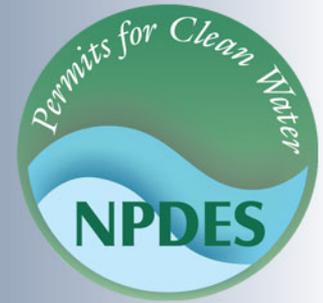




US EPA Pretreatment Webcast Series

**The Pretreatment 101 Series:
Industrial User Permitting**

September 20, 2012



Speakers:

- Jan Pickrel, U.S. EPA
- Grace Scott, Michigan DEQ

Moderator:

- Chuck Durham, Tetra Tech, Inc.

Guide to Our Webcasts

- To Ask a Question – Type your question in the text box located at the bottom of your screen
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- To Complete the Evaluation – Answer questions in the slide window
- To See Closed Captioning – Turn your pop-up blocker off and click on the “closed captioning” button
- Certificate of Participation – Is available after 90 minutes of contact time

The Six Minimum Pretreatment Program Elements

- Legal Authority
- Program Procedures
- Funding
- Local Limits
- Enforcement Response Plan
- List of IUs

Pretreatment 101 Series

- Available archived webcasts:
 - Introduction to the National Pretreatment Program
 - Industrial User Waste Survey Procedures
 - POTW's Procedures for Conducting Compliance Inspections
 - POTW's Procedures for Conducting Compliance Monitoring
 - Overview of Pretreatment Standards
 - Pretreatment Standards - Local Limits Development
- www.epa.gov/npdes/training

Common Acronyms

CWA – Clean Water Act

NPDES – National Pollutant Discharge Elimination System

POTW – Publicly Owned Treatment Works

IU – Industrial User

SIU – Significant Industrial User

CIU – Categorical Industrial User

CFR – Code of Federal Regulations

CA – Control Authority

AA – Approval Authority

POC – Pollutant of Concern

Outline of Today's Webcast

- Establishing a Permit Program
- Preliminary Permitting Decisions
- Permit Writing Procedures
- Permit Contents
- Documentation of Permitting Decisions and Administrative Record

Industrial User Permitting

Jan Pickrel

National Pretreatment Coordinator

Environmental Protection Agency

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EPA Industrial User Permitting Guidance Manual

- 833-R-12-001,
September 2012
- Update of the September
1989 manual

Industrial User Permitting Guidance Manual

833R12001

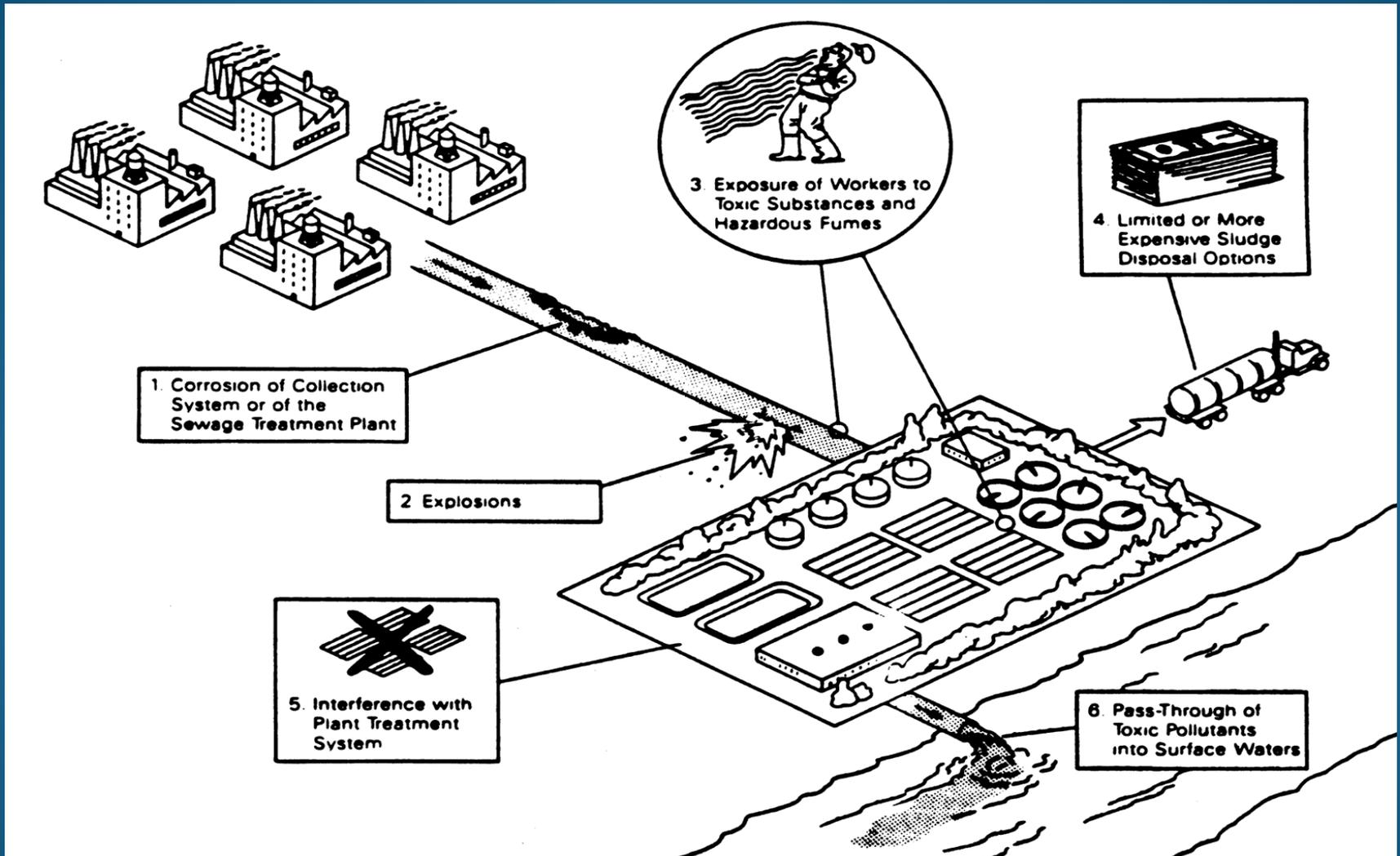
September 2012



United States Environmental Protection Agency
Office of Water



What is the Pretreatment Program?



Control Mechanisms

What a control mechanism is:

- Also called a permit
- Single document
- A privilege, not a right



What a control mechanism does:

- Authorizes discharges, with restrictions
- Specifies duties and obligations of the permittee
- Includes all applicable pretreatment standards and requirements
- Establishes legally enforceable terms

Regulatory Requirements

- POTWs with approved pretreatment programs must control IUs [40 CFR 403.8(f)(1)(iii)]
- Individual permits are required for SIUs [40 CFR 403.8(f)(1)(iii)]
- Permits serve as notification of applicable pretreatment standards and requirements [40 CFR 403.8(f)(2)(iii)]



Regulatory Requirements (cont.)

Required SIU permit components [40 CFR 403.8(f)(2)]:

- Prohibited discharge standards, applicable categorical standards, and local limits
- Effluent limits (including Best Management Practices [BMPs])
- Monitoring and reporting requirements
- Statement of permit duration
- Statement of nontransferability
- Statement of applicable civil and criminal penalty
- Requirements to control slug discharges if determined by the POTW to be necessary

Permits vs. Contracts

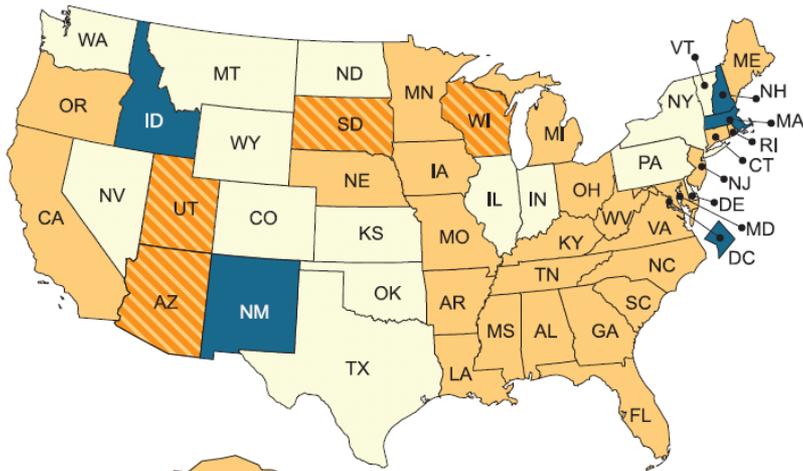
- Discharge authorization
- Requirements for discharger only
- Required to comply
- One-way enforceability
- Signed by Control Authority
- Incorporates all requisite penalty authority
- Required/recommended as a control mechanism
- Discharge agreement
- Requirements (implied or actual) for all parties
- Agreed to comply
- Two-way enforceability
- Signed by all parties
- Lacks requisite penalty authority
- Not an adequate control mechanism

Who Issues Permits?



- Control Authority (CA) vs. Approval Authority (AA)
 - CA - an entity that regulates IUs; can mean the EPA, State, or POTW
 - AA - entity that oversees CAs; can mean the EPA or the State
- Depends on pretreatment authorization status:
 - Delegated states
 - Non-delegated states
 - 403.10(e) states (CT, VT, AL, MS, & NE)

NPDES/pretreatment authorization status



- U.S. Territories**
- American Samoa
 - Guam
 - Johnston Atoll
 - Midway/Wake Islands
 - Northern Mariana Islands
 - Puerto Rico
 - Virgin Islands

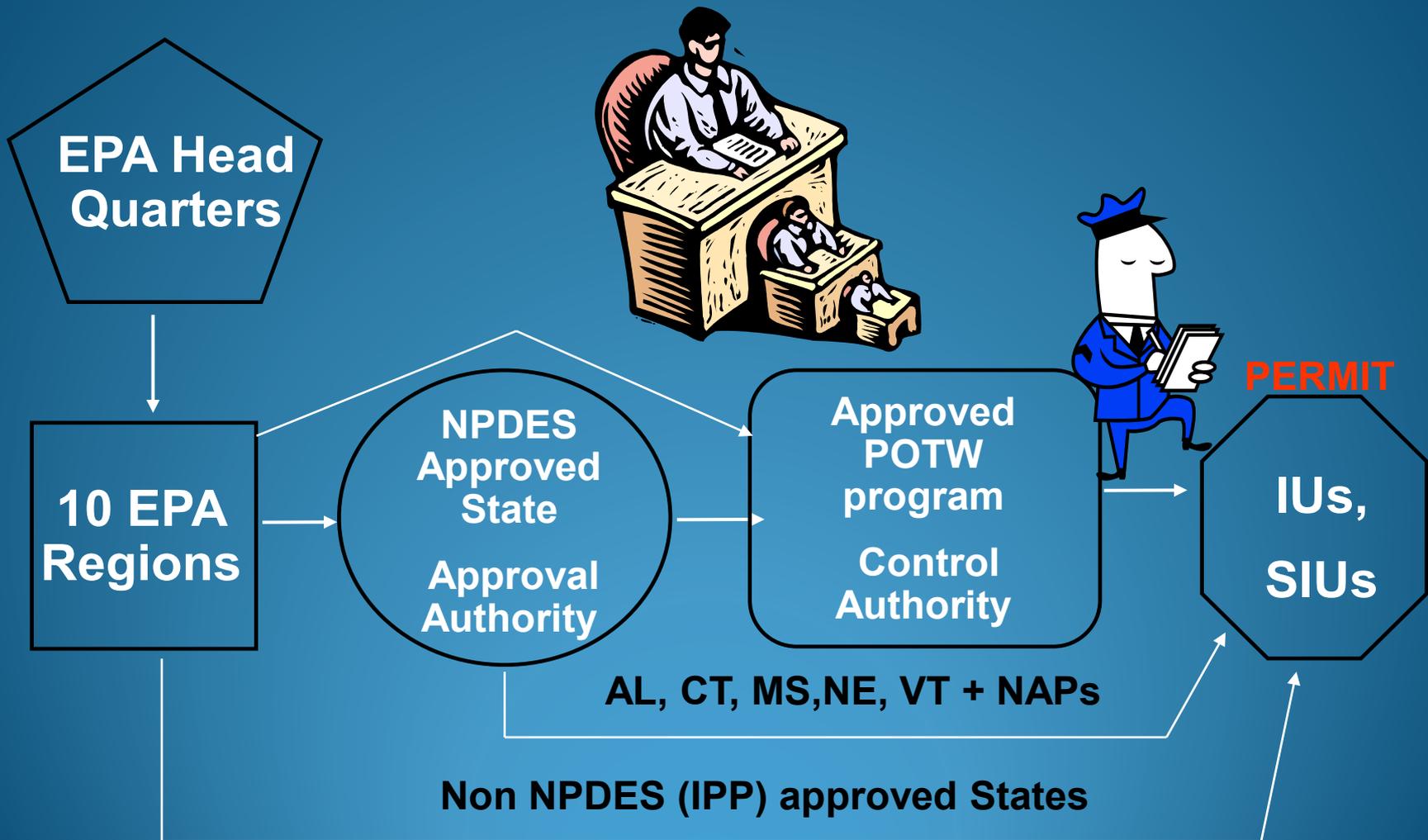
State NPDES Program Status

- Fully authorized
- Fully authorized, including an approved biosolids program
- Partially authorized ([click here for details](#))
- Unauthorized

State	Approved State NPDES Permit Program	Approved to Regulate Federal Facilities	Approved State Pretreatment Program	Approved General Permits Program	Approved Biosolids (Sludge) Program
Alabama	✓	✓	✓	✓	
Alaska*	✓	✓	✓	✓	
American Samoa					
Arizona	✓	✓	✓	✓	✓
Arkansas	✓	✓	✓	✓	
California	✓	✓	✓	✓	
Colorado	✓	✓	✓	✓	
Connecticut	✓	✓	✓	✓	
Delaware	✓			✓	
District of Columbia					
Florida	✓	✓	✓	✓	
Georgia	✓	✓	✓	✓	
Guam					
Hawaii	✓	✓	✓	✓	
Idaho					
Illinois	✓	✓		✓	

Data available at:
<http://cfpub.epa.gov/npdes/statestats.cfm>

Who Issues the Permit? Pretreatment Family Tree



Who Receives the Permits?

Required permits:

- SIUs
- CIUs
- Other



Optional permits:

- Nonsignificant IUs
- Nonsignificant CIUs
- Waste haulers
- Groundwater remediation sites



Individual vs. General

- Applied to a single facility
 - Can be used for IUs, SIUs, CIUs
 - Authority included in program approval
 - **Can** include mass-based and other calculated categorical limits
- Applied to multiple (substantially similar) facilities
 - Can be used for IUs, SIUs, CIUs
 - Authority must be incorporated (post 2005)
 - **Cannot** include mass-based and other calculated categorical limits
 - SIUs must request coverage

Benefits of Issuing Permits

- Allows CA systemic control of IU discharges to POTW
- Administrative process facilitates understanding of standards and requirements
- Allows CA to communicate and address issues with an IU before permit issuance
- IU responsibilities identified in a single document, promoting understanding of IU obligations
- Process fosters dialogue and relationship development, increasing compliance rates

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- Establishing a Permit Program
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Identifying IUs

CAs required to develop and implement procedures [40 CFR 403.8(f)(2)]

- Periodic industrial waste surveys (IWSs)
- Business licenses including discharge applications
- Communications with other city departments
 - Water, utilities, health and safety, hazardous waste, planning and development, building departments
 - New industries in the POTW service area
 - Changes at existing facilities



Identifying IUs (cont.)

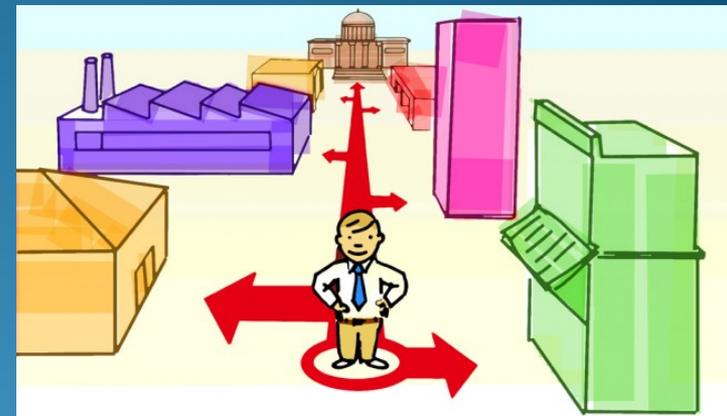
- Continual review of business license records
 - Chamber of Commerce rosters, Manta listings
 - Telephone directory
 - Internet searches
- Ongoing inspection and monitoring activities
- Reapplication by permit holders
- Survey requests to update industry information

CA required to submit to the AA an updated list of its IUs at least annually

[40 CFR 403.12(i)]

Classifying IUs

- IUs [40 CFR 403.3(j)] - commercial dischargers, industrial dischargers
- SIUs
- CIUs
 - Significant CIUs
 - Nonsignificant CIUS (NSCIUs)
 - CIUs with special requirements



Pretreatment 101 Series: Industrial User Waste Survey Procedures
http://cfpub.epa.gov/npdes/courseinfo.cfm?program_id=0&outreach_id=522&schedule_id=1104

SIUs

- Defined at 40 CFR 403.3(v)(1)
- Significant CIUs
- IU that:
 - Discharges $\geq 25,000$ gpd of process wastewater
 - Contributes $\geq 5\%$ of the hydraulic or organic loading
 - Has the potential to adversely impact the POTW

CIUs

- Significant CIUs [40 CFR 403.6]
- NSCIUs [40 CFR 403.3(v)(2)]
 - Discharge \leq 100 gpd of total categorical wastewater
 - Consistently compliant with all applicable categorical pretreatment standards and requirements
 - Never discharges any untreated concentrated wastewater to the POTW
- CIUs with special requirements
 - No discharge requirements
 - Alternative limits, monitoring, or certifications

40 CFR Chapter I Subchapter N Effluent Guidelines and Standards

Rules and development
documents at:

[http://water.epa.gov/scitech/
wastetech/guide/industry.cfm](http://water.epa.gov/scitech/wastetech/guide/industry.cfm)

[-] Subchapter N - EFFLUENT GUIDELINES AND STANDARDS (Parts 400 - 471)

Part 400 - Reserved

[+] Part 401 - GENERAL PROVISIONS

Part 402 - Reserved

[+] Part 403 - GENERAL PRE-TREATMENT REGULATIONS FOR EXISTING AND NEW SOURCES OF POLLUTION

[+] Part 405 - DAIRY PRODUCTS PROCESSING POINT SOURCE CATEGORY

[+] Part 406 - GRAIN MILLS POINT SOURCE CATEGORY

[+] Part 407 - CANNED AND PRESERVED FRUITS AND VEGETABLES PROCESSING POINT SOURCE CATEGORY

[+] Part 408 - CANNED AND PRESERVED SEAFOOD PROCESSING POINT SOURCE CATEGORY

[+] Part 409 - SUGAR PROCESSING POINT SOURCE CATEGORY

[+] Part 410 - TEXTILE MILLS POINT SOURCE CATEGORY

[+] Part 411 - CEMENT MANUFACTURING POINT SOURCE CATEGORY

[+] Part 412 - CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFO) POINT SOURCE CATEGORY

[+] Part 413 - ELECTROPLATING POINT SOURCE CATEGORY

[+] Part 414 - ORGANIC CHEMICALS, PLASTICS, AND SYNTHETIC FIBERS

[+] Part 415 - INORGANIC CHEMICALS MANUFACTURING POINT SOURCE CATEGORY

Part 416 - Reserved

[+] Part 417 - SOAP AND DETERGENT MANUFACTURING POINT SOURCE CATEGORY

[+] Part 418 - FERTILIZER MANUFACTURING POINT SOURCE CATEGORY

[+] Part 419 - PETROLEUM REFINING POINT SOURCE CATEGORY

[+] Part 420 - IRON AND STEEL MANUFACTURING POINT SOURCE CATEGORY

[+] Part 421 - NONFERROUS METALS MANUFACTURING POINT SOURCE CATEGORY

[+] Part 422 - PHOSPHATE MANUFACTURING POINT SOURCE CATEGORY

[+] Part 423 - STEAM ELECTRIC POWER GENERATING POINT SOURCE CATEGORY

[+] Part 424 - FERROALLOY MANUFACTURING POINT SOURCE CATEGORY

[+] Part 425 - LEATHER TANNING AND FINISHING POINT SOURCE CATEGORY

[+] Part 426 - GLASS MANUFACTURING POINT SOURCE CATEGORY

[+] Part 427 - ASBESTOS MANUFACTURING POINT SOURCE CATEGORY

[+] Part 428 - RUBBER MANUFACTURING POINT SOURCE CATEGORY

Factors to Consider

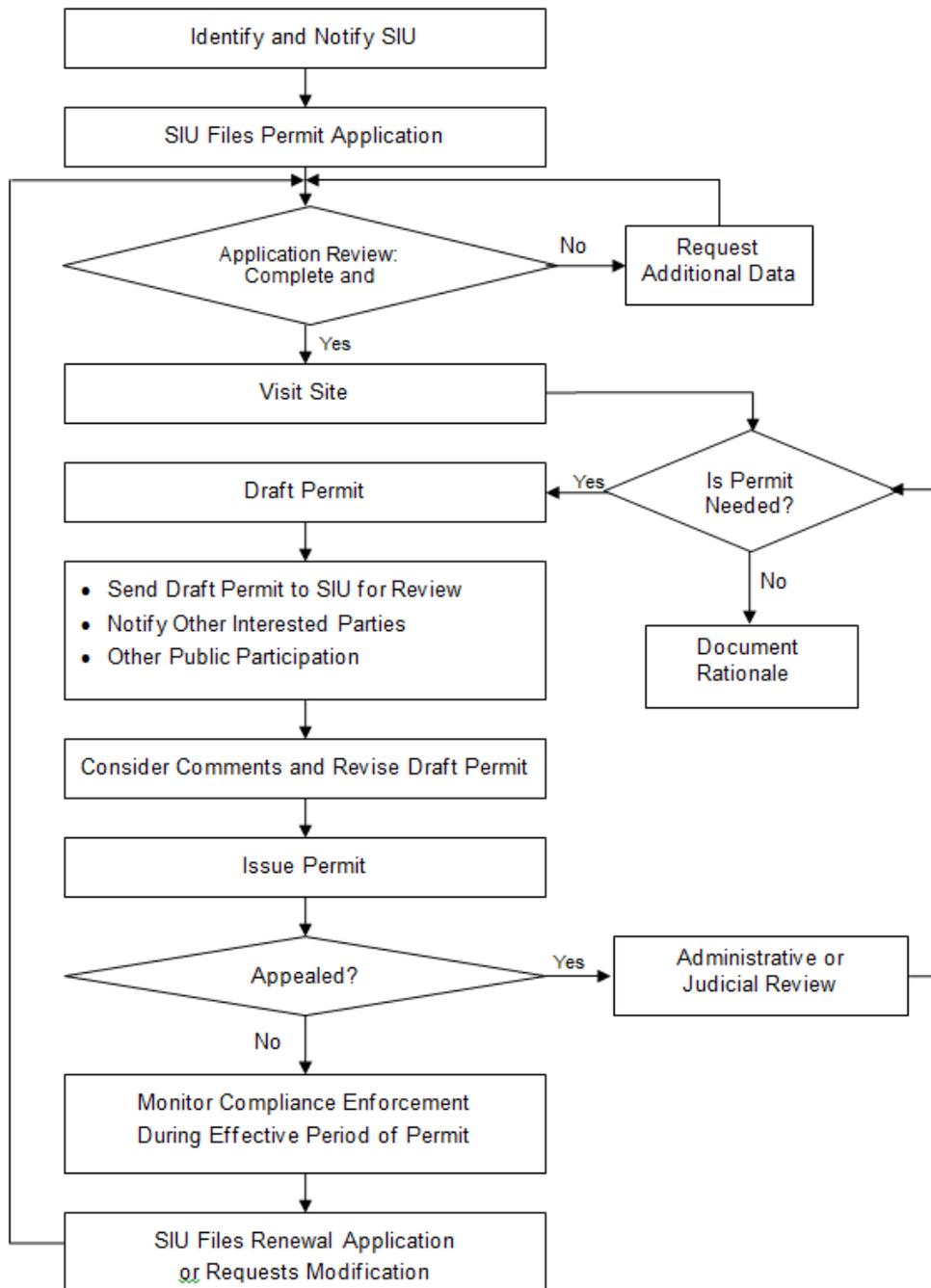
- Pollutants being introduced
- Spill potential
- Slug discharge potential
- Previous compliance history
- Potential for causing the POTW to violate its NPDES permit
- Potential for causing difficulties with sludge use or disposal



Permitting Actions

- Issuance/reissuance
- Modifications
- Termination
- Transferability
- Public participation
- Appeals

Common elements of the permit issuance process



When to Issue a Permit?

Requirements

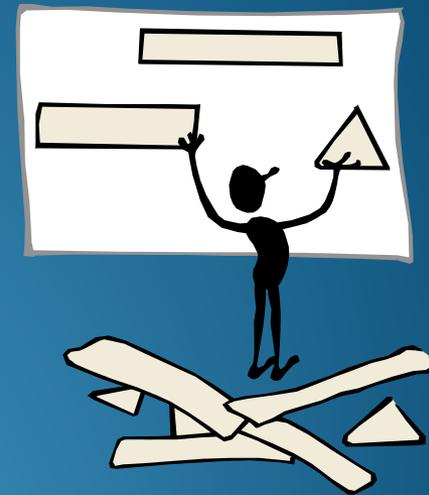
- New sources: before commencement of discharge
- Existing sources:
 - ASAP upon implementation of a newly approved pretreatment program
 - ASAP upon discovery of existing discharger
 - Before expiration of existing permit

Recommendation

- Staggered permit issuance → staggered expirations

When to Modify a Permit?

- Common modification justifications:
 - Significant process or discharge changes
 - New information available
 - New federal, state, or local requirements
 - Correcting errors
 - Request of IU or the public
- New permit or modified portion/addendum
- Specify grace period for compliance



Permit Termination and Transferability

Permit termination

- Typically compliance-related

Permit transferability [40 CFR 403.8(f)(1)(iii)(B)(2)]

- Ownership changes
- Modify/revoke permit if process changes
- Non-transferable without prior notification

Permit Duration

Requirements

- SIU permit 5-year federal maximum [403.8(f)(1)(iii))(B)(1)]
- Applicable state and local regulations

Recommendations

- Shorter-term permits for new dischargers or in anticipation of significant changes
- Reopener clause



Public Participation

- May be a state/local requirement in permit development
- CA notifies and communicates with IU of permit development activities
- Public notice of permit development activities
 - Public notice required for new or modified specific limits developed by the POTW (40 CFR 403.5(c))
- Public meeting/hearing
- Public comment period
- CA response to comments



Public Participation (cont.)

Benefits:

- Resolve concerns before permit finalization and issuance
 - Clarify permit application ambiguities
- Potential source of supplementary data
- Improve CA/IU/public relations



Final Permit Issuance

Transmittal letter

- Effective/expiration dates
- Enforceability
- Appeal procedures

Verify receipt

- Hand delivery
- Certified mail/return receipt
- Receipt signature



Permit Appeals

IUs should have the right to challenge or appeal permit provisions

- Specified appeal period
- Appeal procedures (IU)
- Appeal review procedures (CA)
 - Administrative proceedings
 - Judicial proceedings

General Permits

- Must have authority to issue general permits
[40 CFR 403.8(f)(1)(iii)(A)]
- SIU general permits required elements
[40 CFR 403.8(f)(1)(iii)(B)]
- **Not allowed for:**
 - IUs with production-based categorical pretreatment standards or categorical standards expressed as mass/day
 - IUs with other calculated limits (e.g., combined wastestream formula, net/gross calculations)
- May always be used for IUs
 - For example, auto washes, photo processing facilities

General Permits (cont.)

Substantially similar facilities:

- Same/substantially similar types of operations
- Discharge the same types of wastes
- Subject to the same effluent limitations
- Subject to the same or similar monitoring
- Determined at POTW discretion

General Permit Procedures

1. CA notify SIUs of permit availability
2. SIUs must request coverage; provide documentation
3. CA considers facility-specific factors (e.g., sampling locations, monitoring waivers)
4. CA issues discharge authorization
5. CA retains documentation to support determination that SIU qualifies for general permit



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What IU Information Needs to be Collected?

- Manufacturing process and materials used
- Water balance
- Wastewater characteristics
- Plumbing and treatment schematics
- Existing wastewater treatment and BMPs
- Chemicals used, stored, or disposed
- Spill prevention measures and training
- Basic information:

Number of employees

Hours of operation

Contact information

Facility schematic

Production rates

Key personnel

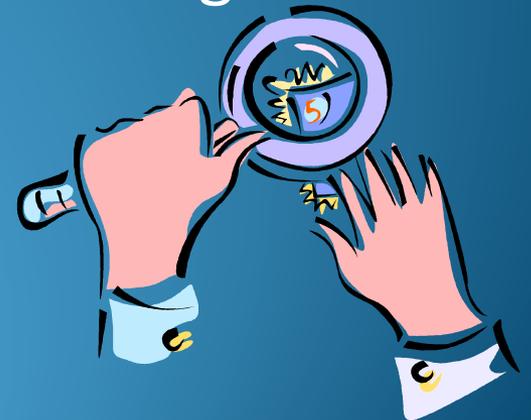
How to Collect Information?

Permit application or Baseline Monitoring Report (BMR)

- CA must have authority
- BMR required for new CIUs [40 CFR 403.12(b)]
- Reapplication of existing users

Reviewing historical effluent data and existing information

Conducting a site inspection



Reviewing the Permit Application

1. Check for completeness

- Piping and process schematics
- Effluent data
- Dilution streams
- Raw materials
- Complete list of pollutants
- Evaluation of all potential pollutants
- Signature



Reviewing the Permit Application (cont.)

2. Check for accuracy

- Use, production, and discharge of toxic substances
- Characterization of all wastestreams
- Consistency with historical/literature data
- Consistency with site visit observations
 - Water balance
 - Waste manifests



Reviewing the Permit Application (cont.)

3. Evaluate and analyze data to determine appropriate permit conditions

- Permit/characterization rationale
- Adequacy of treatment
- Adequacy of monitoring and reporting
- Compliance history



Questions?

Contents of a Permit

Ms. Grace Scott

State Pretreatment Coordinator

Michigan Department of Environmental Quality

Water Resources Division

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Contents of a Permit

- Cover Page
- Effluent Limits
- Monitoring and Reporting Requirements
- Standard Conditions
- Special Conditions

Elements of the Cover Page

- Name and address of the permittee
- Citation to legal authority
- Duty to comply
- Reapplication requirements
- Effective period
- Signature of Control Authority

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**CENTRAL CONTRA COSTA SANITARY DISTRICT
Class II Industrial User Permit**

Industrial User Name:	Varian, Inc.		
Site Address:	2700 Mitchell Drive, Walnut Creek, California		
Mailing Address:	2700 Mitchell Drive, Walnut Creek, CA 94598		
Permit Issued:	November 1, 2008	Permit Fee through October 31, 2009	\$4,422.00
Permit Renewal:	October 31, 2009		

Certification

- The Industrial User agrees to comply with Title 10 of the District Code and the terms and conditions of this permit.
- The Industrial User understands that this permit may be revoked and permission to discharge may be denied.
- The Industrial User shall be liable for all damages, direct and consequential, caused by violating the terms and conditions of this permit.

"I am an authorized representative of the Industrial User as specified in CCCSD Code Title 10.04.020 (B). I have authority to commit resources necessary to achieve and maintain compliance with the conditions of this permit. I have reviewed this permit document and understand the requirements contained herein."

Company Officer:

Name: _____
Title: _____
Signature: _____
Date: 10/28/08

Definition of Authorized Representative:
(1) the principal executive officer, if the industrial user is a partnership or proprietorship, respectively, (3) duly authorized representative of the individual designated above if such representative is responsible for the overall operation of the facilities from which the discharge originates and if such representative is identified in writing by the individual designated in (1) or (2) above.

Authorization
The Industrial User is authorized to discharge wastewater to the sanitary sewer, subject to the Industrial User's compliance with Title 10 of the District Code, 40CFR, and the terms and conditions of this permit. This authorization is conditional on the Industrial User signing and returning the above certification to the District's Source Control Section.

Central Contra Costa Sanitary District

Name: Timothy L. Potter
Title: Environmental Compliance Superintendent
Signature: _____
Date: 10/17/08

RECEIVED
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Varian, Inc. - 2008

Applying Effluent Limits

Identifying POCs

- Is the user subject to categorical standards?
- What pollutants are present?
- What pollutants are suspected to be present?

After these questions are answered....
The Control Authority can determine which
pollutants to regulate.



Applying Effluent Limits

Identifying Other POCs

- National prohibited discharges
 - General [40 CFR 403.5(a)]
 - Specific [40 CFR 403.5(b)]
- Local Limits [40 CFR 403.5(c) and (d)]
- Other site-specific/industry-specific limits



Applying Effluent Limits Considerations for Categorical Pretreatment Standards

- The correct category and subcategory
 - Pretreatment Standards for Existing Sources (PNES)
 - Pretreatment Standards for New Sources (PSNS)
- Identification of all wastestreams
 - Regulated
 - Unregulated
 - Dilute

Considerations for Applying Categorical Pretreatment Standards (continued)

- Identification of appropriate sampling locations
 - End of process (or end of treatment)
 - End of pipe
- All applicable effluent limits, including indicator pollutants, if applicable
- Monitoring waivers, if applicable
- Equivalent mass-limits or concentration-limits, if applicable.

Apply Effluent Limits Categorical Standards

- **Concentration-based limits**
 - Metal Finishing [40 CFR Part 433], mg/L
- **Production-based limits**
 - Aluminum Forming [40 CFR Part 467], mg/off-kg (Al or Al alloy removed from a forming or ancillary process)
- **Best Management Practices (BMPs) or Pollutant Management Plans**
 - Transportation Equipment Cleaning [40 CFR Part 442]
- **Prohibited Discharges**
 - Steam Electric Power Generation [40 CFR Part 423], no discharge of polychlorinated biphenyl compounds

Optional Methods for Applying Categorical Standards

- Equivalent Mass limits for Concentration Limits
- Equivalent Concentration Limits for Mass Limits
- Pollutant Not Expected to be Present
- Nonsignificant Categorical Industrial User (NSCIU)

Equivalent Mass limits for Concentration Limits

- To be eligible, the IU must comply with 40 CFR 403.6(c)(5)(i)(A-E)
- The permit must include the requirements listed at 40 CFR 403.6(c)(5)(ii)(A-D)
- The Control Authority must:
 - Covert the equivalent mass limits by using actual daily flow rates
 - Reassess the equivalent mass limit when necessary

Equivalent Concentration Limits for Mass Limits

- Applicable for the following categories
 - Organic Chemicals, Plastics, and Synthetic Fibers [40 CFR Part 414]
 - Petroleum Refining [40 CFR Part 419]
 - Pesticide Chemicals [40 CFR Part 455]

Must ensure dilution is not being used

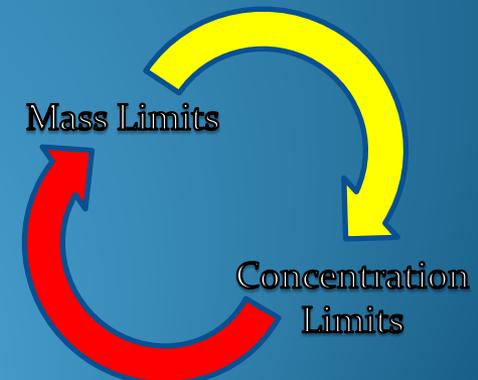
When to convert to...

Mass limits

- Batch dischargers
- Dischargers with excessive or variable wastewater flow
- Dischargers with seasonal variations
- Dischargers with adequate and representative flow rate information

Concentration limits

- Dischargers with consistent wastewater discharge flow rates
- Dischargers with consistent compliance



Pollutant Not Expected to be Present

- Forgo monitoring requirements of a regulated pollutant if the pollutant is:
 - Neither present or expected to be present, or
 - Present only at background levels
- Does not supersede required categorical certifications
- Does not supersede pollutant limit

Pollutant Not Expected to be Present (continued)

- Monitoring waiver valid for the duration of the permit
- User must provide sampling data of process wastestreams prior to treatment
- Waiver requests must be signed in accordance with 40 CFR 403.12(I)
- Conditions of the waiver must be included in the permit
 - Monitoring must resume if conditions change

Nonsignificant CIUs

- **NSCIUs can be permitted**
 - Categorical limits are still applicable
 - Reporting and notification requirements are still applicable
- **The Control Authority must still:**
 - Perform the same minimum oversight as required for nonsignificant users.
 - Notify the NSCIU of its status and requirements
 - Review required reports and certifications
 - Verify regulated flow rates do not exceed 100 gpd
 - Conduct random sampling and inspection
 - Investigate noncompliance when necessary

National Prohibited Discharges

- General Prohibitions
 - A user may not introduce into a POTW any pollutants that cause pass through or interference [40 CFR 403.5(a)(1)].

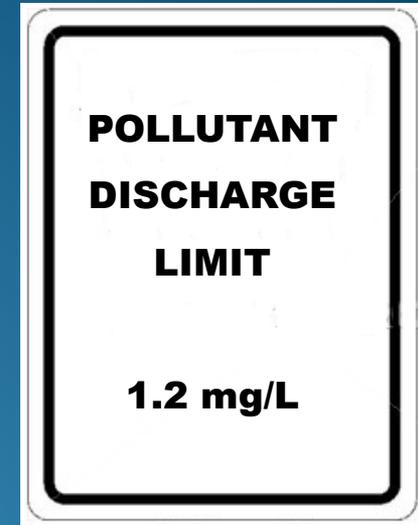


National Prohibited Discharges

- Specific Prohibitions
 - Fire or Explosion hazards (closed cups flashpoint of less than 140°F)
 - Corrosive pollutants (pH less than 5)
 - Solid or viscous pollutants
 - Pollutants that will cause interference (BOD and the like)
 - Heat
 - Petroleum and mineral oils
 - Toxic Fumes and gases that can cause acute worker health and safety problems
 - Trucked waste excepted at designated discharge points

Local Limits

- Permit must include a list of applicable local limits.
 - Industry specific limits
 - Zero-discharge requirements
 - BMPs or Pollution Prevention Plans
- Limits are applicable at the end of pipe sampling point.



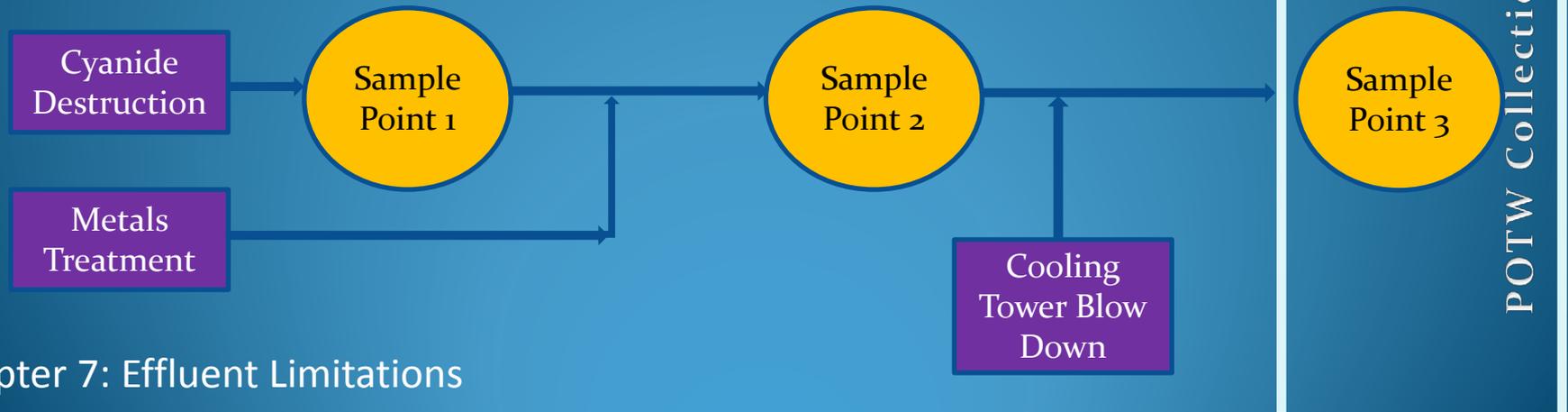
Applying Effluent Limits

- Clearly designated sampling point(s)
- Specific time periods
- Appropriate units of limits
- Appropriate terms of duration for limits
 - Instantaneous maximum
 - Daily Maximum
 - Monthly Averages



Applying Effluent Limits

- Categorical Limits versus Local Limits
 - Distinct
 - Complementary
- Sampling Locations
 - Other sampling locations (Cyanide monitoring) @ Sample Point 1
 - End of process/end of treatment @ Sample Point 2
 - End of pipe @ Sample Point 3



Example of Documenting the Most Stringent Daily Maximum Limit

Parameter	Daily PSES	Monthly PSES	Daily CWF	Monthly CWF	Local daily limit	Daily final limit	Monthly final limit**
Cadmium	0.69	0.26	0.46	0.17	0.1	0.1	0.17
Chromium (Hex)	--	--	--	--	0.1	0.1	--
Chromium (Total)	2.77	1.71	1.85	1.14	1.0	1.0	1.14
Copper	3.38	2.07	2.26	1.38	5.0	2.26	1.38
Cyanide	1.20	0.65	*	*	2.0	1.20 *	0.65 *
Lead	0.69	0.43	0.46	0.29	0.1	0.1	0.29
Manganese	--	--	--	--	1.0	1.0	--
Mercury	--	--	--	--	0.005	0.005	--
Nickel	3.98	2.38	2.66	1.59	2.0	2.0	1.59
Silver	0.43	0.24	0.28	0.16	0.1	0.1	0.16
Zinc	2.61	1.48	1.74	0.99	5.0	1.74	0.99
TTO	2.13	--	1.42	--	1.0	1.0	--

Note: All concentrations are in mg/L unless otherwise noted.

Key:

PSES = Pretreatment Standards for Existing Sources, metal finishing category [40 CFR Part 433.15(a)]

CWF = Alternative metal-finishing standards after use of the combined wastestream formula

Local Limit = Maximum pollutant concentrations established by the Control Authority

Final Limit = Final limits based on most stringent of local, state, and federal standards

* Cyanide limits must apply to the segregated cyanide wastestream of the cyanide destruct treatment process.

** The discharger is required to comply with both the daily maximum and monthly average limits, if applicable.

Monitoring and Reporting

- Sampling location
- Pollutants to be monitored, including pollutants with a sampling waiver
- Sample collection method
- Analytical methods
- Monitoring frequency
- Reporting and certification requirements



Factors that Affect Monitoring and Reporting

- Applicability of categorical standards
 - Example: Nonferrous Metals Manufacturing [40 CFR Part 421]
- Effluent and process variability
- Flow or pollutant loading, or both
- Type of pollutant

Monitoring Requirements: Sampling Location

- A sampling location must
 - coincide with the point that the effluent limits apply
 - produce a representative sample
 - be safe, convenient, and accessible

The permit must clearly specify the designated sampling location.

Monitoring Requirements

- Pollutants to be monitored
 - Are clearly identified in the permit
 - Are not limited to those subject to effluent limits
 - Includes flow-monitoring (mass limits)
- Sample collection method
 - Grab
 - Composite: Flow versus Time Proportional
- Analytical methods
 - 40 CFR Part 136

Minimum Monitoring Frequencies

- At least once every 6 months all SIUs, unless
 - The CIU has been classified as nonsignificant
 - The Control Authority has reduced the discharger's monitoring and reporting requirements (Middle-Tier CIUs)
 - The Control Authority has waived monitoring requirements (pollutants not expected to be present)



Monitoring Frequencies Recommendations

Recommended Industrial Self-Monitoring Frequencies During the Initial Compliance Permit

Industrial flow (gpd)	Conventional pollutants, inorganic pollutants, cyanide, and phenol	GC or GC/MS organics
0–10,000	1/month	2/year
10,001–50,000	2/month	4/year
50,001–100,000	1/week	1/month
100,001–240,000	2/week	2/month
> 240,000	3/week	4/month

Note: Industrial Users subject to TTO standards in the Electrical and Electronic Components, Electroplating, and Metal Finishing categories may elect to implement a Toxic Organics Management Plan and periodic certification statements in lieu of performing TTO analyses. Industrial Users subject to TTO standards in the Aluminum Forming, Copper Forming, Coil Coating (Canmaking), and Metal Molding and Casting categories may monitor for oil and grease as an alternative to TTO monitoring.

Excerpt from: EPA's Pretreatment Compliance Monitoring and Enforcement Guide

Required Reports and Notifications

Required report and citation	Report due date	Purpose of report	Information required
Baseline Monitoring Report (BMR) [40 CFR 403.12(b)(1-7)]	Within 180 days of effective date of the regulation or an administrative decision on category determination	<ul style="list-style-type: none"> To provide baseline information on industrial facility to Control Authority To determine wastewater discharge sampling points To determine compliance status with categorical Pretreatment Standards 	<ul style="list-style-type: none"> Identifying information about the facility (name, address, and so on) List of all environmental control permits issued to the facility Description of operations Flow measurements of wastewater discharged to the POTW Nature and concentration of pollutants discharged to the POTW Certification of compliance status with categorical Pretreatment Standards Compliance schedule to attain compliance Certification of validity of information provided
Compliance Schedule Progress Reports [40 CFR 403.12(c)(1-3)]	Within 14 days of each milestone date on the compliance schedule; at least every 9 months	<ul style="list-style-type: none"> To track progress of the industrial facility through the duration of a compliance schedule 	<ul style="list-style-type: none"> Compliance with appropriate increment of compliance schedule Reasons for any noncompliance Actions taken to return to the approved schedule
90-Day Compliance Report [40 CFR 403.12(d)]	Within 90 days of the date for final compliance with applicable categorical Pretreatment Standard; for new sources, the compliance report is due within 90 days following commencement of wastewater discharge to the POTW	<ul style="list-style-type: none"> To notify Control Authority as to whether compliance with the applicable categorical Pretreatment Standards has been achieved If facility is noncompliant, to specify how compliance will be achieved 	<ul style="list-style-type: none"> Nature and concentration of all pollutants regulated by categorical Pretreatment Standards Average and maximum daily flow for regulated manufacturing processes Compliance status (if noncompliant, additional measures needed) Certification of validity of information provided

Required Reports and Notifications

Required report and citation	Report due date	Purpose of report	Information required
Periodic Compliance Reports for CIUs (not including NSCIUs) [40 CFR 403.12(e)(1)]	Every June and December after the final compliance date (or after commencement of a discharge for new sources) unless the Control Authority increased frequency	<ul style="list-style-type: none"> To provide the Control Authority with current information on the discharge of pollutants to the POTW from categorical industries 	<ul style="list-style-type: none"> Nature and concentration of all regulated pollutants Average and maximum daily flows discharged to the POTW for the reporting period Where mass-based units are used, a measure of the mass of pollutants discharged For industries subject to the production-based standards, an actual average production rate for the reporting period For industries subject to equivalent mass or concentration limits pursuant to 403.6(c), a reasonable measure of the long-term production rate Certification of the validity of the information provided Additional information as required by the Control Authority For industries subject to BMPs, documentation required to determine compliance with the BMP
Periodic Compliance Reports for CIUs with Pollutant Not Present or Expected to be Present [40 CFR 403.12(e)(2)]	Every June and December after the final compliance date (or after commencement of a discharge for new sources) unless the Control Authority increased frequency	<ul style="list-style-type: none"> To certify that a pollutant is not present or expected to be present at a facility 	<ul style="list-style-type: none"> For facilities that have been granted a waiver of monitoring for a pollutant that has been determined not to be present, a certification statement indicating that there has been no increase in the pollutant in the wastestream because of activities of the user (403.12(e)(2)(v))

Required Reports and Notifications

Required report and citation	Report due date	Purpose of report	Information required
Periodic Compliance Reports for CIUs Reduced Monitoring Requirements [40 CFR 403.12(e)(3)]	Once every year, unless required more frequently in the categorical Pretreatment Standard or by the Control Authority	<ul style="list-style-type: none"> To provide the Control Authority with current information on the discharge of pollutants to the POTW from categorical industries 	<ul style="list-style-type: none"> Nature and concentration of all regulated pollutants Average and maximum daily flows discharged to the POTW for the reporting period Where mass-based units are used, a measure of the mass of pollutants discharged For industries subject to the production-based standards, an actual average production rate for the reporting period For industries subject to equivalent mass or concentration limits pursuant to 403.6(c), a reasonable measure of the long-term production rate Certification of the validity of the information provided Additional information as required by the Control Authority For industries subject to BMPs, documentation required to determine compliance with the BMP
Notice of Potential Problems, including Slug Loading [40 CFR 403.12(f)]	Notification of POTW immediately after occurrence of slug load or any other discharge that could cause problems to the POTW	<ul style="list-style-type: none"> To alert the POTW of the potential hazards of the discharge 	<ul style="list-style-type: none"> None specified in General Pretreatment Regulations; other federal, state, and local regulations might address reporting requirements
Noncompliance Notification [40 CFR 403.12(g)(2)]	Notification of POTW within 24 hours of becoming aware of violation	<ul style="list-style-type: none"> To alert the POTW of a known violation and potential problem that could occur 	<ul style="list-style-type: none"> Nature and magnitude of the violation; other information as determined by the POTW

Required Reports and Notifications

Required report and citation	Report due date	Purpose of report	Information required
Periodic Compliance Reports for Noncategorical Users [40 CFR 403.12(h)]	To be determined by the POTW, but at least once every 6 months	<ul style="list-style-type: none"> To provide the POTW with current information on the discharge of pollutants to the POTW from Industrial Users not regulated by categorical standards 	<ul style="list-style-type: none"> Description of the nature, concentration, and flow of the pollutants required to be reported by the Control Authority For industries subject to BMPs, documentation required to determine compliance with the BMP
Notification of Changed Discharge [40 CFR 403.12(j)]	Before any substantial changes in the volume or character of pollutants in the discharge	<ul style="list-style-type: none"> To notify the POTW of anticipated changes in wastewater characteristics and flow that could affect the POTW 	<ul style="list-style-type: none"> All anticipated changes that could affect the character or volume of the discharge
Notification of Hazardous Waste Discharge [40 CFR 403.12(p)]	No later than 180 days after the discharge of the listed or characteristic hazardous waste	<ul style="list-style-type: none"> To notify the POTW of the name of the hazardous waste and type of discharge (batch or continuous) 	<ul style="list-style-type: none"> The name of the hazardous waste, the EPA hazardous waste number, and the type of discharge If the user discharges more than 100 kilograms of hazardous waste per calendar month, the user must also submit (to the extent such information is known) an identification of the hazardous constituents contained in the wastes and an estimation of the mass of constituents in the wastestream expected to be discharged during the following 12 months

Required Reports and Notifications

Required report and citation	Report due date	Purpose of report	Information required
Annual Certification by NCSIUs [40 CFR 403.12(q)]	At least once a year	<ul style="list-style-type: none"> To provide to the POTW a statement that the facility is in compliance with the definition of NCSIU 	<ul style="list-style-type: none"> The certification statement at 40 CFR 403.12(q) must be signed in accordance with the signatory requirements in 40 CFR 403.12(l)
Notification of Bypass [40 CFR 403.17]	<p>If possible, at least 10 days before the date of the anticipated bypass.</p> <p>OR</p> <p>In the event of an unanticipated bypass, a verbal notification of a bypass that exceeds applicable Pretreatment Standards to the POTW within 24 hours from the time the Industrial User becomes aware of the bypass.</p>	<ul style="list-style-type: none"> To provide to the POTW a facility's intentional diversion of <u>wastestreams</u> from any portion of the facility's treatment facility 	<ul style="list-style-type: none"> A written submission must be provided within 5 days of the time the Industrial User becomes aware of the bypass. The written submission must contain a description of the bypass and its cause, the duration of the bypass (including exact dates and times), and if the bypass has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
Notification of Changes Affecting Slug Discharge Potential [40 CFR 403.8(f)(2)(vi)]	Notification of POTW immediately of any changes at the facility that affects the potential for a slug discharge.	<ul style="list-style-type: none"> To notify the POTW of changes that might require the facility to implement procedures to control slug discharges. 	<ul style="list-style-type: none"> All changes that could affect the potential of a slug discharge.]

Other Reporting Considerations

- Who signs the reports
- Where reports are to be sent
- When are reports due
- How reports can be submitted
- Certification Statements
- When the Control Authority conducts all sampling



Standard Conditions

- Standard Conditions outlines:
 - The administrative and procedural requirements
 - The general duties and responsibilities of the user
- Examples of standard conditions:
 - Definition of terms
 - Required analytical methods
 - Signatory requirements
 - Duty to comply

Standard Conditions

- Can contain federally required permit components:
 - Statement of nontransferability
 - Statement of applicable civil and criminal conditions
 - National and specific prohibitions
 - Notification requirements
 - Recordkeeping requirements
 - Process of seeking monitoring waivers, if applicable

Special Conditions Requirement to Control Slug Discharges

- If the Control Authority has determined a SIU is required to develop and implement procedures to control slug discharges, the user's permit **MUST** include this requirement.
- All SIUs are required to report changes that could affect the potential of a slug discharge.

Special Conditions – Compliance Schedules

- Used to document milestones and deadlines for specific actions
- Negotiated with the user to ensure achievability
- Cannot extend a federal categorical pretreatment compliance date
- Does not relieve the user of its pretreatment obligations
- Should not be used to address ongoing pass through or interference issues



Special Conditions – Additional Monitoring

- Used to confirm presence of suspected POCs
- Used as a response to noncompliance – increase monitoring frequency
- Used to determine if local limits need to be developed

Special Conditions – Zero Discharge

- Prior to issuing zero discharge requirements, the Control Authority should evaluate the user's potential for discharge
- Zero discharge Requirements
 - Specify that discharge of process wastewater is prohibited
 - Notify the Control Authority of changes resulting in a potential for discharge
 - Certify periodically that no discharge has occurred
 - Notify that the Control Authority may inspect as necessary

Questions

Outline of Today's Webcast

- Establishing a Permit Program
- Preliminary Permitting Decisions
- Permit Writing Procedures
- Permit Contents
- Documentation of Permitting Decisions and Administrative Record

Administrative Record

Permanent file record

- Permit record
- Periodic compliance reports/self-monitoring report files
- Oversight monitoring files
- Inspection files
- Enforcement files
- Correspondence



Permit Record

- Permit application form and/or BMR
- Permit and fact sheet
- Correspondence
- Permitting decisions
- Records of any public hearing or meetings
 - Copies of all comments received
 - Copies of all replies or responses to comments received

Key Documentation

- Facility characterization
 - Operational history of facility
- Sampling locations
- Effluent limit calculations
- Rationale for best management practices (BMPs)
- Monitoring and reporting requirements
- Rationale for slug discharge control requirements
- Enforcement history

DOCUMENT!
DOCUMENT!
DOCUMENT!

Fact Sheet Components

- Brief description of IU
- Type and quantity of the discharge
- Basis for the permit limits
- Detailed discussion of any special conditions in the permit and the rationale for pollutant selection and limits development
- Calculations showing the actual numbers used to derive each limit

Correspondence

Document all verbal interactions

- Parties involved
- Date and time
- Main points covered
 - Decisions
 - Action items
- Permanent log

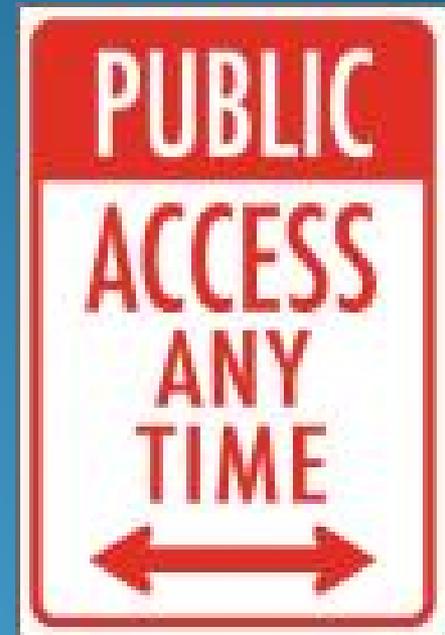
Email is correspondence!



Public Access to Information

Effluent data must be available to the public

- 40 CFR 403.14(b)
- Defined at 40 CFR 2.302(2)(i)
- Upon request



Confidential Business Information

- Cannot include effluent data
- Cannot include production data and flow used to calculate limits
- Must be claimed by facility and approved by CA
- Storage procedures

All non-CBI information should be available to the public
upon request

Questions

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Participation Certificate

- If you would like to obtain participation certificates for multiple attendees, type the link below into your web browser
- You can type each of the attendees' names in and print the certificates
- http://www.epa.gov/npdes/webcasts/certificate/pretreatment_cert_092012.pdf