
Effluent Limitations Guidelines for Non-Municipal Dischargers



Permit Components

Industry-Specific Components

Components of All Permits

Municipal-Specific Components

- *Effluent Guidelines*
- BPJ

Cover Page

Effluent Limitations

Technology-Based

Water Quality-Based

- Secondary
- Equivalent to Secondary

Monitoring & Reporting Requirements

Special Conditions

Compliance Schedules

Storm Water

Special Studies, Evaluations, and Other Requirements

- BMPs

- Pretreatment
- CSOs
- Municipal Sewage Sludge

Standard Conditions



Learning Objectives

- ◆ Describe process used in developing effluent limitations guidelines
- ◆ Discuss considerations in applying effluent guidelines
- ◆ Explain application of effluent guidelines

Effluent Limitations Guidelines

◆ Definition

- Effluent limitations guidelines are National standards prescribing allowable discharges of pollutants from industrial point source categories corresponding to various levels of treatment or control technologies

◆ Scope

- Guidelines are established for most primary and some secondary industries



Effluent Limitations Guidelines (cont.)

- ◆ **CWA establishes technology-based performance levels and compliance dates for different types of dischargers:**
 - **New Sources (CWA §306)**
 - **Existing Sources (CWA §301 and §304)**
 - **Indirect Dischargers (CWA §307)**
 - **New sources**
 - **Existing sources**

Type of Discharger: Key Definitions

- ◆ **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 promulgation of effluent limitations guidelines and standards applicable to such source, or
 - After proposal of effluent limitations guidelines and standards, but only if the standards are promulgated within 120 days of proposal

Additional New Source Determination Criteria

- ◆ **Constructed at a site at which no other source is located; or**
- ◆ **Totally replaces the process causing the discharge from an existing source; or**
- ◆ **Processes are substantially independent of an existing source at the same site; and**
- ◆ **A new source performance standard is independently applicable to the discharge**

Type of Discharger: Key Definitions (Continued)

- ◆ **Existing Source** – Any building, structure, facility, or installation from which there is or may be a discharge of pollutants which is not a new discharger or new source

CWA Technology-Based Control Matrix

Technology-Based Control Level	Type of Discharger	Conventional	Non-Conventional	Toxic
Best Practicable Control Technology Currently Available (BPT)	Direct	X	X	X
Best Conventional Pollutant Control Technology (BCT)	Direct	X		
Best Available Control Technology Economically Achievable (BAT)	Direct		X	X
New Source Performance Standards	Direct	X	X	X
Pretreatment Standards for Existing Sources (PSES)	Indirect	X	X	X
Pretreatment Standards for New Sources (PSNS)	Indirect	X	X	X

Statutory Compliance Deadlines for Technology-Based Requirements

Pollutant Category	Level of Treatment	Compliance Deadline
Conventional	BPT	July 1, 1977
Conventional	BCT	March 31, 1989
Non-conventional	BPT	July 1 1977
Non-conventional	BAT	March 31, 1989
Toxic	BPT	July 1, 1977
Toxic	BAT	March 31, 1989

Effluent Limitations Guidelines (Continued)

◆ CWA Section 304(m)

- August 27, 2002 FR notice identifies the following categories for new and revised guidelines:
 - Metal Products and Machinery
 - Concentrated Animal Feeding Operations
 - Meat and Poultry Products
 - Construction and Development
 - Aquatic Animal Production
 - Pulp, Paper, and Paperboard

◆ www.epa.gov/waterscience/guide



Implementing Effluent Guidelines

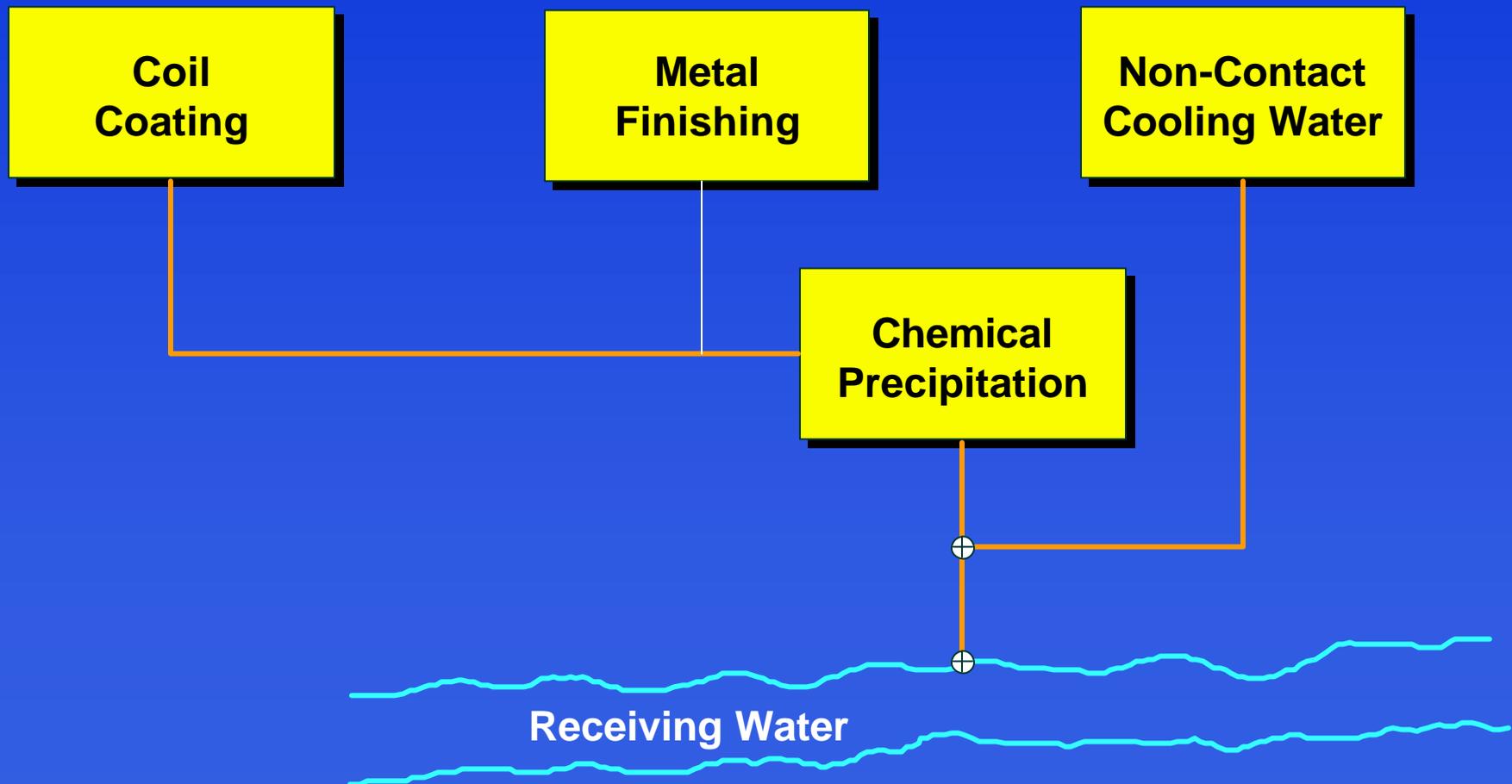
- ◆ **Effluent guidelines**
 - Implemented and enforced through NPDES permits
 - Serve as the basis for technology-based limits

Considerations Involved in Use of Effluent Guidelines

- ◆ **Determination of proper category and subcategory**
 - Applicability section in regulation
 - Preamble to regulation
 - SIC Code(s)
(e.g., Copper Forming = SIC Code 3351)
 - Development documents

Considerations Involved in Use of Effluent Guidelines (Continued)

Example 1:



Considerations Involved in Use of Effluent Guidelines (Continued)

- ◆ **Classification of plants that fall under more than one category**
 - **Must apply all applicable effluent guidelines**
 - **Some guidelines supercede others**
 - **Considerations for common treatment systems**
 - **BPJ for non-regulated pollutants**
 - **Account for dilution from non-regulated wastestreams**
 - **Inconsistent limits expressions (units)**
 - **Use internal outfalls**



Considerations Involved in Use of Effluent Guidelines (Continued)

Example 2:

Coil Coating	mg/m ²
Metal Finishing:	mg/L
Ferroalloy Manufacturing:	kg/mwh

Considerations Involved in Use of Effluent Guidelines (Continued)

- ◆ **Determination of appropriate measures of production and flow**
 - Use reasonable measure of actual production and flow rate
 - Long-term average expected during the term of permit
 - Account for planned changes
 - Time period of measurement
 - Daily maximum production/flow → Daily maximum limit
 - Average monthly production/flow → Monthly average limit



Considerations Involved in Use of Effluent Guidelines (Continued)

- ◆ **Use of alternative or tiered limits**
 - To account for variability of production/flow (e.g., seasonal)
 - Significant = > 20%
 - Requires careful examination of production data
 - Requires special reporting requirements
 - Notification of changed production/flow
 - Reporting of production data

Considerations Involved in Use of Effluent Guidelines (Continued)

- ◆ **Application of effluent guidelines in permits**
 - **Include all regulated pollutants**
 - **Parameters considered by effluent guideline but not regulated by effluent guideline**
 - **Include both daily maximum and monthly average limits**
 - **Express as mass limits unless guideline allows, or parameter requires concentration-based limit**