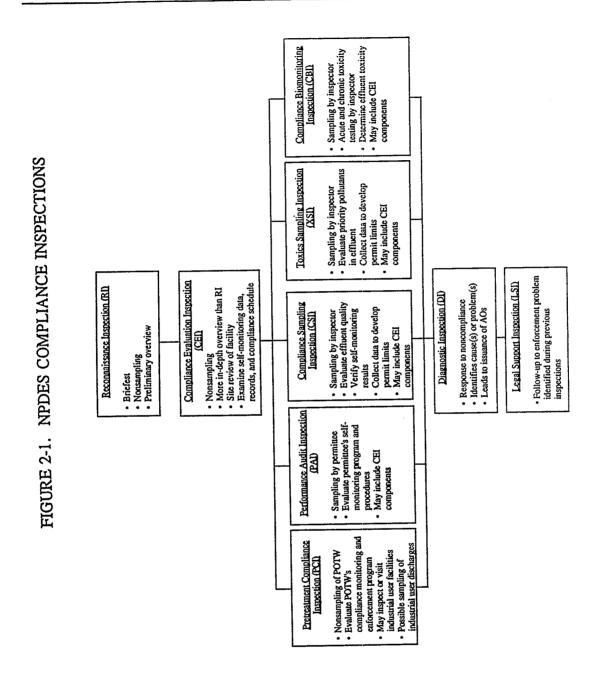
## 2.2 NPDES COMPLIANCE INSPECTIONS

Compliance inspections, conducted at a permittee's facility, are authorized by Section 308(a)(4)(B) of the CWA (provided as Appendix D of this module). (The authority to conduct inspections of permittee facilities is discussed in more detail in the companion training module on Legal Issues.) There are currently nine different inspections that a NPDES inspector may conduct at a permittee's facility. Figure 2-1 highlights these nine inspections which are described briefly below. The inspector may also wish to refer to EPA's NPDES Compliance Inspection Manual, to the four other NPDES training modules, and to the sources listed in Appendix B for information on inspection authorities, techniques, and procedures.

The nine types of NPDES compliance inspections are:

• The Reconnaissance Inspection (RI) provides a preliminary overview of a permittee's compliance program and involves only a brief visual inspection of the permittee's treatment facility, effluent quality, and receiving water. The RI is the briefest of the various NPDES inspections and may focus on only one or two issues.

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- The Compliance Evaluation Inspection (CEI) is a nonsampling inspection intended to verify a permittee's compliance with applicable NPDES permit self-monitoring requirements, effluent limits, and compliance schedule conditions. It is the basis for all other, more NPDES-intense inspections. The CEI consists of a visual inspection of the permittee's treatment facility, effluent quality, and receiving water; and self-monitoring records and reports.
- The Compliance Sampling Inspection (CSI) encompasses all the functions and tasks of the CEI but, in addition, involves sampling the effluent to assess compliance with the facility's permit requirements, to verify the accuracy of the permittee's self-monitoring program, including records and reports and to provide evidence for enforcement proceedings, where appropriate.
- The Toxics Sampling Inspection (XSI) is similar to a conventional CSI in that it evaluates a permittee's effluent and corresponding permit limits for heavy metals, phenols, and cyanide. However, an XSI is a more resource-intensive inspection because it includes sampling and analysis for toxic (priority) pollutants in addition to those evaluated during a CSI. An XSI may also evaluate raw materials, process operations, and treatment facilities to identify toxic substances requiring controls.
- The Performance Audit Inspection (PAI) also includes the tasks and functions of the CEI. However, the PAI provides a more resource-intensive review of the permittee's self-monitoring program and evaluates the permittee's procedures for sample collection, flow measurement, chain-of-custody, laboratory analysis, data compilation, reporting, and more. The PAI does not include the collection of samples by the NPDES inspector. However, the permittee may be required by the inspector to analyze performance samples for laboratory evaluation purposes.
- The Compliance Biomonitoring Inspection (CBI) encompasses the tasks and functions of the CEI as well as an assessment of the toxicity of the permittee's effluent. A CBI reviews a permittee's toxicity bioassay techniques and records maintenance to evaluate compliance with the biomonitoring terms of the NPDES permit and to determine if the permittee's effluent is toxic. The CBI includes the collection of effluent samples by the NPDES inspector to test for acute or chronic toxicity.
- The Pretreatment Compliance Inspection (PCI) evaluates a Publicly Owned Treatment Work's (POTW's) implementation of its approved pretreatment program. The PCI reviews the POTW's records of monitoring, inspection, and enforcement of program requirements on its industrial users industrial users. The PCI may be supplemented with inspections of industrial users and may be conducted in conjunction with another NPDES inspection of the POTW.
- The Diagnostic Inspection (DI) is performed at a municipal treatment facility which failed to achieve compliance with NPDES permit limits or which experienced design or operational problems. The DI is conducted at a facility that lacks the ability to diagnose such causes of noncompliance as operation and maintenance, pretreatment design, or infiltration and inflow problems. A DI is usually followed by issuance of an Administrative Order to conduct a detailed analysis and to correct the identified problem(s).

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The Legal Support Inspection (LSI) is a resource-intensive inspection conducted when an
enforcement problem has been identified as a result of a routine inspection or complaint. For a
LSI, the appropriate resources are assembled to deal effectively with the specific enforcement
problem.

According to 40 Code of Federal Regulations (CFR) 123.26(e)(5), State NPDES programs must have procedures for and the ability to inspect the facilities of all "major" discharges at least annually. The type of inspection performed at these facilities and the number and identity of additional "minor" permittees that are also inspected during that time period is left to the discretion of the appropriate EPA Regional Office or State Agency. The process used to select facilities to be inspected on a routine basis has been outlined by EPA in the policy entitled "Criteria for Neutral Selection of NPDES Compliance Inspection Candidates." A copy of this policy is provided as Appendix E.

## 3. SPECIAL CONSIDERATIONS

#### 3.1 INSPECTOR CONDUCT

An inspector represents EPA to the permittee. S/he is the backbone of EPA's compliance monitoring program. In this respect, an inspector is expected to report the facts of all investigations completely, accurately, and objectively, and to avoid, at all times, any action or failure to act that might be construed as being motivated by personal or private gain. An inspector is expected to dress and act properly at all times and to be able to recognize and avoid any conflicts of interest during any portion of the inspection. An inspector also may not solicit or accept any gift, gratuity, or favor. If offered a bribe, the inspector should follow the four-step response procedure outlined below:

- Ask what the offer is for
- Explain, if the offer is repeated, that both parties to such transactions may be guilty of violating Federal statutes
- Do not accept money or goods
- Report the incident in detail to his/her supervisor.

#### 3.2 DISCLOSURE OF INFORMATION

On occasion, the NPDES inspector may be asked by the permittee being visited to provide information about that inspection. As a rule, an inspector may give general, nonspecific information about EPA programs and activities and may describe the type of inspection scheduled to be performed. However, when the permittee requests specific information on an inspection, the NPDES inspector must be cautious. It is acceptable to discuss with the permittee deficiencies encountered during an evaluation of the permittee's self-monitoring procedures (and the actions required to correct these deficiencies). The inspector may talk about specific facts of concern that resulted from his/her inspection of the facility. However, it is not acceptable to discuss with the permittee information collected during an inspection which may indicate that a violation has occurred. This is because the inspector usually does not have results from effluent sampling.

Also, inspection findings are subject to enforcement review before compliance status is determined. The inspector does not make decisions relative to enforcement actions and must never speculate on what enforcement actions may be taken by the permitting agency in response to violations. Debriefing of facility officials is discussed further in Section 4.2.6.

#### 3.2.1 Confidentiality

Section 308(a)(4)(B) of the CWA establishes the right of access that an EPA inspector or an authorized representative has to a premises to review and copy records, inspect monitoring equipment or monitoring methods, and sample any point source effluent.

Information collected during an inspection is available to the public unless the permittee takes measures to have the information held as confidential. For the information to be held as confidential, the permittee must request [according to Section 308(b)(2)] that the EPA Administrator consider the records, reports, or information confidential because disclosure to the public would divulge trade secrets. If classified as confidential by the Administrator, the information must be maintained as such in accordance with the purposes of Section 1905 of Title 18 of the United States Code (U.S.C.) but may be disclosed to authorized representatives of EPA or of the United States concerned with carrying out the Act. According to this section, any authorized representative who knowingly or willfully discloses, divulges, publishes, or makes known any information required to be considered confidential shall be subject to a fine of not more than \$1,000 or to imprisonment for not more than 1 year, or both.

A business is entitled to make a claim of confidentiality for all information which an inspector requests or is provided access. However, a business may not refuse (on the grounds that the information is considered confidential or a trade secret) to release information requested by the inspector under the authority of Section 308 of the Act. The claim of confidentiality relates only to the <u>public</u> availability of such data and is not to be used for denying access of a facility to EPA or State inspectors performing duties under Section 308 of the Act. The type of information which may be considered confidential business information is defined in 40 CFR

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Part 2. According to 40 CFR 2.302(f), however, "effluent data" as defined in 40 CFR 2.302(a)(2) are not entitled to confidential treatment and will, therefore, be available to the public without restriction. Effluent data is defined as any information necessary to determine the identity, amount, frequency, concentration, temperature, and other characteristics of:

- Any pollutant which has been discharged by the source (or any pollutant resulting from any discharge from the source)
- Any pollutant which the source was authorized to discharge.

Effluent data may also include a general description of the location and/or nature of the source to the extent necessary to distinguish it from other sources (e.g., a description of the device, installation, or operation constituting the source).

It is the inspector's responsibility to handle all material claimed as confidential according to established procedures. For more information on confidentiality and the handling of confidential information as well as on the right of entry to a facility for purposes of monitoring or inspecting, the inspector should refer to the Legal Issues Module.

#### 3.3 FEDERAL AND STATE COOPERATION

A NPDES inspector should be aware of EPA's policy to seek, encourage, and support cooperation between Federal and State agencies. Compliance inspection activities generally should be coordinated on a continuing basis with State officials. This coordination may include providing State officials with information on the EPA inspector's planned or intended activities or performing joint inspections with State officials.

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## 4. GENERAL INSPECTION PROCEDURES

## 4.1 NPDES INSPECTOR RESPONSIBILITIES

The NPDES inspector should conduct all inspections thoroughly and professionally. S/he is expected to uphold certain responsibilities during the inspection process. Each inspector should:

- Be knowledgeable of Section 308 of the Clean Water Act and the regulations contained in 40 CFR Parts 122 and 403
- Maintain a working knowledge of the conditions and requirements contained in a facility's NPDES permit, including Administrative Orders and compliance schedules
- Be knowledgeable about applicable EPA and State policies and procedures
- Understand the purpose of each inspection and be familiar with appropriate information needs, quality assurance/quality control, chain-of-custody procedures, and safety considerations
- Coordinate and conduct inspections, including pre-inspection planning
- Complete postinspection reports and follow-up, as necessary, with the permittee, laboratory, or other involved parties
- Keep records of all inspection activities.

To successfully complete a compliance inspection, the inspector should fulfill all the responsibilities listed above. S/he should also remember that all information gathered during an inspection may be used for an enforcement action and must be collected properly and treated accordingly. If there are any further questions about handling inspection information, the inspector should ask his/her supervisor.

#### 4.2 PREINSPECTION PROCEDURES

To ensure that every in	spection is properly	focused and is	conducted	smoothly a	nd efficiently,	, the
inspector should plan ahead.	Planning for an ins	pection involves	s:			

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- Developing or obtaining a previously developed compliance file for the permittee
- Ensuring the availability of equipment to be used during the inspection
- Addressing safety requirements and obligations
- Making all necessary arrangements (for example, to enter the site or to coordinate with State or Regional personnel) prior to conducting the inspection
- Ensuring that all inspection findings are adequately documented.

Each of these items is discussed briefly in the following sections.

## 4.2.1 Development of a Compliance File

The development of a compliance file for each permittee is extremely important. At a minimum, a permittee's compliance file should contain:

- A copy of applicable Federal and State permits, and if necessary, applicable State water quality regulations
- A map showing the facility's location, effluent discharge points, overflow and bypass discharge points, and all sampling points that are identified in the permit
- The names, titles, locations, and phone numbers of responsible persons
- A flow chart or summary of present or planned treatment and/or abatement facilities
- Previous inspection reports
- The most recent discharge monitoring reports showing violations, compliance schedules, if appropriate, and any enforcement documents
- Listings from the Permit Compliance System (PCS)
- The letter used to notify the permittee of the intended inspection and the need for safety information pursuant to Section 308 of the Act (commonly called a "308 Letter"), where applicable (e.g., 308 Letters are often used to notify permittees of impending PAIs)

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- Other correspondence, (such as a response to the 308 Letter, if one was issued)
- Reports describing nonroutine analyses
- A description of its production processes, if the facility to be inspected is an industry.

Information in the compliance file is a valuable aid to a NPDES inspector because it promotes an efficient and complete inspection of a permittee's facility.

#### 4.2.2 Availability of Equipment

Prior to an inspection, the inspector should make sure that the necessary inspection equipment is available and in proper working order. A complete list of useful inspection equipment appears in Appendix F. The type of equipment needed for an inspection will vary, according to the facility being inspected and the type of inspection being conducted. All equipment must be inspected, calibrated, and tested before being used. The inspector must also ensure that all materials necessary to complete an inspection are taken to the inspection site. It is the inspector's responsibility to maintain all equipment properly in accordance with operating instructions.

#### 4.2.3 <u>Safety Obligations</u>

Prior to an inspection, a NPDES inspector must be familiar with all safety obligations including Regional or State policy and requirements. The safety equipment and procedures required for a facility will be based on either standard safety procedures or the response to the 308 (inspection notification) letter. Safety equipment should be part of the inspector's outfit. Safety requirements must be met, not only for safety reasons, but to ensure that the inspector is not denied entry to the facility (or to parts of it). Personal safety equipment is also listed in Appendix F. This list should be reviewed and expanded (if necessary) by the inspector based on his/her knowledge of the inspection's safety requirements.

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#### 4.2.4 Prior Arrangements

Prior to the inspection, the permittee sometimes is notified by a "308 Letter" that the facility is scheduled for an inspection. The 308 Letter advises the permittee that an inspection is imminent and usually requests information regarding onsite safety requirements to avoid problems concerning safety equipment at the time of the inspection. The inspector may wish to facilitate the inspection process by suggesting that the permittee send general information, such as names, addresses, and updated process information, to him/her prior to the site visit. The 308 Letter is also used to inform the permittee of its right to assert a claim of confidentiality.

In addition, the 308 Letter may specify the exact date of the inspection, if coordination with the permittee is required. However, prenotification of the permittee is not required and inspections are usually performed without any prenotification of the extact date. Depending on the type of inspection, the permittee may be telephoned to inform it that an inspection is forthcoming. The EPA inspector should always contact State personnel before the inspection to encourage cooperation between Federal and State agencies.

#### 4.2.5 Documentation

Each inspector is responsible for maintaining a legible field notebook which accurately and objectively documents inspection activities. The inspector's entries are of particular importance because EPA's subsequent enforcement action or criminal prosecution often hinges upon the evidence the inspector gathers. All entries in a field notebook should be original. Errors should be crossed out and initialed. Inspectors should not erase entries or tear pages out.

All observations recorded in the field notebook should be factual without expressing opinions, such as time of arrival, name of plant personnel contacted, notation of pictures taken, person authorizing entrance to the facility, and any field data collected during the inspection. Information should be recorded immediately. A well-kept field notebook not only provides an accurate record of each inspection, but also aids the inspector in preparing later inspection reports. Additional information collected by the inspector and completed inspection checklists can be stapled into the field notebook. All aspects of an inspection must be conducted and recorded in detail so they can be accurately reconstructed at a later time.

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In addition to the field notebook, the inspector is responsible for preparing a narrative report of his/her findings and completing two forms: the NPDES Compliance Inspection Report Form (EPA Form 3560-3), which must be completed for each type of inspection conducted and the Deficiency Notice, which identifies deficiencies uncovered during the inspection. Use of these forms is discussed in more detail in Chapters 6 and 7 and examples of the forms are provided as Appendices G and H.

#### 4.2.6 Debriefing

Upon concluding the inspection, the inspector should always debrief facility officials. During this debriefing, s/he should review identified deficiencies in the permittee's self-monitoring program and advise the permittee on correct procedures. The debriefing can focus on relevant, objective findings of the inspection and specific areas of concern may be discussed. A Deficiency Notice may be issued by the inspector as part of the debriefing if a deficiency is identified during the inspection. The Deficiency Notice is used by the inspector only to alert the permittee to deficiencies in its self-monitoring activities. At this debriefing, the inspector should never speculate on possible enforcement actions to be taken by the permit-issuing agency. Any apparent permit violation should be reported on the NPDES Compliance Inspection Report and should not be discussed with the permittee during the debriefing.

#### 4.3 INSPECTION PROCEDURES

Regardless of the type of inspection being conducted, the procedures outlined below should be followed by all inspectors.

- Before entering the facility, observe it as thoroughly as possible from public grounds.
- Enter the facility through the main gate.
- Show EPA or State credentials prior to the inspection.
- Act courteously.
- <u>Do not</u> sign a waiver of injury or visitor's release. (If an inspector is required to sign in for records purposes, an attendence log may be signed, as long as it does not contain conditions.)

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- <u>Do not</u> sign any type of confidentiality agreement.
- Obtain consent to conduct the inspection from the proper plant authority.
- Conduct opening and closing conferences with plant officials.
- Complete the inspection in a timely manner.
- Do not offer direct plant operating advice.
- Follow all inspector responsibilities, including chain-of-custody procedures, correct handling of confidential information, and discussion of inspection findings.
- Document observations, permittee statements, and inspection findings.
- <u>Do not</u> express opinions about findings.

For information on entering permittee facilities when access has been denied and a search warrant must be sought, inspectors should consult the module on Legal Issues.

## 5. SPECIFIC INSPECTION PROCEDURES

Chapter 4 introduced general inspection procedures and duties of all NPDES inspectors. This chapter discusses the specific inspection procedures established for five of the nine types of compliance inspections available. The five inspections discussed in this chapter are: (1) the Compliance Evaluation Inspection; (2) the Compliance Sampling Inspection; (3) the Toxics Sampling Inspection, discussed in conjunction with the Compliance Sampling Inspection; (4) the Performance Audit Inspection; and (5) the Compliance Biomonitoring Inspection. The Pretreatment Compliance Inspection is discussed in Chapter 6 of this module. Additional guidance on performing inspections has been published in EPA's NPDES Compliance Inspection Manual, a valuable reference that should be read by every NPDES inspector. Two companion modules to this document, the Sampling Procedures Module and the Biomonitoring Module, also will furnish the inspector with relevant information and should be reviewed by him/her. Should these manuals not provide the inspector with all necessary information, his/her supervisor should be consulted.

#### 5.1 COMPLIANCE EVALUATION INSPECTION

The CEI is one of the least resource-intensive types of NPDES inspections. Typically, 1 to 3 workdays are allotted for conducting a CEI, which includes travel, the inspection, and report preparation, but does not include wastewater sampling. It is comprised of the following four components; which are explained in more detail below:

- Records and reports review
- Compliance schedule status review
- Facility site review
- Self-monitoring review.

#### 5.1.1 CEI Records and Reports Review

The NPDES program requires permittees to maintain records and to report periodically on the amount and the nature of waste components in their effluents. Section 308 of the Act authorizes inspections of such required records and reports. There are six objectives of a records and reports review. (1) the review documents the permittee's compliance status with permit limitations and requirements; (2) it is used to evaluate effluent quality trends as well as to follow-up on specific permit violations; (3) it helps to define the scope of the suspected violation; (4) it determines the adequacy of the permittee's records maintenance system; (5) it determines the adequacy of the permittee's reports; and (6) it briefly reviews the quality assurance of the permittee's self-monitoring activities.

During a routine records and reports review, the inspector will generally examine the permittee's files to determine if the permittee:

- Keeps and properly files the required records
- Maintains records in an up-to-date manner
- Retains all records for the minimum time period required by the NPDES permit or by State regulations
- Needs assistance on complying with the Agency's requirements on records and reports.

When conducting a records and reports review, inspectors should follow the procedures outlined below:

- Discuss record keeping and reporting requirements with relevant facility personnel
- Verify the maintenance of sampling and analytical data
- Verify that the facility has a copy of the NPDES permit and that responsible personnel are cognizant of the permit's contents
- Verify the maintenance of daily operating logs
- Verify the maintenance of management-generated records

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- Verify the maintenance of pretreatment records
- Verify the maintenance of laboratory records
- Verify that all records and reports are retained for at least 3 years
- Verify that all data reported in Discharge Monitoring Reports (DMRs) have been correctly
  calculated.

The results of a CEI may lead to a more in-depth inspection of the permittee's records and reports at a later date. Such an in-depth inspection is conducted, when necessary, to substantiate a suspected violation; to verify self-monitoring data which may be used as corroborative evidence in an enforcement action; or to confirm apparent sampling, analysis, or reporting discrepancies discovered during the CEI's limited investigation.

#### 5.1.2 CEI Compliance Schedule Status Review

If the permit does not contain a compliance schedule, this section of the CEI is not applicable. However, the inspector should be aware that a compliance schedule may appear in an Administrative Order or consent decree issued to a permittee. Thus, the inspector should review all relevant information from the permittee to determine whether it is on a compliance schedule.

Compliance schedules are established for permittees with treatment or abatement facilities that need to be modified to meet NPDES permit effluent limitations. These schedules contain milestones that the permittee must meet and report on to ensure that abatement is attained on schedule. Reports of progress and the permittee's current status are used by the regulatory authority to determine the facility's compliance with set milestones. This phase of the CEI is not appropriate during inspections that are conducted after the permittee has achieved final effluent limitations.

There are four objectives of a compliance schedule status review. First, the review determines the accuracy of progress reports submitted on the permittee's compliance schedule requirements. Second, it determines the permittee's conformance to the compliance schedule and, if the permittee has not been able to

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conform, identifies causes of the delays and determines whether the final treatment requirements will be achieved on time. Third, it documents cases of schedule violations and delays. Fourth, it serves as a means to determine the validity of requests for permit modifications.

Before performing a CEI, the NPDES inspector must be familiar both with the permittee's compliance schedule requirements and with progress reports submitted. Compliance schedules should be reviewed before the inspection and status reviews coordinated with Regional or State construction grants personnel, if appropriate. Also, inspectors should review the permittee's plans, specifications, construction and equipment contracts, and work orders to determine whether construction is occurring as scheduled. Further, inspectors are responsible for conducting a visual inspection of the permittee's construction efforts and equipment.

When conducting a compliance schedule status review, inspectors must:

- Visually check the progress of all construction activities
- Verify that the status of construction matches what has been reported to the regulatory authority in progress reports
- If delays are apparent, determine the cause:
  - Verify that the permittee has notified the permit-issuing authority promptly of delays and of the measures it has taken to minimize the delay
  - Review the permittee's contract and equipment orders
  - Verify that the permittee has the authority to construct the necessary installation and has financing available to fund construction costs
- Determine causes for existing or projected delays
- Determine whether operating personnel are being trained or other appropriate procedures are being followed to ensure that new treatment equipment or facilities will be operated properly after construction is completed.

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#### 5.1.3 CEI Facility Site Review

The objective of a facility site review is to examine the permittee's premises for problem areas. This overall review allows the inspector to gain a feeling for the facility being inspected and to review areas that may indicate problems with plant operations or effluent limitations. During a facility site review, an inspector must examine all areas of the permittee's premises where pollutants are generated, pumped, conveyed, treated, stored, or disposed. The inspector should also perform a visual inspection of all monitoring and treatment equipment. The inspector must have a full understanding of each treatment process in the facility and how each process fits into the overall treatment scheme, as well as an understanding of the upstream conditions that affect treatment operations, to examine the facility effectively.

As the inspector conducts an industrial facility site review, s/he should become familiar with the following information about the facility being inspected:

- Flow of raw water used for production, the facility's water consumption and distribution usage, and the hydraulics of the facility's drainage and collection system
- Raw materials and any additives used in production as well as all end-products; by-products; and other liquid, gaseous, and solid wastes resulting from the production process
- Treatment processes
- Wastewater characteristics
- Production processes.

If the inspector is conducting a site review of a municipal treatment plant rather than an industrial facility, s/he should become familiar with somewhat different information. Besides learning about the facility's treatment processes and wastewater characteristics, the inspector should determine the following information:

- Nature of the contributing industrial community
- Pollutants received by treatment facility and their probable sources

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- Volume and nature of influent and effluent flow
- Whether the plant accepts hazardous wastes.

Before conducting a tour of the facility, the inspector must hold preinspection discussions with the facility owner and/or operator. During these discussions, the inspector should explain to the permittee the authority to enter the facility and discuss the applicable provisions of the CWA. It is to the inspector's advantage to conduct the facility site review as soon as possible upon entering the facility. This prevents the permittee from altering any problem areas. After completing preliminary discussions, the inspector will be ready to tour the facility. During the plant tour, the inspector should be alert and should inquire about situations such as:

- Accumulations of solids and scum in wet wells or excessive buildup of scum, grease, foam, or floating materials in tanks.
- Obnoxious odors in or around wet wells, grit chambers, aerobic biological units, scum removal devices, and sludge handling facilities.
- High flows in influent lines, overflow weirs, and other structures.
- Vital treatment units out-of-service for repairs. (The inspector should determine when the units were taken out of service, the type of failure experienced, and when the units will be put back in service.)
- Any unusual equipment or operations such as special pumps, floating aerators in diffused air systems, chemical feeders, construction, temporary structures, or any rigged systems intended to correct operational problems.
- Presence of excessive weeds and algae in stabilization ponds, etc. (Earthen retention walls (dikes) should be checked for breaches, leaks, and other problems requiring maintenance.)
- Sludge decomposing in clarifiers as indicated by gas bubbles rising to the surface or by floating sludge cakes.
- Freezing wastewater in ammonia stripping towers, formation of excessive calcium carbonate
  deposits on tower structures, fouling of fabric in microscreens due to the presence of grease and
  solids, and mechanical fouling of activated carbon columns.

- Visual condition of discharges (i.e., the presence of scum, foam, solids, color, steam, or oil) and
  whether excessive suspended solids, turbidity, foam, oil or grease, scum, color, or other
  macroscopic particulate matter are present in the plant effluent and the receiving waters.
- Adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical failures.
- Unauthorized discharge points and/or bypasses, channels, or other areas likely to experience overflows. (The inspection should determine if spills or unauthorized use has recently occurred as a result of facility staff attempting to correct operational problems.)
- Disposal of collected screenings, slurries, sludges, or other by-products of treatment. (These materials, including wastewater should be disposed of in a manner so as to prevent the materials from entering navigable waters or their tributaries.)
- Changes in production, whether expansions or reductions in production capacity. (If production changes have been introduced, the inspector will need to conduct an industrial process verification, inquire about the changes, determine if the changes will increase or decrease the facility's discharge above or below the current effluent limitation, and determine whether EPA was notified of the changes.)

In addition, the inspector should check the appropriateness of monitoring locations, existence and condition of permittee's self-monitoring equipment (both field and laboratory), and the facility's maintenance program. The inspector should also conduct postinspection discussions. These discussions are covered later in this module.

#### 5.1.4 CEI Self-Monitoring Review

The self-monitoring review is the CEI component that examines the permittee's self-monitoring program. To perform this review thoroughly, it is the inspector's responsibility to be familiar with the monitoring requirements contained in the facility's permit and with any correspondence which may have modified or reestablished sampling points or analytical procedures. The inspector should also be thoroughly familiar with approved test methods and specified sample holding times, or in the case of a complex list, should have available a reference list of the approved methods for those samples required by the permit. For information on approved sampling procedures and analytical test methodologies, inspectors should review the Sampling Procedures and Laboratory Analysis Modules and the references recommended in each.

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There are three objectives of the self-monitoring review: (1) the review should confirm that sampling and flow measurement equipment are provided as required in the permit and that they are being operated and maintained properly; (2) the review should verify that the analyses are being performed with the proper equipment and by persons who have the requisite skills; and (3) the review should confirm that the analytical test methods used to evaluate pollutants or parameters specified in the NPDES permit conform with the Agency's regulations in 40 CFR Part 136.

When conducting the self-monitoring review, the inspector should:

- Verify that flow measurement devices are in use and are adequate to handle expected ranges of flow rates
- Verify that samples are taken at locations prescribed in the NPDES permit
- Verify that the sampling location specified in the permit is adequate to provide a representative sample of the regulated discharge
- Verify that the frequency of sampling is performed in accordance with the NPDES permit requirements
- Verify that samples are collected and preserved in accordance with 40 CFR Part 136
- Verify that samples are analyzed within holding times and analyzed according to approved test methods in 40 CFR Part 136
- · Verify that chain-of-custody procedures are used
- · Verify that quality assurance and quality control is used in all self-monitoring programs
- Check all sampling, monitoring, and laboratory equipment to verify that all equipment is in working order and has been maintained, operated, and calibrated correctly.

## 5.1.5 CEI Discharge Monitoring Report/Quality Assurance Review

A Discharge Monitoring Report (DMR)/Quality Assurance (QA) review is the	e CEI component which
focuses on aspects of quality assurance in the permittee's self-monitoring program.	A DMR/QA inspection is

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usually conducted, along with other aspects of a CEI, as follow-up to DMR/QA performance sample findings. For more details on examining the permittee's self-monitoring program, refer to Section 5.3 of this module, which discusses PAIs.

#### 5.1.6 Post-Inspection Reporting

The inspector should complete the NPDES Compliance Inspection Report (EPA Form 3560-3 in Appendix G) for all sections applicable to the CEI. The inspection type for a CEI is denoted by inserting a "C" in Column 18 of the form. For more information on the use of this form, refer to Chapter 7 of this module and to EPA's NPDES Compliance Inspection Manual.

Deficiencies identified during the CEI should be documented by the inspector on the Deficiency Notice developed by EPA for use Nationally and contained in Appendix H. Information on the form's use is also provided in the memo in Appendix H.

## 5.2 CONVENTIONAL AND TOXIC COMPLIANCE SAMPLING INSPECTIONS

The second and third types of compliance inspections to be discussed are the CSI and the XSI. For the CSI and the XSI, inspectors must be familiar with both the NPDES Compliance Inspection Manual and the Sampling Procedures Module. The average resource allocation for a CSI ranges from 16 days for inspection of a municipal facility to 30 days for inspection of an industrial facility. The XSI generally involves more resources to accommodate sampling and analysis of toxic pollutants. To conduct an XSI successfully, the inspector should be knowledgeable about organic chemistry and process operations waste sources, and control technology associated with the facility being inspected. It is also helpful if the inspector has an ability to evaluate and interpret toxics data.

There are five objectives of both the CSI and the XSI: (1) the CSI and XSI serve to verify the permittee's compliance with the effluent limitations specified in the permit; (2) the inspections are used to verify the permittee's self-monitoring data; (3) they are used to ensure that parameters specified in the permit are consistent with the facility's wastewater characteristics; (4) the inspections support permit reissuance and

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revision and build a file for further inspections; and (5) the CSI and XSI support enforcement actions taken against the permittee. In addition to the information to be collected as part of the CEI, eight other steps are incorporated into the CSI and the XSI. As part of the CSI/XSI, the inspector should:

- Sample at the locations and for the parameters specified in the NPDES permit
- Sample at locations and for parameters not specified in the NPDES permit, as requested by permitting enforcement personnel
- Measure flow by either verifying accuracy of in-plant equipment or by actual independent flow measurement
- Verify that the permittee's sampling location(s) include all the effluent from process and nonprocess wastewater systems
- Verify that the permittee's sampling techniques are adequate to ensure the collection of representative samples
- Verify that the permit sampling and monitoring requirements will yield representative samples
- Verify that the parameters specified in the permit are adequate to cover all pollutants of concern discharged by the permittee
- Conduct postinspection discussions (limited to specific findings) with the appropriate representatives of the permittee.

More detailed information about sampling and flow measurement is provided in the Sampling Procedures Module.

It is important to note that the CSI/XSI incorporate all aspects of a CEI. These inspections, however, are more comprehensive than the CEI because they include sampling. The NPDES Compliance Inspection Report (EPA Form 3560-3) is used to document the findings of all types of NPDES inspections, so the inspector should refer to this form in Appendix G. The inspection type for a CSI is denoted by entering an "S" in Column 18 of the inspection report form. The inspection type for an XSI is denoted by entering an "X" in that same column. Deficiencies identified by the inspector during the CSI/XSI should be documented on the Deficiency Notice (see Appendix H).

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#### 5.3 PERFORMANCE AUDIT INSPECTION

A fourth type of inspection that may be performed is the PAI. The PAI examines a permittee's self-monitoring procedures and includes all aspects of a CEI. It requires approximately 12 workdays for completion. Before conducting a PAI, all inspectors should be familiar with the latest editions of EPA's <a href="https://www.NPDES Compliance Inspection Manual">NPDES Compliance Inspection Manual</a> and the training modules on sampling procedures and laboratory analysis.

The PAI has six major objectives. It is intended to:

- Evaluate compliance schedules established in the NPDES permit and to review DMR data submitted by the permittee
- Determine if self-monitoring requirements contained in the permit are adequate and are being complied with by the permittee
- Evaluate the permittee's sampling techniques
- Evaluate the permittee's and/or its contract laboratory's analytical procedures
- Evaluate the permittee's and/or its contract laboratory's quality assurance and quality control procedures
- Gather data and information that supports enforcement action.

To fulfill these objectives, the inspector should apply engineering, chemistry, and biological skills. An inspector should also be able to distinguish between procedures that a permittee is required to follow and those that are desirable to improve the way in which a permittee satisfies its permit conditions.

The NPDES inspector has several responsibilities to meet during the PAI: (1) s/he must be familiar with the self-monitoring requirements established in the NPDES permit; (2) the inspector must be familiar with any correspondence modifying the permittee's sampling points; (3) the inspector must fulfill the CEI's objectives; (4) s/he must visually inspect all aspects of the permittee's self-monitoring procedures; (5) the inspector must be extremely knowledgeable about common self-monitoring procedures (since the PAI is an in-depth evaluation

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of these procedures); and (6) the inspector should posses a broad understanding of laboratory procedures. S/he should be familiar with EPA-approved analytical methods, be capable of recognizing equipment typically associated with these methods, provide credible advice on such methods, and be familiar with alternative test-approval procedures.

The inspector should review the modules on Sampling Procedures and Laboratory Analysis for information on deficiencies in these areas. The inspector should also be able to distinguish between deficiencies in self-monitoring procedures (which may be corrected by instruction on the proper procedures) and violations of those procedures. All violations identified during an inspection should be recorded on the NPDES Compliance Inspection Report form (see Appendix G). The inspector should not discuss the compliance status with the permittee because the onsite findings usually do not include sampling results and are subject to further enforcement review before compliance determination.

When conducting a PAI, the NPDES inspector is expected to carry out the following tasks:

- Confirm that primary flow measurement devices are appropriate for the wastestreams being measured, and that the devices are properly installed, free of debris, and properly maintained. (For more information, the inspector should refer to the module on Sampling Procedures.)
- Observe instrument calibration and maintenance.
- If the permit requires "continuous flow" monitoring, check for the existence of a flow recording device, verify its proper operation, and review the discharger's flow records.
- Observe sample collection and measurement techniques, including sampling preservation, holding time, and location of sampling equipment deficiencies. (The inspector may wish to review the appropriate section of EPA's <u>NPDES Compliance Inspection Manual</u> for more information on identifying deficiencies.)
- Examine appropriate permittee records and reports.

If the facility has an onsite laboratory, the inspector must perform these additional activities:

• Verify [by referring to 40 CFR Part 136 and Section 304(h) of the Act] that methods of analysis used by the onsite laboratory are approved for the parameters being analyzed

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- Verify that the laboratory has written instructions on analytical test methods
- Verify that QA/QC methods are being employed
- Check equipment availability and condition
- Check for proper sign-off procedures
- Examine staff capabilities
- Check the health and safety conditions of the laboratory
- Check the laboratory's maintenance and calibration records
- Check the viability of reagents and standard solutions
- Check for proper shipment of samples if some or all of the samples are not analyzed onsite
- Evaluate laboratory capabilities with performance samples
- Check for proper sample holding times and preservation techniques.

If the permittee uses an offsite laboratory, the inspector must:

- Verify the name and address of the laboratory
- · Verify the procedures for labeling and shipping samples
- Verify that sample results are properly coded
- Check for onsite evaluations of the offsite laboratory by other EPA programs or by the permittee (e.g., duplicate or split samples)
- · Verify that the sample holding times and methods of preservation are according to EPA requirements
- Verify compliance with Department of Transportation (DOT) regulations for the shipment of hazardous materials.

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If the offsite laboratory has not previously been evaluated or if the inspector questions the validity of results reported, this laboratory should be evaluated as part of the PAI, if possible, in the same manner as an onsite laboratory.

When conducting a PAI, a thorough knowledge of correct and required sampling and analysis procedures is essential to the inspector, who must identify and document deficiencies in the permittee's self-monitoring program. As the inspection proceeds, the inspector should note observed deficiencies, discuss them with the permittee's self-monitoring personnel, and identify correct procedures whenever feasible. The inspector should keep detailed notes of deficiencies and identified corrections and responses. However, when the inspector suspects criminal activity, s/he should always exercise judgement in disclosing information. The inspector should not discuss compliance status, any legal effects, or enforcement consequences with the permittee's representative or with facility operating personnel. The inspector should note all information pertaining to an apparent violation on the NPDES Compliance Inspection Report form.

When completing the NPDES Compliance Inspection Report form in order to enter data into the automated PCS, the symbol used to designate a PAI is "A." This should be inserted in Column 18 of the form.

## 5.4 COMPLIANCE BIOMONITORING INSPECTION

The CBI involves collecting samples of the permittee's effluent, conducting acute or chronic toxicity testing, determining the instream waste concentration of the effluent, and evaluating the permittee's biomonitoring program. A PAI or CEI may also be used to evaluate the permittee's biomonitoring program. The resources allocated for biomonitoring are generally 6 days for a 24-hour static test and 30 days for a 96-hour flow-through test.

The objectives of a CBI are to:

- Screen for toxic conditions in an effluent and assess biological effect
- Evaluate compliance with water quality standards

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- Monitor toxic compounds that may or may not be controlled through economically achievable Best Control Technology/Best Available Technology (BCT/BAT)
- Evaluate permit limitations
- Develop enforcement cases
- Investigate probable cause violations
- Develop data for establishing new effluent limitations.

As with the other inspection types, the NPDES inspector has certain responsibilities to meet during the inspection, including:

- Knowledge of the biomonitoring conditions, effluent toxicity limitations, and related interim and final requirements set forth in the latest NPDES permit
- Knowledge of EPA policies and procedures to conduct, interpret, and report biomonitoring of wastewater effluent
- Completing the inspection plan and scheduling the inspection
- Conducting the onsite biomonitoring evaluation
- Preparing and assembling complete and accurate records of self-monitoring practices and other issues addressed during a biomonitoring inspection
- Following up with the appropriate representatives of the permittee after the inspection with regard to biomonitoring performance, quality control, and related compliance activities evaluated during the inspection.

Toxicity tests are generally described as either acute or chronic. The responses observed will determine which term is appropriate. When mortality is observed, tests are considered acute. Chronic tests are those that measure growth, reproduction, or terata. Technically, acute and chronic refer to the length of time organisms are exposed to toxicants before responses are observed. In this context, acute refers to short-term responses, and chronic refers to responses that develop after long-term exposure.

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Toxicity tests may be conducted onsite (at the effluent discharge point) or offsite (at a testing laboratory).

Onsite biomonitoring may include the following toxicity tests:

- Acute toxicity tests
  - An 8- to 24-hour range-finding (screening) test
  - A 24- to 96-hour static test
  - A 96-hour flow-through test
  - A 24-hour quality assurance test with a standard toxicant
- Chronic toxicity tests
  - Range finding tests
  - Monthly acute tests with a standard toxicant
  - Short-term chronic tests (either static or flow-through).

Offsite analysis as part of a biomonitoring inspection consists of a 24-hour static test. A sample of the permittee's effluent is collected and taken to a laboratory for testing. An LC<sub>50</sub> is calculated and multiplied by an application factor. The result is compared with the instream waste concentration to determine the compliance of the permittee's effluent with permit requirements. More specific information on toxicity testing can be found in EPA's NPDES Compliance Inspection Manual and the module on Biomonitoring.

As with the other inspections, the inspector should complete the NPDES Compliance Inspection Report form for a CBI. In this case, s/he would enter a "B" in Column 18 of the form.

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## 6. PRETREATMENT COMPLIANCE INSPECTION

## 6.1 REVIEW OF THE GENERAL PRETREATMENT REGULATIONS

The General Pretreatment Regulations (40 CFR Part 403), establishing the National Pretreatment
Program were first promulgated on June 26, 1978. The program was developed to regulate industries that
discharge pollutants to POTWs. The regulations, which were subsequently revised and repromulgated on
January 28, 1981, specify the basic procedures, responsibilities, and requirements of EPA, States, POTWs, and
industries in implementing the National Pretreatment Program. Since publication of the rule in 1981, the
regulations have continued to be revised. Amendments to the regulations were promulgated on October 17,
1988, to clarify some aspects of the regulations and to respond to the findings of the Pretreatment
Implementation Review Task Force (PIRT) study conducted in 1984. [For a discussion of the findings and
recommendations of PIRT, inspectors may wish to review the <u>Pretreatment Implementation Task Force (PIRT)</u>
Final Report published by EPA in 1985.]

Additional regulatory changes to 40 CFR Parts 122 and 403 were promulgated on July 24, 1990, (Fed. Reg. 30082) in response to the recommendations made in the Domestic Sewage Study (DSS).

The purpose of the General Pretreatment Regulations is to protect POTWs and the environment from the damage that may result from nondomestic discharges to sanitary sewer systems. The three specific objectives cited in 40 CFR 403.2 are:

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

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In addition, EPA policy encourages the protection of worker health and safety as part of the local pretreatment program. Table 6-1 summarizes the General Pretreatment Regulations and notes major technical changes that have resulted from regulatory revisions or court decisions.

#### 6.2 PRETREATMENT COMPLIANCE INSPECTIONS

For EPA or States with delegated pretreatment responsibilities to evaluate the implementation and compliance status of the pretreatment program Nationally, EPA developed three types of evaluations: (1) the PCI; (2) the pretreatment program audit; and (3) the annual report. The PCI evaluates a POTW's compliance monitoring and enforcement activities. It is also designed to determine if changes have been made to the POTW's program since approval or the last PCI, audit, annual report, or previous program modification. The role of the NPDES inspector during a PCI is that of a data gatherer who collects information on POTW program implementation to be evaluated further by EPA or State permits and enforcement personnel.

The PCI has been designed to be incorporated into the existing NPDES inspection program. Two days are usually allocated to the conduct and follow-up of a PCI. PCIs should be conducted, where possible, in conjunction with other NPDES inspections to conserve travel resources and to integrate information on other facets of a POTW's operations. PCIs are compatible with CEIs, CSIs, PAIs, and CBIs, as well as with other types of inspections not discussed in detail in this module.

A PCI involves three major components: (1) preinspection preparations; (2) onsite evaluations; and (3) follow-up activities. Each of these components is highlighted below and discussed in detail in EPA's 1986

Pretreatment Compliance Inspection and Audit Manual for Approval Authorities. Previsit or preinspection preparations consist of:

- Coordination of inspection plans with EPA Regional and/or State Pretreatment Coordinators.
- Review of background information on the POTW and its pretreatment program. Information that
  should be reviewed by the inspector prior to the inspection includes the approved program document,
  POTW annual reports (if available), POTW fact sheets, program modification requests, and the
  POTW's NPDES permit compliance status.

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The General Pretreatment Regulations are divided into 18 sections (40 CFR 403.1 through 40 CFR 403.18) and 4 appendices (Appendices A-D). The 18 sections and 4 appendices are listed below, along with brief explanations of the contents of each, where necessary.

- 403.1 Purpose and Applicability
- 403.2 Objectives of General Pretreatment Regulations
- 403.3 **Definitions**
- 403.4 State or Local Law

The General Pretreatment Regulations are not meant to affect any State or local regulatory requirements as long as those requirements are at least as stringent as the Federal regulations.

#### 403.5 National Pretreatment Standards: Prohibited Discharges

General and specific prohibited discharge standards that POTWs must incorporate into their pretreatment programs are provided in this section. The general prohibitions specify that pollutants introduced into POTWs by nondomestic sources will not pass through the POTW or interfere with the operation or performance of the treatment works. POTWs required to develop local pretreatment programs (and POTWs where interference and pass through are likely to occur) must develop and enforce specific limitations to implement the general prohibitions against interference, pass through, and sludge contamination.

The five prohibitions specify prevention of discharge of pollutants that cause any of the following conditions to occur at the POTW (including within the collection system):

- Fire or explosive hazard
- Corrosive structural damage (no pH < 5.0 s.u.)
- Obstruction of flow in the POTW
- Interference
- Heat causing inhibition of biological activity and temperatures at the treatment plant to exceed 40°C (104°F).

Amendments on January 14, 1987, provided industrial users with an affirmative defense (if specified conditions are met) for actions brought against it for alleged violations of the general or specific prohibitions contaminated in this section.

#### 403.6 National Pretreatment Standards: Categorical Standards

Development and implementation of categorical pretreatment standards including compliance deadlines, concentration and mass limits, prohibition of dilution as a substitute for treatment, and use of the combined wastestream formula to determine discharge limitations is discussed in this section.

#### 403.7 Revision of Categorical Pretreatment Standards to Reflect POTW Removal of Pollutants

This removal credits provision provides the criteria and procedures to be used by a POTW in revising the pollutant discharge limits specified in categorical pretreatment standards to reflect removal of pollutants by the POTW. (No removal credits may be granted until final sludge regulations are promulgated.)

#### 403.8 POTW Pretreatment Programs: Development by POTW

The requirements for pretreatment program development by a POTW are outlined in this section. Included are criteria for determining which POTWs must develop pretreatment programs, program approval deadlines, incorporation of approved programs and compliance schedules in NPDES permits, and program and funding requirements. The POTW is required to have sufficient legal authority to enforce the approved pretreatment program. It is also stated in this section that all POTWs with approved programs or programs under development, must develop and implement procedures to ensure compliance with the requirements of a pretreatment program.

## 403.9 POTW Pretreatment Programs and/or Authorization to Revise Pretreatment Standards: Submission for Approval

Requirements and procedures for submission and review of POTW pretreatment programs are discussed in this section. Included are discussions of conditional program approval authority action, and notification where submissions are defective.

#### 403.10 Development and Submission of NPDES State Pretreatment Programs

Requirements and procedures for submission and review of NPDES State pretreatment programs are provided in this section. Included are discussions of deadlines for approval of State programs; legal authority, procedural, and funding requirements; and contents of program submissions.

## 403.11 Approval Procedures for POTW Pretreatment Programs and POTW Revision of Categorical Pretreatment Standards

Included in this section are procedures for accepting or denying POTW requests for program approval of removal credits authority.

#### 403.12 Reporting Requirements for POTWs and Industrial Users

Reports required by industrial users include the following:

- <u>Baseline monitoring reports</u> Submit to the Control Authority within 180 days of the
  effective date of the categorical pretreatment standards. In addition, new source BMR
  reporting requirements are discussed.
- Compliance schedule (for meeting categorical pretreatment standards) progress reports -Submit to the Control Authority within 14 days of completion of compliance schedule milestone or due dates.
- Report on compliance with categorical pretreatment standard deadline (final compliance report) Submit to the Control Authority within 90 days of the compliance date of the categorical pretreatment standards.
- <u>Periodic reports on continued compliance</u> Submit to the Control Authority at least semiannually, usually in June and December after the compliance date.
- Notice of potential problems, including slug loadings Required to be submitted by categorical and noncategorical industries immediately upon identification of discharges including slug loadings that could cause problems to the POTW treatment plant.
- Notice of changed discharge Required to be submitted to the Control Authority by categorical and noncategorical industrial users in advance of any significant change in volume or character of pollutants discharged.

Reports required by POTWs include the following:

- Compliance schedule progress reports (for development of pretreatment programs)
- Removal credit reports.

Signatory certification and record keeping requirements for POTWs and industrial users and monitoring requirements for industrial users are specified in this section.

#### 403.13 Variances from Categorical Pretreatment Standards for Fundamentally Different Factors

This provision allows an industrial user or any interested person to request a variance for the establishment of limits either more or less stringent than required by a categorical pretreatment standard. The primary criteria required for approval of this variance is that the factors relating to the industrial user's discharges are fundamentally different from the factors considered by EPA in establishing categorical standards for these discharges.

#### 403.14 Confidentiality

The confidentiality requirements and prohibitions for EPA, States, and POTWs are covered in this section. Effluent data is available to the public without restriction.

#### 403.15 Net/Gross Calculation

This provision provides for adjustment of categorical pretreatment standards to reflect the presence of pollutants in the industrial user's intake water.

#### 403.16 Upset Provision

This provision allows an upset (which meets the conditions of an "upset" as specified in this provision) to be an affirmative defense to an action brought for noncompliance with categorical pretreatment standards. The industrial user will have the burden of proof for such a defense.

#### 403.17 Bypass

The requirement for industrial users to operate their treatment systems at all times is specified in this section. Also included in this provision are criteria for allowing bypass to occur and notification procedures for both an anticipated and unanticipated bypass.

#### 403.18 Modification of POTW Pretreatment Programs

This provision specifies procedures for criteria for "minor" and "substantial" modifications to approved POTW pretreatment programs and incorporation of substantial modifications into the POTW's NPDES permit.

#### Appendix A Program Guidance Memorandum

This memorandum summarizes the Agency's policy on the use of construction grants for treatment and control of combined sewer overflows and stormwater discharges.

#### Appendix B 65 Toxic Pollutants

This appendix lists the 65 toxic pollutants which are regulated by the pretreatment program through categorical pretreatment standards.

# Appendix C Industrial Categories Subject to National Categorical Pretreatment Standards (previously titled "34 Industrial Categories")

The Appendix C, published on January 21, 1981, listed 34 industrial categories originally expected to be regulated by the pretreatment program through categorical pretreatment standards. Appendix C was revised on June 4, 1986, to incorporate changes to previous categorization, to delete categories that were exempted by paragraph 8 of the NRDC vs. EPA Consent Decree, and to incorporate additional categories for which standards are being developed or considered.

# Appendix D Selected Industrial Subcategories Considered Dilute for Purposes of the Combined Wastestream Formula (previously titled "Selected Industrial Subcategories Exempted from Regulation Pursuant of paragraph 8 of the NRDC vs. Costle Consent Decree")

The Appendix D, published on January 21, 1981, provided a list of industrial subcategories that had been exempted (pursuant to paragraph 8 of the <u>NRDC</u> vs. <u>EPA</u> Consent Decree) from regulation by categorical pretreatment standards. Appendix D was revised on October 9, 1986, to update the list of exempted industrial categories and to correct previous errors by

either adding or removing various subcategories or by changing the names of some categories or subcategories. Each of the subcategories, as indicated by the revised Appendix D title, contains wastestreams that are classified as dilute for purposes of applying categorical pretreatment standards to other wastestreams and for using the combined wastestream formula to adjust these standards.

•	Notification	of POTW	officials	prior t	to the	inspection.
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#### Onsite activities consist of:

- Opening conference with POTW officials
- Interviews with POTW officials based on information to be gathered for completion of the PCI checklist
- Review of POTW pretreatment files on industrial users and other program activities
- Inspection of industrial user facilities to evaluate each industrial user's pretreatment systems, monitoring equipment, spill prevention and control procedures, chemical storage, waste disposal practices, and other facets of the user's facility with the potential to affect the POTW
- Tour of the POTW (optional)
- Closing conference with POTW officials.

#### Follow-up responsibilities include:

- Completion of the PCI checklist/preparation of inspection reports
- Entry of data into PCS
- Distribution of follow-up letters to POTW officials and to other personnel who participated in the inspection (e.g., nondelegated State personnel)
- Enforcement action, when necessary
- Modification of NPDES permit conditions or POTW program responsibilities and procedures, when necessary.

In addition to completing the NPDES Compliance Inspection Report form ("P" is used for a municipal PCI and "I" for an industrial inspection), the inspector is expected to complete a checklist developed to document the PCI's findings and to summarize the required and recommended actions that the POTW should take. A copy of this checklist is contained in EPA's 1986 Pretreatment Compliance Inspection and Audit Manual for Approval Authorities.

#### 6.3 PRETREATMENT PROGRAM AUDITS

In contrast to PCIs which are intended to evaluate a POTW's pretreatment compliance monitoring and enforcement activities, pretreatment audits are more resource-intensive, depending upon the industrial characteristics of the POTW's service area and the complexity of the POTW's program. Pretreatment audits are designed to be a comprehensive review of all facets of a POTW's program. Audits not only address the items evaluated during PCIs but also examine a POTW's legal authority to implement and enforce program requirements, its procedures for applying pretreatment standards to industrial users, the adequacy of its pretreatment data management systems, and the resources allocated to carry out program responsibilities.

The procedures for conducting an audit are similar to those discussed previously for conducting a PCI. A more extensive checklist than the PCI checklist is used to document the findings and required actions of an audit. A copy of this audit checklist appears in EPA's 1986 Pretreatment Compliance Inspection and Audit Manual for Approval Authorities. Additional guidance manuals that discuss pretreatment program responsibilities are included in the list of references provided in Appendix B.

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## 7. POST-INSPECTION PROCEDURES

Thus far in this training module, the types of inspections, the NPDES inspector's obligations and responsibilities, preinspection activities, procedures for each type of inspection, and the use of the NPDES Compliance Inspection Report form have been discussed. The last subject area to cover is postinspection or follow-up activities. There are five major postinspection activities: (1) presentation of findings; (2) data analysis; (3) completion and distribution of reports; (4) testimony; and (5) updating permittee files.

#### 7.1 PRESENȚATION OF FINDINGS

After concluding the inspection, the inspector should communicate the inspection results to the permittee. Postinspection discussions must be limited to specific findings of the visit and should <u>not</u> include discussion of any enforcement actions. Also, the inspector must remember that the overall compliance or noncompliance status of the permittee is determined by the Enforcement Branch after reviewing the inspection report and <u>not</u> by the inspector.

#### 7.2 DATA ANALYSIS

For offsite testing, laboratory analysis should be completed as quickly and efficiently as possible. Results of the laboratory analysis will be used by the inspector to complete compliance reports.

#### 7.3 COMPLETION AND DISTRIBUTION OF REPORTS AND FORMS

Immediately after returning to the office, inspectors must complete EPA Form 3560-3 to the extent possible before laboratory analytical results are returned. Instructions for completing this form appear on the back of the form. At the completion of each inspection, the coding symbol for the type of inspection that has been conducted should be entered in Column 18, labeled "Inspection Type." Table 7-1 shows the letters which correspond to the type of inspection:

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TABLE 7-1. CODING SYMBOLS FOR INSPECTIONS

Type of Inspection	<u>Initials</u>	<u>Code</u>
Compliance Evaluation Inspection	CEI	"C"
Compliance Sampling Inspection	CSI	"S"
Toxics Sampling Inspection	XSI	"X"
Performance Audit Inspection	PAI	"A"
Compliance Biomonitoring Inspection (Municipal)	CBI	"B"
Pretreatment Compliance Inspection (Industrial User Inspections)	PCI	"P" "I"
Diagnostic Inspection	DI	"D"
Legal Support Inspection	LSI	"L"
Reconnissance Inspection	RI	"R"

The inspector should fill out the inspection report form as completely as possible and as soon after the inspection as possible to ensure that the report is filled out accurately and to the extent required. The inspector should also note that EPA's compliance activities are supported by the results reported on the inspection report form. Inspectors must, therefore, take care to complete the form in a detailed and accurate manner.

Deficiencies identified during an inspection of a permittee's self-monitoring program, biomonitoring program, laboratory procedures, pretreatment program implementation, or other permit requirements should be noted on a Deficiency Notice Form (see Appendix H).

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After the inspection report form has been completed, the inspector should distribute copies of the report to the appropriate enforcement personnel (the inspector's supervisor should be consulted to determine the precise distribution of the report). Enforcement personnel then will determine the permittee's compliance status with permit conditions.

#### 7.4 TESTIMONY

In certain cases, EPA's Enforcement Branch and Regional Counsel may decide to recommend court action against the permittee. Should this occur, the inspector may be asked to testify. It is important that the inspector's field notes be objective and legible for this purpose. For more information on testifying as follow-up to NPDES inspections or on other legal issues, the inspector should refer to the Legal Issues Module.

#### 7.5 UPDATING PERMITTEE FILES

The inspector is responsible for updating permittee compliance files as soon as possible after the inspections are conducted. When all data have been placed on the inspection form, the information must be entered into PCS. An inspection is not credited until inspection findings have been coded into PCS. Timely completion of reports is, therefore, important.

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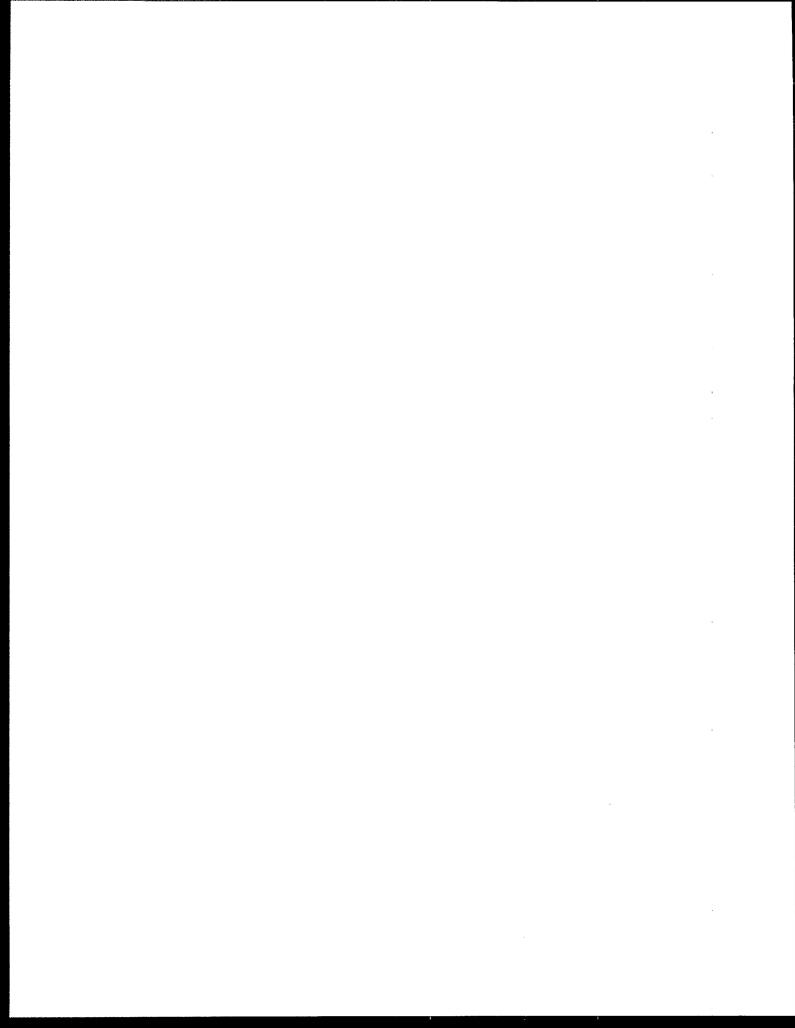
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## 8. SUMMARY

This module discussed the basic purpose for compliance inspections and the general methods for conducting an inspection. It also provided a brief overview of the different types of compliance inspections that may be conducted. Inspectors should now review the questions in Appendix C to test their understanding of the module's contents.

At this point, inspectors should have an understanding of the scope of the NPDES compliance program. It is important to remember that inspectors represent EPA's interests in the field and are, therefore, responsible for acting in an effective, appropriate, and responsible manner. If inspectors have any questions regarding the material contained in this module, consult the reference materials listed in Appendix B of this module and contact their supervisor.

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# APPENDIX A GLOSSARY AND

LIST OF ACRONYMS

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#### **GLOSSARY**

- Acclimation The physiological and behavioral adjustments of an organism to changes in its immediate environment.
- Act The Federal Water Pollution Control Act as amended; usually referred to as the Clean Water Act.
- Acute Toxicity Short-term effect of a toxicant on test organisms. Death is usually the end point in acute toxicity tests.
- Administrator The Administrator of the U.S. Environmental Protection Agency (EPA).
- Agency The U.S. Environmental Protection Agency (EPA).
- Announced Inspection An inspection in which a permittee is aware of the exact dates on which the inspection is scheduled to take place.
- Approval Authority The NPDES State with an approved State pretreatment program or EPA in a State without an approved State pretreatment program.
- Bioassay A test used to evaluate the relative potency of a chemical by comparing its effect on a living organism with the effect obtained from a standard preparation on the same type of organism of Bioassays are frequently used in the pharmaceutical industry to evaluate potency of vitamins and drugs. The terms "bioassay" and "toxicity test" are not synonymous.
- Biomonitoring The use of toxicity testing to determine the toxicity of effluent in receiving waters.
- Chain-of-Custody All of the administrative procedures directed toward protecting and certifying the integrity and, therefore, the acceptability of evidence in a legal proceeding.
- Chronic Toxicity Long-term exposure of a toxicant on test organisms.
- Compliance Evaluation Inspection (CEI) An inspection conducted without sampling to determine compliance with the Clean Water Act and NPDES permit requirements.
- Compliance Monitoring Collection and evaluation of data including self-monitoring reports and verification to show whether pollutant concentrations and loads contained in permitted discharges are in compliance with the limits and conditions specified in the permit.
- Compliance Sampling Inspection (CSI) An inspection conducted with sampling to determine compliance with the Clean Water Act and NPDES permit requirements.
- Compliance Schedule A schedule of remedial measures, including an enforceable sequence of actions or operations, leading to compliance with an effluent limitation, prohibition, or standard.
- Composite Sample A sample derived from several discrete samples collected at equal time intervals or collected proportional to the flow rate over the compositing period (refer to EPA's NPDES Compliance Inspection Manual).

- Confidential Information Information supplied to EPA by a permittee, which, if made public, would divulge methods or processes entitled to protection as trade secrets.
- Control Authority The term refers to either: (1) the POTW if it has an approved pretreatment program under the provisions of 40 CFR 403.11; or (2) the "Approval Authority," as defined above if the POTW's submission has not been approved.
- Definitive Test Full-scale bioassay consisting of at least five different concentrations of effluent in an exponential series with each concentration and control tested against a sufficient number of organisms of a given species to produce statistical significance.
- Direct Discharge The discharge of treated or untreated wastewater directly to the waters of the United States,
- Discharge The introduction of pollutants into a POTW from any nondomestic source regulated under Section 307(c) and (d) of the Act.
- Discharge Monitoring Report (DMR) Information that permittees must submit, at least quarterly, on their self-monitoring program to the respective NPDES permitting authority. At present, EPA Form 3320-1 is used for reporting purposes.
- Document Control Administrative procedures used to track and maintain adequate records of all documents issued by, or generated by, a particular program.
- Effluent For the purposes of this module, an outflow from a point source with some of its physical, chemical, and biological parameters regulated by a NPDES permit.
- Effluent Biomonitoring Measurement of biological effects of effluent (e.g., toxicity, biostimulation, and bioaccumulation).
- Flow-through Bioassay Continuous flow bioassay. A test in which different concentrations of the effluent are prepared by mixing with adequate quality dilution water, then tested by allowing such effluent concentrations to flow at predetermined rates into chambers containing the test organism.
- Grab Sample A single discrete sample taken on a one-time basis with no regard to flow or with no consideration for time involved.
- Indirect Discharge The discharge or the introduction of nondomestic pollutants from any source into a POTW.
- Industrial User Any nondomestic source discharging pollutants into a POTW.
- Inspector Any officer, employee, or contractor of the EPA or of any State duly authorized by the Administrator to conduct inspections, make investigations, collect samples, or otherwise carry out the provisions of the Act.
- Instream Waste Concentration (IWC) The concentration (expressed as a percent) of a permittee's waste in the receiving stream at the 7Q10 mean low flow. This is a 7-day flow, the lowest expected in a 7-day period to occur, on the average, once every 10 years.
- Interference A discharge that alone or in conjunction with other discharges disrupts the POTW or sludge processes and the disruption, in turn, causes a violation of any requirement of the POTW's NPDES permit or prevents the POTW from using its chosen sludge use or disposal practice.

- LC<sub>50</sub> Median lethal concentration producing death in 50 percent of the test organisms within a specific period of time.
- Monitoring In this module, overview by actual sampling and/or evaluation of a NPDES permittee's compliance with permit conditions.
- Multimedia Inspection An inspection conducted to determine compliance status in accordance with two or more environmental laws.
- New Source Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section.
- National Categorical Pretreatment Standard or Pretreatment Standard Any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Act which applies to a specific category of industrial users.
- National Pollutant Discharge Elimination System (NPDES) The permit system developed by EPA under the authority granted by Section 402 of the Act.
- Pass Through A discharge that exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with other discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).
- Performance Audit Inspection (PAI) A nonsampling inspection which includes observation of all the elements of a permittee's self-monitoring program, such as testing procedures and methodology, quality assurance, data gathering and interpretation, files, and laboratory facilities.
- Plot Plan A map of a facility describing the layout of buildings, production processes, and other facility structures.
- Point Source Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel, or other floating craft from which pollutants are or may be discharged as defined in the Act. This term includes landfill leachate collection systems but does not include agricultural stormwater discharges and return flow from irrigated agriculture.
- Pretreatment or Treatment The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to, or in lieu of, discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration can be obtained by physical, chemical, or biological processes, or through process changes or by other means, except as prohibited by 40 CFR 403.6(d).
- Pretreatment Compliance Inspection (PCI) A nonsampling inspection of a POTW's pretreatment compliance monitoring and enforcement of pretreatment program requirements on industrial users.
- Process Verification Verification that process raw materials, water usage, waste treatment processes, production rate, and other factors relative to the quantity and quality of pollutants contained in discharges are substantially described in the permit application and the issued permit.

- Publicly Owned Treatment Works (POTW) A waste treatment facility owned by a State or municipality. This definition includes any sewers that convey wastewater to the POTW treatment plant, but does not include pipes, sewers, or other conveyances not connected to the facility providing treatment.
- Quality Assurance (QA) The total program for ensuring data reliability by using administrative procedures and policies to evaluate and maintain the desired quality of data.
- Quality Assurance Bioassay A bioassay performed with a standard toxicant in order to determine the sensitivity of the test organisms.
- Quality Control (QC) The routine application of procedures to control the accuracy and precision of sampling and analytical measurement process (as a function of quality assurance). Quality control of sampling procedures should include the use of duplicate, spiked and/or split samples, and sample blanks. Quality control of analytical procedures should include proper calibration of instruments and the use of appropriate analytical procedures.
- Rangefinding Test A short-term (8-24 hours) flow-through or static bioassay (usually static) used to determine the approximate concentrations, above and below the LC<sub>50</sub>, to be used in the definitive test. In this test, groups of five organisms are exposed to three to five widely-spaced effluent dilutions.
- Records and Reports All records and reports maintained pursuant to Section 308(a)(A) of the Act and specified in the permittee's NPDES permit.
- Sampling Point A particular site, the location of which may be specified in a permit and from which effluent samples are to be collected for testing and evaluation.
- Standard Toxicant Toxic reference material used for QA purposes in the biomonitoring program. Its main functions are to determine the reproducibility of test results and differences in sensitivity among batches of test organisms.
- Toxic Pollutant Any pollutant or combination of pollutants listed as toxic in regulations promulgated by the EPA Administrator under the provisions of Section 307(a) of the CWA or of other Acts.
- Toxicity Test The means to determine the toxicity of a chemical or an effluent with the use of living organisms. A toxicity test measures the degree of response of an exposed test organism to a specific chemical or effluent.
- Treatment Works Any facility, method, or system for the storage, treatment, recycling, or reclamation of municipal sewage or industrial waste of a liquid nature, including water in combined stormwater and sanitary sewer systems.
- User Any person who contributes, causes, or permits the contribution of wastewater into a POTW.
- Wastewater The liquid and water-carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, whether treated or untreated, which are contributed to or permitted to enter the POTW.
- Waters of the State All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the State or any portion thereof.

#### LIST OF ACRONYMS

AO Administrative Order

BAT Best Available Technology Economically Achievable

BPT Best Practicable Control Technology Currently Available

CBI Compliance Biomonitoring Inspection

CD Consent Decree

CEI Compliance Evaluation Inspection

CSI Compliance Sampling Inspection

CWA Clean Water Act

DI Diagnostic Inspection

DMR Discharge Monitoring Report

EMS Enforcement Management System

EPA Environmental Protection Agency

LC<sub>50</sub> Median lethal concentration producing death in 50 percent of the test organisms

LSI Legal Support Inspection

NPDES National Pollutant Discharge Elimination System

OMB Office of Management and Budget

OWEP Office of Water Enforcement and Permits

PAI Performance Audit Inspection

PCI Pretreatment Compliance Inspection

PCS Permit Compliance System

PIRT Pretreatment Implementation Review Task Force

POTW Publicly Owned Treatment Works

QA Quality Assurance
QC Quality Control

RI Reconnaissance Inspection

XSI Toxics Sampling Inspection

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# APPENDIX B

**REFERENCES** 

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# APPENDIX C

# REVIEW QUESTIONS AND ANSWERS ON THE OVERVIEW OF THE NPDES COMPLIANCE INSPECTION PROGRAM

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# **REVIEW QUESTIONS**

- 1. List the nine types of NPDES compliance inspections presented in this module.
- 2. A Pretreatment Compliance Inspection (PCI) includes all the aspects of a Compliance Evaluation Inspection (CEI). (Circle correct answer.) True or False.
- 3. Which of the following is not an objective of the Compliance Sampling Inspection (CSI)?
  - a. To verify compliance with permit effluent limits
  - b. To evaluate the permittee's laboratory techniques
  - c. To verify that parameters specified in the permit are consistent with the facility's wastewater characteristics
  - d. To gather information that may support enforcement actions.
- 4. Information from a permitted facility that has been classified as confidential may be withheld from an EPA or State NPDES inspector. (Circle correct answer.) True or False.
- 5. The term "LC<sub>50</sub>" in conjunction with biomonitoring of a permittee's effluent refers to the concentration of a pollutant or toxicant that causes 50 percent of the test organisms to die within a given period of time. (Circle correct answer.) True or False.
- 6. Which of the following is not a component of a Compliance Evaluation Inspection (CEI)?
  - a. Facility site review
  - b. Compliance schedule review
  - c. Biomonitoring procedures review
  - d. Records and reports review.
- 7. A Pretreatment Compliance Inspection (PCI) is designed to focus primarily on an evaluation of the POTW's compliance monitoring of industrial users and enforcement of pretreatment program requirements. (Circle correct answer.) True or False.
- 8. A Deficiency Notice may be issued to a permittee in response to deficiencies identified during a Performance Audit Inspection only. (Circle correct answer.) True or False.
- 9. A Compliance Sampling Inspection (CSI) is (more/less) resource-intensive than a Compliance Evaluation Inspection (CEI)? (Circle correct answer.)
- 10. It is the NPDES inspector's obligation during a Performance Audit Inspection (PAI) to be knowledgeable about common permittee self-monitoring deficiencies. (Circle correct answer.) True or False.
- 11. It is permissible for the NPDES inspector, after completing an inspection of a facility, to discuss both the findings of the inspection and all violations identified with representatives of the permittee. (Circle correct answer.) True or False.

- 12. A Pretreatment Compliance Inspection is designed to be a (sampling/nonsampling) type of NPDES inspection? (Circle correct answer.)
- 13. Which of the following is/are objectives of the records and reports review conducted as part of the Compliance Evaluation Inspection? (Circle correct answer.)
  - a. To identify trends in a permittee's effluent quality
  - b. To review the quality assurance of a permittee's self-monitoring program
  - c. To document compliance/noncompliance with permit limitations and requirements
  - d. All of the above.
- 14. A NPDES inspector need not be concerned with the manner in which a permittee disposes of sludges produced during the treatment of wastewaters, but should only verify the compliance status of the facility's effluent with permit discharge limitations. (Circle correct answer.) True or False.

# ANSWERS TO REVIEW QUESTIONS

List the nine types of NPDES compliance inspections presented in this module and underline the six 1. inspections that were discussed in detail.

- Answer: (1) Reconnaissance Inspection (RI)
  - (2) Compliance Evaluation Inspection (CEI)
  - (3) Compliance Sampling Inspection (CSI)
  - (4) Toxic Sampling Inspection (XSI)
  - (5) Performance Audit Inspection (PAI)
  - (6) Compliance Biomonitoring Inspection (CBI)
  - (7) Pretreatment Compliance Inspection (PCI)
  - (8) Diagnostic Inspection (DI)
  - (9) Legal Support Inspection (LSI)
- 2. True or False. A Pretreatment Compliance Inspection (PCI) includes all the aspects of a Compliance Evaluation Inspection (CEI).

Answer:

False

- Which of the following is not an objective of the Compliance Sampling Inspection (CSI)? 3.
  - To verify compliance with permit effluent limits
  - To evaluate the permittee's laboratory techniques b.
  - To verify that parameters specified in the permit are consistent with the facility's wastewater c. characteristics
  - To gather information that may support enforcement actions.

Answer: b. (This is an objective of the Performance Audit Inspection)

True or False. Information from a permitted facility that has been classified as confidential may be 4. withheld from an EPA or State NPDES inspector.

Answer: False

5. True or False. The term "LC<sub>50</sub>" in conjunction with biomonitoring of a permittee's effluent refers to the concentration of a pollutant or toxicant that causes 50 percent of the test organisms to die within a given period of time.

Answer: True

- 6. Which of the following is not a component of a Compliance Evaluation Inspection (CEI)?
  - a. Facility site review
  - b. Compliance schedule review

c.

All of the above

Answer: d. All of the above

to

	c. Biomonitoring procedures review	
	d. Records and reports review.	
	Answer: c. Biomonitoring procedures review	
<b>'.</b>	True or False. A Pretreatment Compliance Inspection (PCI) is designed to focus on primarily an evaluation of the POTW's compliance monitoring of industrial users and enforcement of pretreatment program requirements.	
	Answer: True	
3.	True or False. A Deficiency Notice may be issued to a permittee in response to deficiencies identified during a Performance Audit Inspection only.	
	Answer: False	
€.	A Compliance Sampling Inspection (CSI) is (more/less) resource intensive than a Compliance Evaluation Inspection (CEI?)	a i
	Answer: More because a CSI includes all aspects of a CEI in addition to sampling of a permittee's effluent.	
10.	True or False. It is the NPDES inspector's obligation during a Performance Audit Inspection (PAI) to be knowledgeable about common permittee self-monitoring deficiencies.	
	Answer: True	
11.	True or False. It is permissible for the NPDES inspector, after completing an inspection of a facility, discuss both the findings of the inspection and all violations identified with representatives of the permittee.	to
	Answer: False	
12.	A Pretreatment Compliance Inspection is designed to be a (sampling/nonsampling) type of NPDES inspection.	
	Answer: Nonsampling	
13.	Which of the following is/are objectives of the records and reports review conducted as part of the Compliance Evaluation Inspection?	
	a. To identify trends in a permittee's effluent quality	
	b. To document the quality assurance of a permittee's self-monitoring program	

To document compliance/noncompliance with permit limitations and requirements

14. True or False. A NPDES inspector need not be concerned about the manner in which a permittee disposes of sludges produced during the treatment of wastewaters, but should only verify the compliance status of the facility's effluent with permit discharge limitations.

Answer: False

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# APPENDIX D

# SECTION 308 OF THE CLEAN WATER ACT

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experts, and Federal departments and agencies.

- (b) (1) The Administrator shall, within one hundred and eighty days after the date of enactment of this title and from time to time thereafter, publish proposed regulations establishing pretreatment standards for introduction of pollutants into treatment works (as defined in section 212 of this Act) which are publicly owned for those pollutants which are determined not to be susceptible to treatment by such treatment works or which would interfere with the operation of such treatment works. Not later than ninety days after such publication, and after opportunity for public hearing, the Administrator shall promulgate such pretreatment standards. Pretreatment standards under this subsection shall specify a time for compliance not to exceed three years from the date of promulgation and shall be established to prevent the discharge of any pollutant through treatment works (as defined in section 212 of this Act) which are publicly owned, which pollutant interferes with, passes through, or otherwise is incompatible with such works. If, in the case of any toxic pollutant under subsection (a) of this section introduced by a source into a publicly owned treatment works, the treatment by such works removes all or any part of such toxic pollutant and the discharge from such works does not violate that effluent limitation or standard which would be applicable to such toxic pollutant if it were discharged by such source other than through a publicly owned treatment works, and does not prevent sludge use or disposal by such works in accordance with section 405 of this Act, then the pretreatment requirements for the sources actually discharging such toxic pollutant into such publicly owned treatment works may be revised by the owner or operator of such works to reflect the removal of such toxic pollutant by such works."
- (2) The Administrator shall, from time to time, as control technology, processes, operating methods, or other alternative change, revise such standards following the procedure established by this subsection for promulgation of such standards.
- (3) When proposing or promulgating any pretreatment standard under this section, the Administrator shall designate the category or categories of sources to which such standard shall apply.
- (4) Nothing in this subsection shall affect any pretreatment requirement established by any State or local law not in conflict with any pretreatment standard established under this subsection.
- (c) In order to insure that any source introducing pollutants into a publicly owned treatment works, which source would be a new source subject to section 306 if it were to discharge pollutants, will not cause a violation of the effluent limitations established for any such treatment works, the Administrator shall promulgate pretreatment standards for the category of such sources simultaneously with the promulgation of standards of

performance under section 306 for the equivalent category of new sources. Such pretreatment standards shall prevent the discharge of any pollutant into such treatment works, which pollutant may interfere with, pass through, or otherwise be incompatible with such works.

- (d) After the effective date of any effluent standard or prohibition or pretreatment standard promulgated under this section, it shall be unlawful for any owner or operator of any source to operate any source in violation of any such effluent standard or prohibition or pretreatment standard.
- (e) Compliance Date Extension for Innovative Pretreatment Systems. In the case of any existing facility that proposes to comply with the pretreatment standards of subsection (b) of this section by applying an innovative system that meets the requirements of section 301(k) of this Act, the owner or operator of the publicly owned treatment works receiving the treated effluent from such facility may extend the date for compliance with the applicable pretreatment standard established under this section for a period not to exceed 2 years—
- (1) if the Administrator determines that the innovative system has the potential for industrywide application, and
- (2) if the Administrator (or the State in consultation with the Administrator, in any case in which the State has a pretreatment program approved by the Administrator)—
- (A) determines that the proposed extension will not cause the publicly owned treatment works to be in violation of its permit under section 402 or of section 405 or to contribute to such a violation, and
  - (B concurs with the proposed extension.

#### [307(e) added by PL 100-4]

[Editor's note: Section 309(b) of PL 100-4 provides:

"(b) Increase in EPA Employees. — The Administrator shall take such actions as may be necessary to increase the number of employees of the Environmental Protection Agency in order to effectively implement pretreatment requirements under section 307 of the Federal Water Pollution Control Act."]

#### INSPECTIONS. MONITORING AND ENTRY

Sec. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, 404 (relating to State permit programs), 405, and 504 of this Act—

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## [Sec. 308(a)(4) amended by PL 100-4]

- (A) the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require; and
- (B) the Administrator or his authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of his credentials—
- (i) 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 under clause (A) of this subsection are located, and
- (ii) may at reasonable times have access to and copy any records, inspect any monitoring equipment or method required under clause (A), and sample any effluents which the owner or operator of such source is required to sample under such clause.

#### [Sec. 308(a)(B) amended by PL 100-4]

(b) Any records, reports, or information obtained under this section (1) shall, in the case of effluent data, be related to any applicable effluent limitations, toxic, pretreatment, or new source performance standards. and (2) shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or particular part thereof (other than effluent data), to which the Administrator has access under this section, if made public would divulge methods or processes entitled to protection as trade secrets of such person, the Administrator shall consider such record, report, or information, or particular portion thereof confidential in accordance with the purposes of section 1905 of title 18 of the United States Code. Any authorized representative of the Administrator (including an authorized contractor acting as a representative of the Administrator) who knowingly or willfully publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information which is required to be considered confidential under this subsection shall be fined not more than \$1,000 or imprisoned not more than I year, or both. Nothing in this subsection shall prohibit the Administrator or an authorized representative of the Administrator (including any authorized contractor acting as a representative of the Administrator) from disclosing records, reports, or information to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act or when

relevant in any proceeding under this Act.

#### [308(b) amended by PL 100-4]

- (c) Each State may develop and submit to the Administrator procedures under State law for inspection, monitoring, and entry with respect to point sources located in such State. If the Administrator finds that the procedures and the law of any State relating to inspection, monitoring, and entry are applicable to at least the same extent as those required by this section, such State is authorized to apply and enforce its procedures for inspection, monitoring, and entry with respect to point sources located in such State (except with respect to point sources owned or operated by the United States).
- (d) Access by Congress. Notwithstanding any limitation contained in this section or any other provision of law, all information reported to or otherwise obtained by the Administrator (or any representative of the Administrator) under this Act shall be made available, upon written request of any duly authorized committee of Congress, to such committee.

[308(d) added by PL 100-4]

#### FEDERAL ENFORCEMENT

[Editor's note: See also Section 318 of PL 100-4, published at the end of this Act, for applicability of this Section to the Unconsolidated Quarternary Aquifer, Rockaway River Basin, New Jersey.]

- Sec. 309. (a) (1) Whenever, on the basis of any information available to him, the Administrator finds that any person is in violation of any condition or limitation which implements section 301, 302, 306, 307, 308, 318, or 405 of this Act in a permit issued by a State under an approved permit program under section 402 or 404 of this Act, he shall proceed under his authority in paragraph (3) of this subsection or he shall notify the person in alleged violation and such State of such finding. If beyond the thirtieth day after the Administrator's notification the State has not commenced appropriate enforcement action, the Administrator shall issue an order requiring such person to comply with such condition or limitation or shall bring a civil action in accordance with subsection (b) of this section.
- (2) Whenever, on the the basis of information available to him, the Administrator finds that violations of permit conditions or limitations as set forth in paragraph (1) of this subsection are so widespread that such violations appear to result from a failure of the State to enforce such permit conditions or limitations effectively, he shall so notify the State. If the Administrator finds such failure extends beyond the thirtieth day after such notice, he shall give public notice of such finding. During the period beginning with such public notice and ending when such State satisfies the Administrator that

# APPENDIX E

# CRITERIA FOR NEUTRAL SELECTION OF NPDES COMPLIANCE INSPECTION CANDIDATES

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# CRITERIA FOR NEUTRAL SELECTION OF NPDES COMPLIANCE INSPECTION CANDIDATES

#### A. BACKGROUND

In response to the Supreme Court decision in <u>Marshall v. Barlow's Inc.</u>, 436 U.S. 307 (1978), the Agency developed neutral inspection criteria to be used when targeting compliance inspections. The purpose of using the neutral inspection plan is to eliminate any bias in choosing candidates for compliance inspections.

Under the NPDES program [authorized by Section 402(a)(1) of the Clean Water Act], over 65,000 permits have been issued for the discharge of pollutants. Of these issued permits, about 7,500 have been classified by EPA or States with NPDES authority as major permittees. The designation of a permittee as "major" is based on a number of factors including quantity and potential environmental impact of the wastewater source (e.g., toxicity). EPA's program to monitor compliance with terms and conditions of issued NPDES permits is primarily designed to ensure the compliance of these major permittees.

Compliance inspections performed under the NPDES program can be divided into two general categories: (1) those inspections based on administrative factors; and (2) those inspections based on specific evidence of an existing violation (e.g., civil probable cause). Inspections based on the second category are not neutral since they are based on prior knowledge of apparent or probable permit violations. Factors which constitute specific evidence consist of: (1) violations reported on recent DMRs; (2) citizen complaints; (3) response to emergency situations, such as threats to public health or safety; (4) follow-up to previous inspections which indicated violations; and (5) specific enforcement case support. The Agency has developed the neutral inspection plan described in the remainder of this appendix to schedule inspections based strictly on administrative factors.

## B. UNIVERSE OF NPDES INSPECTION CANDIDATES

The EPA and State personnel as well as authorized contractors have, upon the presentation of credentials, the authority to enter and inspect all NPDES permitted facilities at any reasonable time, regardless of other factors such as "major" or "minor" designations. Because of limited resources, not all minor facilities are usually targeted for inspections each year. Consequently, the frequency with which compliance inspections are performed is based on:

- Discharger's environmental significance
- Available resources
- Types and mix of inspection being employed
- Climatic and geographic influences on inspection logistics
- Other factors influencing compliance monitoring such as the ability to follow-up on inspection findings.

#### C. BASIC SELECTION CRITERIA

When targeting permittees for neutral compliance inspections, the time that has passed since the last inspection and the geographical grouping of the permittees are the only factors which may be considered. Other information, such as data from DMRs which indicate apparent violations, would not be used since this would constitute probable cause under the civil standard. However, the existence of such data would not preclude the facility from being considered for a neutral inspection if this neutral plan is followed during the selection process. The only permittees who would not be considered when targeting neutral compliance inspections are permittees who are in current litigation with EPA. (State litigation would not preclude an EPA inspection.)

## D. NEUTRAL COMPLIANCE INSPECTIONS

To target inspections based on a neutral inspection plan, permitting authorities must first determine the length of time that has passed since the last EPA or State inspection. This can be done easily using the capabilities of the Permit Compliance System (PCS). A PCS report can be generated which will print out each permittee in order by the date of the last inspection. Figure 1 contains a sample list which PCS can generate. A separate report can be generated for each State in the Region. In some cases, it may be appropriate to use subdivisions (e.g., county) of a State. The permittees which are highest on the list (greatest time since last inspection) will have the highest priority for neutral inspections.

In order to minimize use of limited resources, inspection targeting should be based on both the priority list and geographical grouping. For example, any permittee on the list may be targeted for an inspection if it is in close physical proximity to a facility which is very high on the list. PCS can give the names and most recent inspection dates for all permittees which are in the same county as a permittee selected for an inspection.

The priority list will identify only those facilities which are possible targets for compliance inspections during the current fiscal year. The exact timing of these inspections during the fiscal year will be at the discretion of the permitting authority, based on logistics and specific needs. This list of permittees targeted for inspections may be amended at any time during the fiscal year. Similarly, before the start of a new fiscal year, the permitting authority should reassess all permittees regardless of whether all previously targeted inspections have been completed for the current fiscal year.

# E. INSTRUCTIONS FOR TARGETING INSPECTIONS BASED ON THE POINT ASSESSMENT SYSTEM

To use the neutral inspection plan, permitting authorities will first determine the percentage of inspection resources that will be devoted to neutral administrative inspections. This will depend, to a large extent, on the ongoing enforcement case load and the percentage of major permittees which have probable violations of effluent limitations and compliance schedules. For example, the following resources may be allocated for neutral inspection activities:

- 25 percent of Compliance Sampling Inspection resources
- 25 percent of Performance Audit Inspection resources
- 25 percent of Compliance Evaluation Inspection resources.

The remaining 25 percent of inspection resources would be reserved for inspections based on probable cause and specific enforcement case support.

The Region should next determine the approximate number of neutral inspections that can be completed using the resources allocated for each inspection type (CSI, CEI, and PAI). This number will be flexible depending on the type and/or the number of outfalls and size of the permitted facility.

Each State will start with the permittees highest on the list and proceed down the priority list until about one-third of the neutral inspection resources for that jurisdiction have been allocated. For example, if the allocated inspection resources for neutral inspections are enough for 30 inspections, approximately the first 10 permittees on the priority list would be targeted. The permitting authorities should then use the remaining 20 inspections for permittees which are grouped with the already targeted candidates based on common geographical and/or special technical considerations. For example, once a sampling inspection is scheduled for

a facility with a high point rating, several more sampling inspections, CEIs, or PAIs may be scheduled in the same geographical area. This will allow all of these facilities to be inspected on one inspection trip. Of course, permitting authorities are free to target inspections to single facilities particularly when the facility is in close proximity to regional or field offices.

A specific percentage of inspection resources are set aside each fiscal year for enforcement case support activities and emergency response. By the last quarter of the fiscal year, permitting authorities should know to what extent these set-aside resources will be available for routine inspections. To the extent that these resources become available, they should be utilized to inspect the remaining permittees on the priority list.

# FIGURE 1. SAMPLE PCS INSPECTION REPORT

The figure below is similar to a printout from the PCS. It lists major NPDES facilities in the imaginary State of ZX in order of the date of the last inspection. Permittees with no date listed for inspections have not had an inspection which was noted in PCS. These permittees will have the highest priority for neutral inspections.

	FIGURE 1	RE 1		June 25, 1988
	THE PERMIT COMPLIANCE SYSTEM	PLIANCE SYSTEM		
ALL MA	ALL MAJOR FACILITIES AND THEIR LATEST INSPECTION	THEIR LATEST INS	SPECTION	
REGION=11	STATE=ZX			
NAME	DTIN	TYPI	INSP	NPDES
Port Authority of 7X				001754
City of Anvyille				005876
Local Glass Works				000479
Numsuch Electronics				003912
Humbuo Iron and Steel				006543
Cozicomer Plant	86/03/02	ပ	æ	001642
City of Valley	87/08/06	ပ	S	005264
Central Power and Light	87/12/11	ပ	8	006294
Chemical Corporation	88/01/02	S	æ	005296
Townsburg Carpets	88/01/16	ပ	<b>&amp;</b>	001295
Panerboard Company	88/02/04	S	S	002564
County S&P	88/02/15	Ф	~	006292
PCS Terminal	88/03/05	×	S	004692
Tree County STP	88/04/15	Q	~	004260
Hills Sewerage System	88/05/20	S	~	000296
North Hills District	88/05/23	၁	S	001126

# APPENDIX F

# LIST OF FIELD SAMPLING AND PERSONAL SAFETY EQUIPMENT

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# LIST OF FIELD SAMPLING EQUIPMENT

# Field Equipment

- Tools
  - Multi-tooled jack knife (Swiss Army type)
  - Electrical and duct tape
  - Tape measure
  - Hand-held range finder and level
  - Camera/film
  - Flashlight
  - Screwdriver
  - Adjustable Wrench and vise grips
  - Electrical Pliers
  - Plastic Bucket
  - Nylon Cord
- Samplers
  - Tubing
  - Sample bottles
  - Batteries
  - Desiccant
- Flow Measurement Devices
- Meters
  - pH buffer
  - Chart paper

- Sample Containers
- Coolers/Ice
- Preservatives
- Transportation Materials
  - Bubblepack material
  - Filament tape
  - Shipping labels
  - Chain-of-custody forms
  - Water Resistent Marker/Pen
  - Analysis request forms
- Protective Clothing
  - Hard hat
  - Safety shoes
  - Gloves
  - Coveralls
  - Reflective safety vest
  - Safety glasses/goggles
  - Rain wear
- Safety Equipment
  - First-aid kit
  - Safety harness and retrieval system
  - Ventilation equipment
  - Meters (oxygen content, explosivity, and toxic gas)
  - Respirator
  - Self-contained breathing apparatus (if appropriate)

# APPENDIX G

NPDES COMPLIANCE INSPECTION REPORT FORM (EPA FORM 3560-3)

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Unit	d Sugar Em	vironmental i	votection Agenc	Ÿ			
Control Station Environmental Protection Agency Washington, D. C. 20460  NPDES Compliance Inspection Report							
Section A: National Data System Coding							
Transaction Code         NPDES         yr/mo/day         Inspection Type         Inspector         Fac Type           1         2         5         3         1         1         1         1         1         1         1         1         1         2         1         1         1         2         1							
		Remarks			1111	111	
Reserved Facility Evaluation Rating 67 70 59 70	71	72 <u></u>	A 	تت	74 75	<b>I</b>	
	Sec	tion 5: Fac	Hity Data				
Name and Location of Facility Inspected				Entry	AM C_	РМ	Permit Effective Date
Name(s) of On-Site Representative(s)	<u> </u>	Title(s)		Exit Ti	me/Date		Permit Expiration Date
namely of On-Site Representatively		1 Trie(#)					Phone No(s)
Name, Address of Responsible Official		Title					
		Phone No					Contacted Yes No
s	ection C:	Areas Evalu	ated During is	napecti	DER .	<del></del>	
			Unsatisfactor				
	essuremen	re		atment		-	Operations & Maintenance
Records/Reports Laborat	-	. 19/			ichedules	<del></del>	Sludge Disposal
	/Receiving		Self-N	Aonitori	ng Program	<u> </u>	Other:
Section D: Summary of Findings/Commonts (Attach additional sheets if necessary)							
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Name(s) and Signature(s) of Inspector(s)	Agency/	Office/Tele	phone		<del></del>	0	ate
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Signature of Reviewer	Agency/	Office				0	ate
	Re	gulatory O	ffice Use Only	,		<del></del>	
Action Taken					Date		Compliance Status
<u></u>							Noncompliance Compliance

## INSTRUCTIONS

# Section A: National Data System Coding (i.e., PCS)

Column 1: Transaction Code: Use N, C, or D for New, Change, or Delete. All inspections will be new unless there is an error in the data entered.

Columns 3-11: NPDES Permit No. Enter the facility's NPDES permit number. (Use the Remarks columns to record the State permit number, if necessary.)

Columns 12-17: Inspection Date. Insert the date entry was made into the facility. Use the year/month/day format (e.g., 82/06/30 = June 30, 1982).

Column 18: Inspection Type. Use one of the codes listed below to describe the type of inspection:

A - Performance Audit

E — Corps of Engrs Inspection S — Compliance Sampling

B — Biomonitoring

L — Enforcement Case Support X — Toxic Sampling

C — Compliance Evaluation P — Pretreatment

D — Diagnostic

R — Reconnaissance Inspection

Column 19: Inspector Code. Use one of the codes listed below to describe the lead agency in the inspection.

C - Contractor or Other Inspectors (Specify in

N - NEIC Inspectors

Remarks columns)

R — EPA Regional Inspector

E — Corps of Engineers

S - State Inspector

J — Joint EPA/State Inspectors—EPA lead

T — Joint State/EPA Inspectors—State lead

Column 20: Facility Type. Use one of the codes below to describe the facility.

- 1 Municipal. Publicly Owned Treatment Works (POTWs) with 1972 Standard Industrial Code (SIC) 4952.
- 2 Industrial. Other than municipal, agricultural, and Federal facilities.
- 3 Agricultural. Facilities classified with 1972 SIC 0111 to 0971.
- 4 Federal. Facilities identified as Federal by the EPA Regional Office.

Columns 21-66: Remarks. These columns are reserved for remarks at the discretion of the Region.

Column 70: Facility Evaluation Rating. Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Column 71: Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Column 72: Quality Assurance Data Inspection. Enter Q if the inspection was conducted as followup on quality assurance sample results. Enter N otherwise.

Columns 73-80: These columns are reserved for regionally defined information.

#### Section B: Facility Data

This section is self-explanatory.

# Section C: Areas Evaluated During Inspection

Indicate findings (S, M, U, or N) in the appropriate box. Use Section D and additional sheets as necessary. Support the findings, as necessary, in a brief narrative report. Use the headings given on the report form (e.g., Permit, Records/Reports) when discussing the areas evaluated during the inspection. The heading marked "Other" may include activities such as SPCC, BMP's, and multimedia concerns.

# Section D: Summary of Findings/Comments

Briefly summarize the inspection findings. This summary should abstract the pertinent inspection findings, not replace the narrative report. Reference a list of attachments, such as completed checklists taken from the NPDES Compliance Inspection Manuals and pretreatment guidance documents, including effluent data when sampling has been done. Use extra sheets as necessary.

# APPENDIX H DEFICIENCY NOTICE GUIDANCE AND FORM

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# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

MEMORANDUM

OFFICE OF ENFORCEMENT

SUBJECT:

"Deficiency Notice" Implementation to Improve Quality Assurance in NPDES Permittee Self-Monitoring Activities

FROM:

Director, Enforcement Division (EN-338)

TO:

Enforcement Division Directors, Regions I - X

Surveillance and Analysis Division

Directors, Regions I - X

Director, National Enforcement Investigations Center,

Denver

The Enforcement Divisions and the Surveillance and Analysis Divisions in several Regions have developed a form, called a Deficiency Notice, which their inspectors issue at the end of compliance inspections. This Deficiency Notice alerts NPDES permittees to problems in their routine self-monitoring activities. On June 11, 1979, the Office of Water Enforcement proposed that all the Regional offices adopt this form along with the Guidance for its use, and asked for your comments on this proposal. The Deficiency Notice and Guidance, which are attached, reflect your comments.

We have ordered the Deficiency Notice Forms, which will be printed on no-carbon-required paper and will be color coded in pads to correlate with the NPDES Compliance Inspection Form (EPA 3560-3). You may reproduce the attached form for use until you receive these forms.

The Deficiency Notice was designed so that State NPDES programs might easily use it. However, EPA cannot now sanction its use by the States since the Office of Management and Budget (OMB) has not authorized the form for non-Federal use. We will attempt to get OMB approval.

Since the Deficiency Notice provides a swift and simple mechanism for responding to deficiencies in self-monitoring data, I believe that its use will substantially improve the performance of wastewater treatment facilities without creating additional resource burdens or enforcement problems. If you have any questions about the Deficiency Notice or its use, please do not hesitate to call Gary Polvi of my staff at 755-0994.

J. Brian Molloy

Attachments

#### DEFICIENCY NOTICE GUIDANCE

#### Purpose,

The purpose for using the Deficiency Notice is to provide a swift and simple method for improving the quality of data from NPDES self-monitoring activities. Since an inspector may issue a Deficiency Notice during any NPDES compliance inspection to alert the permittee to either existing or potential problems in self-monitoring, its receipt prompts the permittee to quickly take corrective action, as close as possible to the time the inspector perceives the problem.

#### Scope

The Deficiency Notice is a tool for use in conjunction with any type of EPA NPDES compliance inspection (i.e., compliance evaluation, sampling, performance audit, biomonitoring, etc.), during which the inspector identifies problems with self-monitoring that warrant response.

The Deficiency Notice and Guidance were designed so that State NPDES compliance monitoring programs could also easily use them. (Note the use of the term "regulatory authority" throughout this guidance.) However, EPA cannot yet sanction the States' use of this form because the Office of Management and Budget (OMB) has not yet approved the form for non-Federal use.

Use of the Deficiency Notice does not apply to a wide range of possible permit violations. It is to be used by the inspector to alert permittees to deficiencies in their self-monitoring activities only. The enforcement office of the regulatory authority (i.e., the EPA Regional Enforcement Division or its State counterpart), not the inspector, will continue to handle violations relative to compliance schedules or effluent limitations.

## Form Description

The Deficiency Notice (see attachment) is one page long and is for use in conjunction with the standard EPA Compliance Inspection Form (EPA 3560-3; September, 1977). The reverse side of the Notice contains general instructions to inspectors for completing the form. The regulatory authority using the form may add other specific instructions that do not conflict with this guidance.

The form has four sections: (1) basic facility data, (2) deficiencies, (3) comments, and (4) inspector identification. These sections contain individual spaces where the inspector during an

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inspection can log deficiencies in the following self-monitoring activities: (1) monitoring location, (2) flow measurement, (3) sample collection/holding time, (4) sample preservation, (5) test procedures, (6) record keeping, (7) other self-monitoring deficiencies (i.e. sampling frequency, instrument calibration, etc.). Since the existing Compliance Inspection Form (which inspectors now complete) includes questions and answers relating to the above seven activities, inspectors should not need much additional time to complete this Deficiency Notice.

## Administrative Procedures

With few exceptions (see March 7, 1977 EMS Guide), the handling and tracking of Deficiency Notices will follow the normal EPA Enforcement Management System (EMS) procedures. Inspectors can issue the Deficiency Notice to a permittee immediately following a compliance inspection if they discover any permit deficiencies which the Notice includes. Under unusual circumstances inspectors may delay issuing a Deficiency Notice until after conferring with other officials of the regulatory authority.

EMS requires the offices responsible for inspections and for NPDES enforcement to jointly establish a policy delineating the procedure for the permittee to appropriately respond to the Deficiency Notice. In the EPA Regions, the Directors of the Enforcement Division and the Surveillance and Analysis (S&A) Division will develop this policy. If the offices agree to allow the permittee to submit a separate written response rather than to include the response as part of a regular Discharge Monitoring Report (DMR) submission, they will require the inspector to record the necessary mailing instructions and deadline for response under the additional comment section of the Deficiency Notice. The inspector indicates the appropriate method for the permittee's response in the "requested action" section of the Deficiency Notice. Due to the nature of most self-monitoring problems it is reasonable for the regulatory authority to ask that the permittee submit a written description of any corrective actions within 15 work days after receiving the Notice. Where the permittee is asked to respond as part of a regular DMR submission, a similar reporting time allowance should be allotted. In either response option, the inspector should always indicate in the Deficiency Notice the requested date for permittee response.

Having the permittee document Deficiency Notice corrective actions as part of a regular DMR submission establishes accountability for the compliance inspection in the official NPDES permit compliance file even before a compliance review is undertaken. This is a resource efficient method of documenting the minimum benefit from performing inspections.

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The issuance of a Deficiency Notice is not a formal enforcement action. It is not intended and must not be construed as an administrative or legal order to the permittee. Therefore, the action by the permittee to respond is voluntary, but incentive for such response comes from the positive consideration it may have on further formal enforcement follow-up of the inspection.

When the regulatory authority receives the permittee's response to the Deficiency Notice, they will review the inspection data and the permittee's response according to EMS procedures. If during routine reviews of inspection data, the authorities note deficiencies in self-monitoring data and note that the inspector did not issue a Deficiency Notice, they may issue one at any time.

The responsibility for all enforcement activity shall always remain in the enforcement/compliance review office of the regulatory authority. After agreement between the Directors of the Regional Enforcement Division and the S&A Divison, these offices should incorporate details for insuring which office retains which responsibility into the Regional EMS. Whether or not a Deficiency Notice has been issued, the enforcement office of the regulatory authority can take administrative or legal action at any time. Also, a Deficiency Notice may not be appropriate in those cases where additional enforcement action is expected or litigation against the permittee is already underway.

DEFICIENCY NOT	iCE		PERMIT	TEE (Fee	ility) NAMI	E AND ADD	RESS	
NATIONAL POLLUTANT D	ISCHARGE	ł						ł
ELIMINATION SYSTEM (	-							
(Read instructions on back of last pa PERMITTEE REPRESENTATIVE (Receiving				,,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	e une noncep (II)						MPOES PERMIT NO	• 7
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During the compliance inspection car	ried out on (date	. 1			<del></del>	the d	fisionaise acted to	low were found
Additional areas of deficiency may be	brought to you	r atter	ition fo	llowing	complete	review of	eficiencies noted be the Inspection Reg	ort and other in-
formation on file with the REGULAT	ORY AUTHORI	TY ad	ministe	ring your	NPDES P	ERMIT.		
DE	FI	C		ΕN	C	1	S	
							- 3	
MONITORING LOCATION (Describe)						•		
-								
FLOW MEASUREMENT (Describe)						**********		
-								
SAMPLE COLLECTION/HOLDING TIME (2	(describe)				<del></del>	<del></del>		
SAMPLE COLLECTION HOLDING TIME (2	(eecrise)							
SAMPLE PRESERVATION (Describe)								
TEST PROCEDURES, SECTION 304(h), 40	CFR 136 (Describs)	•						
RECORD KEEPING (Describe)				· · · · · · · · · · · · · · · · · · ·				
· · · •								
OTHER SELF-MONITORING DEFICIENCIE	\$ (Describe)							
ADDITIONAL COMMENTS								
REQUESTED ACTION—Your attention to	the correction of t	the defi	ciencies	noted abov	e is request	ted. Receipt	of a description of the	e corrective actions
taken will be considered in the determinati priete response method): (1) included with	<b>VOUR BEST NPDES</b> :	Dischar	ree Mani	itorine Rar	ort (DMR)	AP /21 mihr	witted as diseased by	the (monaston Ocean.
tions regarding possible follow-up action coters your NPDES Permit.	an be answered by	the RE	GULAT	ORY AUT	HORITY to	which you	r DMRs are submitted	and which adminis-
INSPECTOR'S SIGNATURE	INSPECTOR'S A	ODRES	SS/PHO	NE NO.	REGULA	TORY AUT	HORITY/ADDRESS	DATE
-	1			•				
INSPECTOR'S PRINTED NAME	1							
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EPA Form 3560-4 (2-80)		-						

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