



# **US EPA Pretreatment Webcast Series**

**The Pretreatment 101 Series:**

**POTW Procedures for Conducting Compliance Inspections**

**January 11, 2011**



## **Panel member:**

**Jan Pickrel**, EPA Office of Wastewater Management,  
Water Permits Division

**Jennifer Dodd**, Tennessee Department of  
Environmental Conservation

## **Moderator:**

**Chrystal Beasley**, US EPA

Presented by: U.S. EPA, Office of Wastewater Management

# Guide to Our Webcasts – For Technical Support Click the “Help” Button

- [To Ask a Question](#) – Type your question in the text box located in the lower left-hand corner of your screen and click on the “Submit Question” button
- [To Answer Poll Question](#) – Click on the radio button to the left of your choice and click submit. Do not type your answer in the “Ask a Question” box
- [To See Closed Captioning](#) – Turn your pop-up blocker off and click on the “closed captioning” button
- [To Complete the Survey](#) – Click the “Enlarge Slides” button and fill out the survey in the window
- [To Obtain a Certificate](#) – Watch 45 minutes of the webcast and then click “Download Certificate.” If you are in a room with multiple attendees please wait until the last slide to obtain the URL to customize your own certificates

# Pretreatment 101

- Purpose
- Previous Webcast
  - Industrial User Wastewater Survey Procedures  
([http://cfpub.epa.gov/npdes/courseinfo.cfm?program\\_id=0&outreach\\_id=522&schedule\\_id=1104](http://cfpub.epa.gov/npdes/courseinfo.cfm?program_id=0&outreach_id=522&schedule_id=1104))
- Future Webcast Training Webcasts
  - Compliance Monitoring  
(Scheduled for January 25, 2011)
  - Legal Authority & Permitting
  - Funding/Resources
  - Local Limits
  - Enforcement

# Registration for the Next Webcast

- POTW's Procedures for Conducting Compliance Monitoring
  - [www.epa.gov/npdes/training](http://www.epa.gov/npdes/training)

# Pretreatment 101: Compliance Monitoring

- Compliance with the federal requirements of 40 CFR 403.8(f)(2)
- Compliance Monitoring Procedures
  - Analytical methods
  - Sampling methods

# Pretreatment 101: Legal Authority

- Compliance with the federal requirements of 40 CFR 403.8(f)(1)
- Ordinance Requirements
  - 2005 changes to the general pretreatment regulations regarding legal authority
  - Multijurisdictional Agreements
- Issuing Control Mechanisms
  - Individual and general permits

# Pretreatment 101: Funding/Resources

- Compliance with the federal requirements of 40 CFR 403.8(f)(3)
- Organization and Staff
- Adequate Equipment
- Funding

# Pretreatment 101: Local Limits

- Compliance with the federal requirements of 40 CFR 403.5(c) & 403.8(f)(4)
- When to develop and revise local limits
- How to develop local limits
  - Determining pollutants on concern
  - Data needed to develop local limits
  - Calculation of MAHLs
  - Designating and implementing local limits



# Pretreatment 101: Enforcement

- Compliance with the federal requirements of 40 CFR 403.8(f)(5)
- Enforcement Response Plans
  - How to investigate instances of noncompliance
  - Identifying violations
  - Enforcement actions
- Significant noncompliance

# Frequency and Types of Compliance Inspections

Ms. Jan Pickrel

National Pretreatment Coordinator  
EPA Office of Wastewater Management,  
Water Permits Division

# Regulation Background

- POTW pretreatment programs must conduct surveillance activities [403.8(f)(2)(v)]
- POTWs are required to inspect each SIU at least annually except for:
  - Middle-tier CIU (MTCIU)
  - Nonsignificant Categorical Industrial User (NSCIU)

# Purpose and Objectives

- Information collection
- Identify possible pollutants of concern
- Determine compliance with regulations and control mechanism requirements
- Support enforcement actions
- Determine if previously identified problems have been resolved

# Purpose and Objectives Cont.

- BMP assessment
- Evaluate the IU's operation, maintenance, chemical storage, and pretreatment
- Evaluate slug discharge control measures
- Evaluate adequacy of designated sampling point
- Develop working relationships with IUs

# Minimum POTW Compliance Inspection Frequencies



	<b>Minimum Required Oversight</b>
All SIUs	At least once per year
MTCIUs	At least once every other year
NSCIUs	At least an annual evaluation
Other IUs	Random assessment

# Other CIU Classifications: MTCIU and NSCIU

- Prior to using these optional CIU classifications:
  - POTW must have the legal authority to implement these provisions
  - CIUs must demonstrate consistent compliance
    - As defined at 403.12(e)(3) for MTCIUs
    - As defined at 403.3(v)(2)(i) for NSCIUs

# MTCIU

## 40 CFR 403.12(e)(3)

- Discharges  $< 0.01\%$  of the design dry weather hydraulic capacity, or 5,000 gpd (which ever is smaller)
- Discharges  $< 0.01\%$  of the design dry weather organic treatment capacity of the POTW
- Discharges  $< 0.01\%$  of the maximum allowable headworks loading for any pollutant regulated by the applicable categorical pretreatment standard for which approved local limits were developed



# MTCIU (cont)

- CIU cannot be in significant noncompliance (SNC) for any time in the past two year
- CIU cannot have significantly variable daily flow rates, production levels, or pollutant levels

# NSCIU

## 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

# Reasons for an Increased Inspection Frequency

- IU's continued noncompliance with pretreatment requirements
- Complaints
- IU with variable processes, production, and wastewater discharge

# Types of Inspections

- Initial inspection
  - Industrial wastewater surveying
  - New industry
  - First visit to a facility



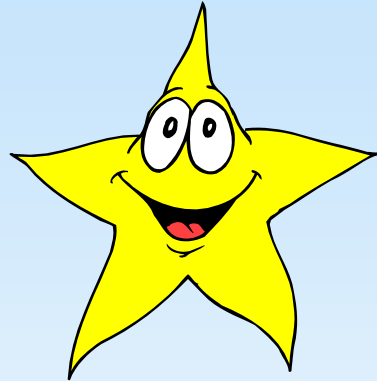
# Types of Inspections

- Routine Compliance Inspection
  - Can be announced or unannounced
  - Used to satisfy the federal requirements



# Announced or Scheduled Inspections

## ■ Pros



- Facility representative will be on-site
- Builds a cooperative relationship

## ■ Cons

- Facility may not be operating under normal conditions



# Types of Inspections

- On-demand inspections
  - Suspected violations
  - Public complaints
  - Operations issues at the POTW
  - Usual influent characteristics at the POTW
  - Emergency situations



# Questions?





# **Industrial User Inspections**

Jennifer Dodd

Pretreatment Coordinator

State of Tennessee

# Responsibilities of the Inspector

- Examine the environmental activities of a single regulated facility.
- Be knowledgeable about the requirements which apply to the industrial user.

# Proper Inspection Practices

- Legal Authority
  - Inspect within Legal Framework
  - Apply appropriate regulations
- Evidence Collection
- Safety
- Professional/Ethical Conduct
- Quality Assurance Responsibilities
- Documentation of Evaluation of Findings

# Confidential Information

- What constitutes confidential information?
- Disclosure of confidential information.
- Repercussions of improper disclosure
- Section 308 of the Federal Clean Water Act

# Pre-Inspection Activities

- Plan effectively
- Review background information

# General Facility Information

1. Previous inspection report
2. Maps and schematics
3. Names, titles, and telephone numbers of responsible facility officials
4. Any special entry requirements

# General Facility Information (cont.)

5. Nature of the IU processing operations and wastewater characteristics
6. General layout of the facility
7. Production levels
8. Changes in facility conditions since the last inspection or permit application

# General Facility Information (cont.)

9. Water use data

10. SIU slug control plan

11. Raw materials used in production processes

12. Location of storage sites for raw materials



# General Facility Information (cont.)

13. Special permit conditions

14. Progress toward meeting any applicable compliance schedule

15. Sources, volumes, and characteristics of waste discharges

# Requirements, Regulations, and Limitations

- Should have copies of:
  - All applicable Federal, State and Local regulations
  - Any joint or multijurisdictional agreements
  - Industrial user's permit and application
  - Any applicable compliance schedules which the IU might be under

# Facility Compliance and Enforcement History

1. Any correspondence between the facility and Local, State or Federal agencies
2. Past violations and compliance schedules
3. Self-monitoring data and reports
4. Past notices of violation
5. Laboratory capability and analytical methods used by the industrial user's lab

# Wastewater Treatment Systems

- Description and design specifications for the pretreatment system employed at the IU facility
- Available bypasses for existing pretreatment systems

# Entry to the Industrial Facility

- Proper, lawful entry onto an inspection site is crucial.



- Should have the ability to enter all areas of facility.

# Entry Procedures - Arrival

## Routine Inspections

Arrive during normal business hours  
Schedule a time and date for an inspection

## Emergency situations

# Entry Procedures - Entry

- Enter through the main gate
- Enter through a pre-designated point of entry
- Locate appropriate IU representative
- Obtain consent to enter the facility

# Refused Entry

- A. Present Credentials
- B. Tactfully Discuss the Reason for Denial
- C. Record Observations in the Field Notebook
- D. Privately call your Supervisor for Direction
- E. Leave and immediately collect samples



# When Consent to Inspect is NOT Necessary

A. Emergency Situations

B. Open Fields and Plain View Situations



# Perimeter Inspection

**Prior** to entering the facility...

- Examine the facility's perimeter
  - Detect leaky storage areas and other general housekeeping practices at the plant which might affect its discharge to the POTW.
  
- Evaluate the environmental conditions
  - Vegetation, Odor problems, or Direct discharges to streams.



# Inspection Form

- ✓ Use as a prompting and documentation tool, not as your inspection.
- ✓ Verify answers you receive with visual observations, and note discrepancies.



# Evaluate Need for SDCP

## 40 CFR 403.8(f)(2)(vi)

IUs must be evaluated to determine if the IU needs to develop a plan or action to control slug discharges within one year of being classified as an SIU.

# Operations/Sources of Discharge

Restroom/showers

Air pollution control  
devices

Backwash water

Boilers

Cafeteria/breakroom

Contact cooling water

Equipment washdown

Fleet maintenance

In-product

Lab

Maintenance shop

Noncontact cooling water

Cooling tower bleed off

Off spec/out of date returned  
product or raw material

Pump sealant water

Remediated groundwater

Storm water

Tank bottoms

# Documentation of Slug Evaluation

- Document your evaluation of need for SDCP
- If an IU is required to develop a plan, retain copy of SDCP
- If an IU is required to develop a plan, the IU permit should be revised to include this requirement

# Walkthrough

- Housekeeping
- Labels & containment
- Dilution sources
- Piping configurations
- Identify potential P2 opportunities
- Monitoring point location/ accessibility
- Condition of monitoring point and pretreatment equipment
- Visible permit/SUO non-compliance

**Walkthroughs can be  
performed prior to  
asking questions**



# Inspector's Field Notes

- Observations
- Documents and Photographs
- Unusual Conditions and Problems
- General Information







GRAINGER

GRAINGER

2.0. 2000000 0000

30

20

30



FLUME













# Follow-Up With IU Before Leaving

- ✓ Comment on housekeeping and/or compliance issues
- ✓ Allow IU to ask questions

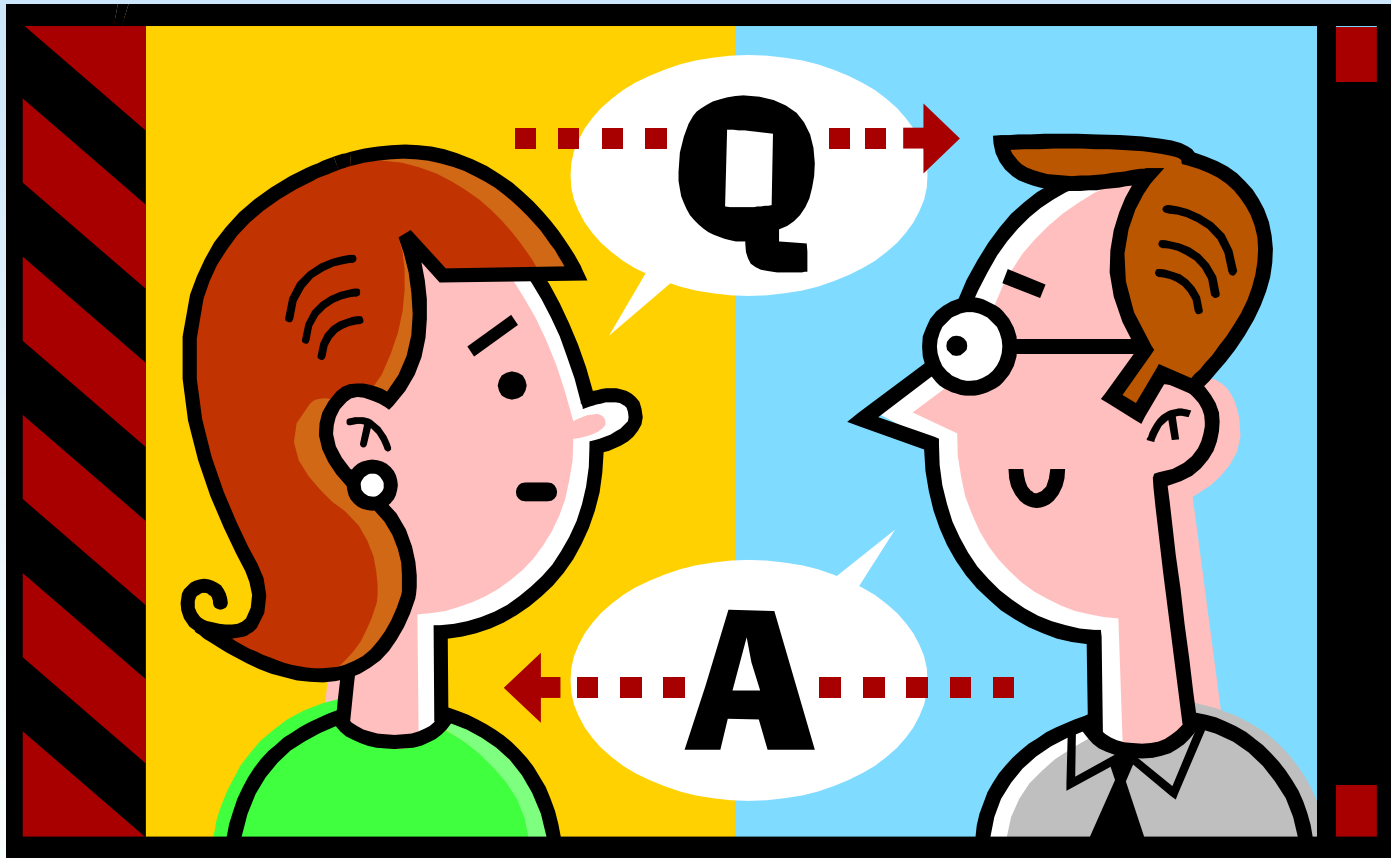
# Follow-Up Activities

- Review inspection notes
- Identify area that require follow-up
- Draft a final inspection report

# Final Inspection Report Criteria

- Accuracy
- Relevancy
- Comprehensiveness

# Questions?



# Speaker Contact Information



Jan Pickrel

EPA National Pretreatment Coordinator

[pickrel.jan@epa.gov](mailto:pickrel.jan@epa.gov)



Jennifer Dodd

State of Tennessee Pretreatment Coordinator

[jennifer.dodd@tn.gov](mailto:jennifer.dodd@tn.gov)

# Participation Certificate

- If you would like to obtain participation certificates for multiple attendees, copy and paste 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/outreach\\_files/pretreatment\\_cert\\_011111.pdf](http://www.epa.gov/npdes/outreach_files/pretreatment_cert_011111.pdf)