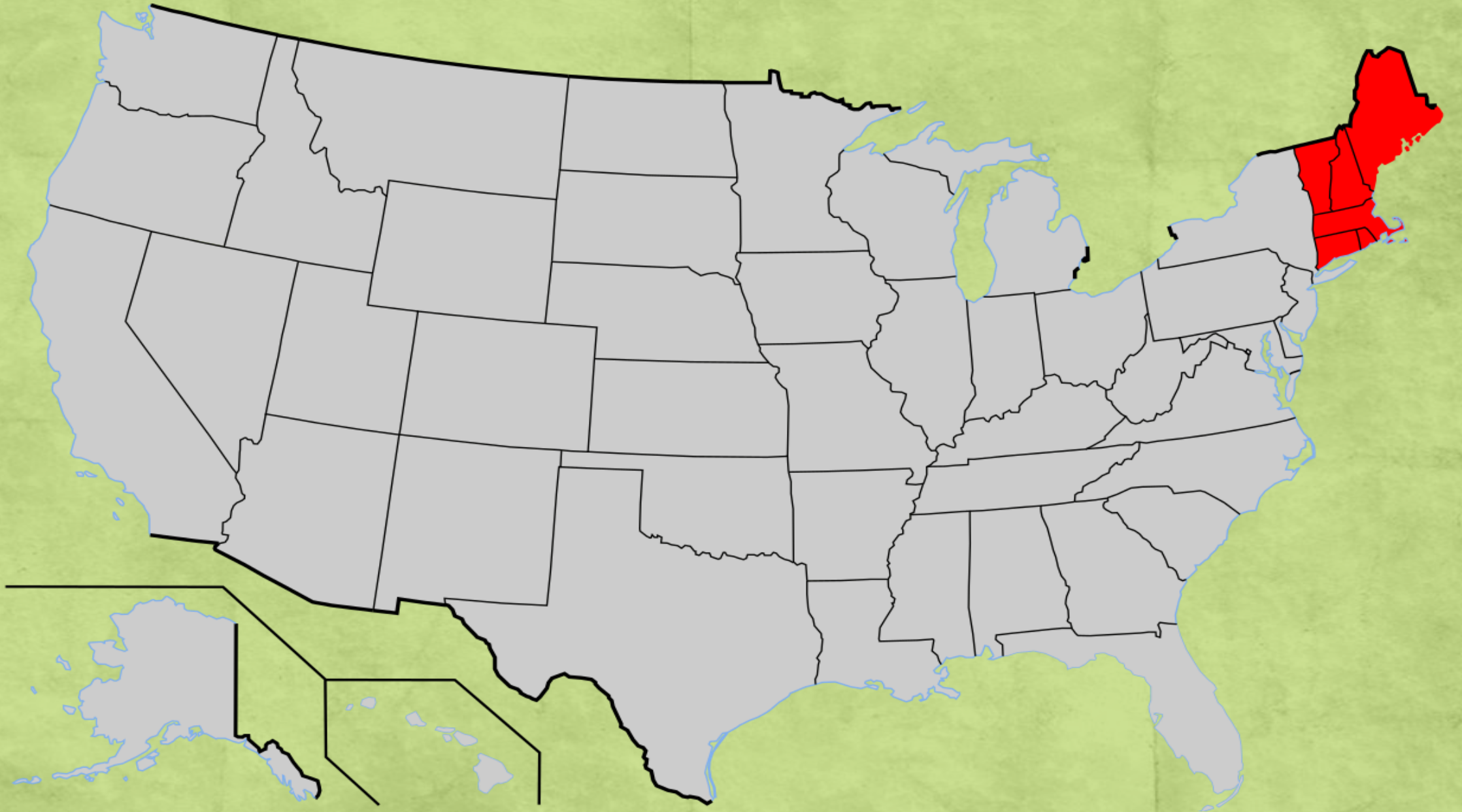


# Preparing for an EPA Pretreatment Audit

## Do's and Don'ts and How to Survive

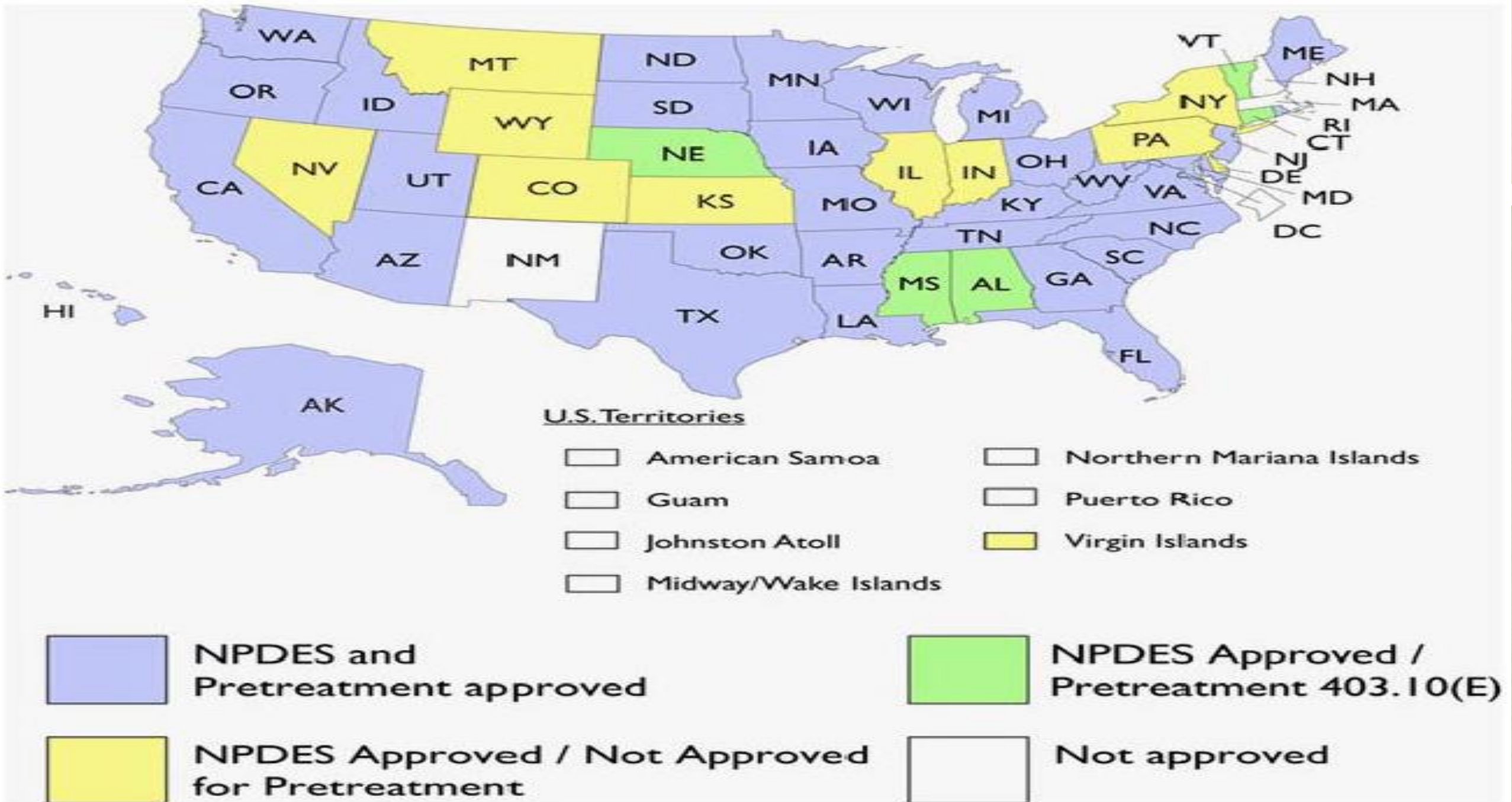
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# Background - When do they occur?

- EPA HQ national audit goal is once every five years or 20% of regional/state program annually
- Region 1 – EPA is Approval Authority for NH and MA – 62 Approved Programs in total
- FY 2021 – EPA New England Completed 14 audits for 23% Audit coverage
- EPA Authorized for NPDES (3) – NH, MA and NM
- EPA Direct Implementation States (13) – NH, MA, NY, PA, DE, IL, IN, NM, KS, CO, MT, WY, NV
- EPA HQ national PCI goal is twice every five years or 40% of regional/state program over five years





# Pre-Audit Procedures

- ~ 30 – 60 Days advance notice is given (via phone call)
- Notify program of “what to expect” and what documents will be reviewed on site:
  - SIU File: permits, inspection reports, SIU and POTW monitoring, correspondence, NOVs, etc.
  - Sewer Use Ordinance, Enforcement Response Plans and Local Limit Evaluation
  - Industrial waste surveys and BMP programs (if applicable)
  - SIU inspections to be conducted (unannounced)
  - Audit can last anywhere from 2-5+ days depending on size of program
  - Decide on a mutually agreeable date
- Send audit checklist (February 2010) to be completed by POTW
  - Section 1 (Data Review)
  - Attachment A – Program Status

# Remote Audit Protocols

- Since March 2020, EPA New England has done ~30 remote audits
- Originally planned as a POTW check-in/technical assistance effort
- Microsoft Teams is the platform
- Benefits:
  - No travel time
  - Screen sharing capabilities
  - Permit findings/recommendations are shared live on screen
  - Provides an opportunity for technical assistance
  - Can be scattered over a few days to allow for a thorough review
- Cons:
  - No *immediate* inspections conducted
  - POTWs may not have EPAs remote platform (Microsoft Teams)



# EPA Pre-Audit Review

- Review NPDES permit for pretreatment requirements
- Review latest annual report
- Review latest audit/PCI reports
- Any other pertinent information that exists
- Any outstanding deliverables ? (SUO, ERP, Local limits, etc)
- Enforcement status via ECHO

ECHO – Enforcement and Compliance History On-line

- Notify State, if applicable, to see if they want to assist

# POTW preparation – What you can do?

- Have your files in order and all in ONE place

aka – Get **ORGANIZED**



# Remember!

- General Rule of Thumb: Organized files = Good audit results (typically...)
- Documentation is a key component of the program
- Maintain a solid file structure
- Attention to detail
- Need to keep accurate and clear notes
  - Cannot be stressed enough....

# On-Site/Remote Procedures

- Opening conference
  - Include all personnel related to program
- Review checklists (Section 1) and any other information previously requested and submitted
- Review SIU files
  - Permit, Permit application, fact sheet, POTW and SIU Monitoring, inspection reports, notice of violation, correspondence, etc.
- Review any other information as necessary
- Tour of POTW (time permitting)
- SIU Inspections (EPA/State or POTW lead)
- Close-out conference



# Next Step: EPA will evaluate: RNC/SNC

- Failure to enforce against Pass Through or Interference
- Failure to submit reports within 30 days of due date
- Failure to meet compliance schedule dates within 90 days
- Failure to issue/reissue permits to 90% of SIUs
- Failure to inspect or sample 80% of SIUs within past 12 months
- Failure to enforce Pretreatment Standards or reporting (more than 15% of SIUs in SNC)
- Other: Other items of concern to the Approval Authority
- These are Significant Non-Compliance or Reportable Non-Compliance triggers that result in EPA enforcement

# Audit Follow-Up

- Determine Reportable Noncompliance (RNC) or Significant Noncompliance (SNC)
- Refer to enforcement (if necessary)
- Final report within 60 days (most cases.....)
  - Requires POTW to respond to findings within 30-45 days



# Common Findings

- Failure to annual inspect SIUs
- Failure to properly categorize a CIU
  - Electroplating (413) vs. Metal Finishing (433)
  - Phosphating is Metal Finishing
  - Cleaning typically not a Metal Finishing operation (refer to EPA/State Coordinator for determination)
- Failure to take timely and appropriate enforcement action
- Failure to develop local limits when necessary
- Local limits vs. surcharge limits for conventional pollutants (BOD, TSS) in permits
- Local limits vs. categorical standards in permit (need to apply more stringent in permit)
- Approved local limits not adopted into legal authority
- Toxic Organic Management Plan (TOMP) not on file
- SIU inspections could be more thorough
  - Develop a checklist

# Common Findings (cont'd)

- Failure to update regulations to comply with 2005 Pretreatment Streamlining Rule and/or out of date Legal Authority
- Interjurisdictional agreements poor quality or non-existent
- Other jurisdictions have not been required to develop legal authority equivalent to approved POTWs where appropriate
- Permits are missing required elements and permit fact sheets are not documenting decisions (flow vs. time composite sampling, CWF, etc.)
- Enforcement authority in permits inconsistent with legal authority
- Permit applications of poor quality and completed permit applications have blanks (not filled in)
- POTW has failed to maintain records for last local limits evaluation
- POTW has over allocated the MAIL through SIU permits
- POTW failed to follow its Enforcement Response Plan (ERP)
  - POTW failure to escalate enforcement when necessary



## Common Findings (cont'd)

- Inspections are declining in quality. Inspectors using last inspection and updating rather than a fresh form. No rotation of inspectors
- Inspections done same time each year
- The POTW needs checklist for reviewing SIU self-monitoring reports (data reviews are inconsistent)
- Staff training is inadequate resulting in stagnant program and missed industrial processes – among many other things
- Zero discharge status not verified (and permits have incorrect language for zero discharge facilities)
- Enforcement: All violations need to have a timely and appropriate response. SNC violations have to have a formal response

## Common Findings (cont'd)

- Files should have a formal filing plan and archiving schedule
- All confidential information must be kept in a separate, locked file cabinet
- All reports that are received should be stamped to marked with a "Date Received" date
- Sector Control Programs (e.g. FOG, silver, dental mercury, perchloroethylene, Nonylphenol, etc.) do not appear to have gone through public participation
- IWS procedures do not integrate with building permits department. City missing IU changes and FOG facilities.
- Resources need to be re-evaluated



## Common Findings (cont'd)

- Dentists have not submitted One Time Compliance Forms
- Laboratory reports not signed by IU representative
- Incorrect analytical methods
  - SW 846 is not approved for wastewater
  - PH and temp must be analyzed immediately
- Chain of custody forms
  - Time, date, relinquished by
  - Grabs vs. composites

# Pretreatment Compliance Audits vs. Inspections

Amelia Whitson  
EPA Pacific Southwest  
Regional Pretreatment Coordinator





China

Russia

Alaska (USA)

Canada

Japan

United States of America

NEVADA

ARIZONA

CALIFORNIA

Mexico

Republic of Palau

Commonwealth of the Northern Mariana Islands

Guam

Wake Island

Midway Island

HAWAII

Federated States of Micronesia

Republic of the Marshall Islands

Johnston Atoll

Indonesia

Papua New Guinea

Costa Rica

El Salvador

Honduras

Nicaragua

Costa Rica

Panama

Jamaica

Cuba

Brazil

Ecuador

Venezuela

Trinidad

Australia

Solomon Islands

Kiribati

Howland Island

Palmyra Atoll

Baker Island

EQUATOR

Tuvalu

Kiribati

Kiribati

Kiribati

American Samoa

Pitcairn Is. (U.K.)

Cook Is. (N.Z.)

French Polynesia

New Caledonia (Fr.)

Fiji

Tonga



Welcome to US EPA Region 9  
The Pacific Southwest Region



# Pretreatment Compliance Inspection (PCI) vs. Audit (PCA)

Similar overall process, but PCA more extensive

## PCI

- Interview
- File Review
- Site Visits

## PCA

- Interview
  - Additional interview questions
    - Data collection
    - Public Participation
    - Pollution Prevention
    - Resources
    - Industrial Waste Survey Procedure
- Review of legal authority
- Increased File Review and Site Visits
  - Look as specific issues such as
    - Application of CWF
    - Categorical Determinations, BMPs, TOMPs, etc...



# PCI vs. PCA

- Frequency of PCIs vs. PCAs depends on:
  - Authorized State program procedures
  - Section 106 funding agreements
  - Performance Partnership Agreements
  - Compliance Monitoring Strategy goals

## Information that may be reviewed prior to visit

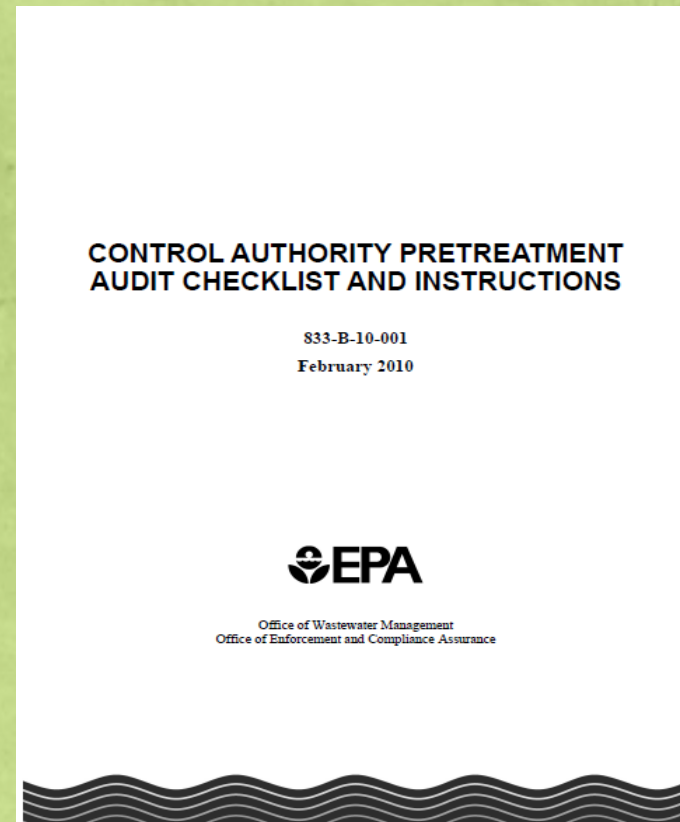
- Previous inspection/audit reports
- Learn about issues, follow-up on problems
- NPDES permit & compliance history
  - POTW influent, effluent, sludge, and toxicity test data
- Enforcement actions



# Information that may be reviewed prior to visit (cont.)

- Approved Program and any approved modifications
  - Sewer Use Ordinance
  - Multijurisdictional agreements, if applicable
  - Enforcement Response Plan
  - Industrial Waste Survey (IWS)
- Annual Report
  - To understand program (number of Significant Industrial Users (SIUs), enforcement issues, compliance sampling and inspections)
- Search for potentially unpermitted SIUs

# Audit Checklist and Instructions



Published  
February  
2010

[https://www.epa.gov/system/files/documents/2021-07/final\\_pca\\_checklist\\_and\\_instructions\\_-feb2010.pdf](https://www.epa.gov/system/files/documents/2021-07/final_pca_checklist_and_instructions_-feb2010.pdf)



# Criteria for Industrial User (IU) file review & site visits

- Selection intended to be a representative cross section of the program
- Both Categorical IUs and non-categorical Significant IUs can be chosen, with focus on:
  - CIUs with complex calculations
  - SIUs with compliance issues
  - New SIUs
  - General control mechanisms or SIUs with other optional provisions (if applicable)
  - SIUs that whose files were not reviewed previously

# File Review checklist

APDES # <<NPDES Permit Number>>

SECTION II: IU EVALUATION (Continued)				
Industry Name				
Meat Packers Inc.	ABC Metal Finishing	Electroplating USA		
INSTRUCTIONS: Evaluate the contents of selected IU files; place an emphasis on SIU files. Use N/A (Not Applicable) where necessary. Use ND (Not Determined) where there is insufficient information to evaluate/determine implementation status. Provide comments in the comment area at the bottom of the page for all violations, deficiencies, and/or other problems as well as for any areas of concern or interest noted. Enter comment number in box and in the comment area at the bottom of the page, followed by the comment. Comments should delineate the extent of the violation, deficiency, and/or problem. Attach relevant copies of IU file information for documentation. Where no comment is needed, or if the item was found to be satisfactory, enter ✓ (check) to indicate area was reviewed. The evaluation should emphasize any areas where improvements in quality and effectiveness can be made.				
File	File	File	File	File
1	2	3	—	—
<b>IU FILE REVIEW</b>				
<b>A. ISSUANCE OF IU CONTROL MECHANISM</b>				
✓	✓	✓		
✓	✓	✓		
✓	✓	✓		
NA	NA	NA		
1	1	1		
✓	✓	✓		
✓	2	3		
<b>Comments</b> 1. The permit duration exceeds the 5 year max. Permit terms are for 10 years. 2. ABC's permit does not include all applicable categorical effluent limits. Permit just includes daily maximum limits. 3. Electroplating USA's permit does not include local limits. The permit only requires the IU to comply with categorical limits.				

“✓” for items that are found to be adequate

“NA” for items that are not applicable

Footnotes to denote deficiencies or additional comments.





**SECTION II: IU EVALUATION (Continued)**

File 1	File 2	File 3	File 4	File 5	Reg. Cite
<b>IU FILE REVIEW</b>					
A. ISSUANCE OF IU CONTROL MECHANISM (continued)					
d. Self-monitoring requirements 403.800(1)(II)(B)(4)					
✓	2	4			<ul style="list-style-type: none"> <li>Identification of pollutants to be monitored</li> </ul>
NA	NA	NA			<ul style="list-style-type: none"> <li>Process for seeking a waiver for pollutant not present or expected to be present (CIUs only)</li> </ul>
NA	NA	NA			<ul style="list-style-type: none"> <li>Is the monitoring waiver certification language included in the control mechanism? (Y/N) 403.120(2)(i)</li> </ul>
NA	NA	NA			<ul style="list-style-type: none"> <li>Are conditions for reinstating monitoring requirements if pollutants not present are detected in the future included in the permit? (Y/N) 403.120(2)(ii)</li> </ul>
1	✓3	4			<ul style="list-style-type: none"> <li>Sampling frequency</li> </ul>
NA	NA	NA			<ul style="list-style-type: none"> <li>Has the POTW reduced the IU's monitoring requirements for pollutants not present or expected to not be present? (Y/N)</li> </ul>
✓	✓	5			<ul style="list-style-type: none"> <li>Sampling locations/discharge points</li> </ul>
✓	✓	✓			<ul style="list-style-type: none"> <li>Sample types (grab or composite)</li> </ul>
✓	✓	✓			<ul style="list-style-type: none"> <li>Reporting requirements (including all monitoring results)</li> </ul>
✓	✓	✓			<ul style="list-style-type: none"> <li>Record-keeping requirements</li> </ul>

**Comments**

1. Meat Packer's permit only specifies that the IU is required to conduct annual monitoring of all POCs. The City only conducts annual compliance monitoring (as specified during the interview). Therefore, Meat Packer is required to conduct at least semiannual self-monitoring of all pollutants.

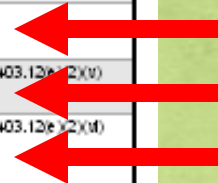
2. ABC Metal Finishing is a CIU subject to 40 CFR Part 433. Therefore is required to either sample for TTOs or develop a TOMP (Toxic Organics Management Plan) and submit semiannual TTO certifications. ABC's permit does not include either requirement.

3. The self-monitoring sampling frequency for ABC is monthly.

4. Electroplating's permit does not include any self-monitoring requirements.

5. Electroplating's permit does not clearly specify where the sample point is located. The permit just indicates that the sampling point is located in a "sampling manhole."

If a POTW is implementing any of the optional streamlining provisions, the POTW must have the legal authority to do so.



Permits requirement should be very specific.

**SECTION II: IU EVALUATION (Continued)**

File 1	File 2	File 3	File 4	File 5	<b>IU FILE REVIEW</b>	<b>Reg. Cite</b>
					<b>C. CA COMPLIANCE MONITORING</b>	
✓	4	✓			1. Inspection (at least once a year, except as otherwise specified)	403.811(2)(b)
					a. If the CA has determined a discharger to be an NSCIU	403.811(2)(b)(B)
NA	NA	NA			▪ Evaluation of discharger with the definition of NSCIU once per year	
					b. If the CA has reduced an IU's reporting requirements	403.811(2)(b)(C)
NA	NA	NA			▪ Inspect at least once every 2 years	
1	4	✓			2. Inspection at frequency specified in approved program	403.8(c)
✓	4	✓			3. Documentation of inspection activities	403.811(2)(d)
✓	4	5			4. Evaluation of need for slug discharge control plan (reevaluation of existing plan)	403.811(2)(d)
✓	✓	✓6			5. Sampling (at least once a year, except as otherwise specified)	403.811(2)(e)
					a. If the CA has waived monitoring for a CIU	403.811(2)(e)(A)
NA	NA	NA			▪ Sample waived pollutant(s) at least once during the term of the control mechanism	
					b. If the CA has reduced an IU's reporting requirements	403.811(2)(e)(C)
NA	NA	NA			▪ Sample and analyze IU discharge at least once every 2 years	
✓	✓	✓6			6. Sampling at the frequency specified in approved program	403.8(c)
2	2	NA			7. Documentation of sampling activities (chain-of-custody; QA/QC)	403.811(2)(d)
✓	✓	NA			8. Analysis for all regulated parameters	403.129(1)
3	3	NA			9. Appropriate analytical methods (40 CFR Part 136)	403.811(2)(d)
<b>Comments</b>						
1. During the interview, City personnel indicated that all SIUs are inspected twice a year. Only found one inspection report for 2009.						
2. <u>COCs</u> did not specify the sample collection times (composite start and stop times), indication of preservatives.						
3. Sample result reports indicate that solid waste methods were used.						
4. Only stormwater inspection reports were found. No pretreatment inspection reports in files.						
5. Did not find any document slug discharge evaluation in file.						
6. There were no compliance sampling data in the files, but there was a letter from the IU indicating that the facility will be closed for 2009 for company restructure and therefore no production or discharge.						

Compliance inspection and sampling frequency evaluated based on the approved program.

If the POTW does not have any documentation of its compliance activities, then the auditors have to assume that it was not performed.

Compliance monitoring must be performed so that the results can be used in enforcement proceedings or in judicial actions.



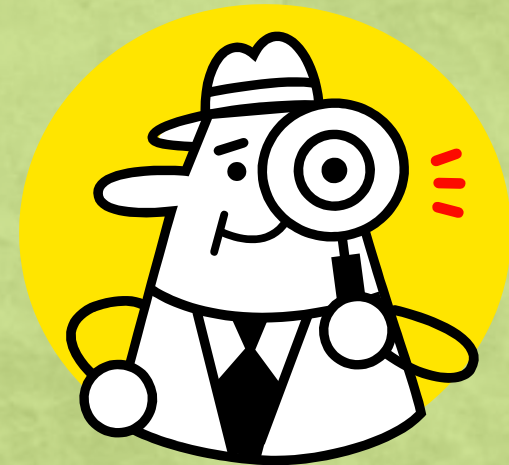
# Criteria for IU site visits

EPA recommends at least 2 IU site visits

- New facilities
- IUs whose files were reviewed
- Input from the POTW
- IUs with:
  - Outstanding pollution prevention programs
  - Innovative processes
  - Advanced pretreatment systems
- Zero-discharging CIUs

# Things Evaluated during a Site Visit

- Adequacy of IU classification
  - Has the POTW correctly classified the IU? New source vs. Existing source?
  - Has the POTW identified all sources of wastewater?
- Type of pretreatment system
  - Operational status during visit
- Process area
  - Housekeeping observations





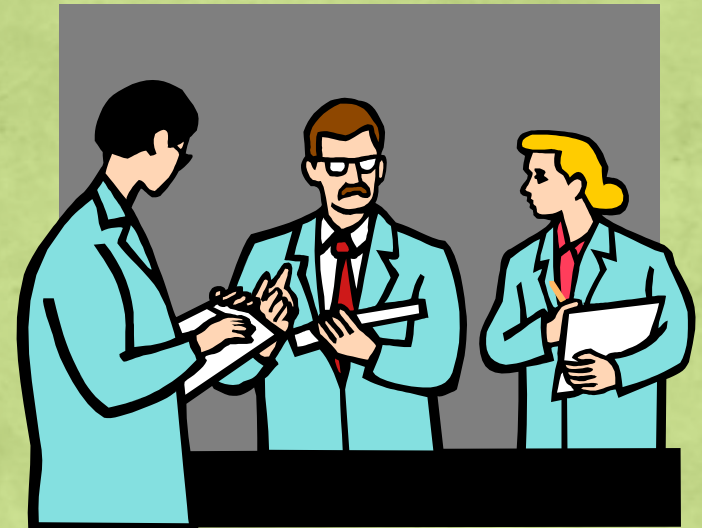
## Things Evaluated during a Site Visit (cont.)

- Chemical and hazardous waste storage and disposal
- Adequacy of the POTW's inspection procedures
- Adequacy of sampling point(s) and sampling procedures
- Unusual issues



# Closing Conference

- Summarize observations and concerns
- Share preliminary observations (not final findings)
- Explain report process
- Explain POTW response and corrective actions





# Benefits of PCAs/PCIs

- Benefits:
  - Provides EPA/State with big picture assessment of overall program compliance
  - Provides insight to POTW as to success/effectiveness of program at the time of audit
  - Creates a technical assistance opportunity
  - Builds relationship between POTW and EPA/State

# Outcomes from PCAs/PCIs

- Assessment of NPDES compliance/non-compliance
- Identifies programs in need of additional guidance/assistance
- Identify need for program modification/development
- Enforcement action against POTW and/or IUs



# Common PCI/PCA FINDINGS

1. Control Authority modified approved pretreatment program without proper notification to, or approval from, Regional Board
2. Permits contain requirements/conditions for POTW
3. Mis-classification of IUs
4. Inspectors not familiar with permitted IUs

## Common PCI/PCA FINDINGS (cont'd)

5. Problems with sampling protocols
6. Records not properly maintained
7. Not conducting “independent” compliance monitoring – POTW has lab conduct IU sampling, and lab bills IU directly for cost
8. Lack of documentation of evaluations for the need for IUs to develop slug control plans



## Common PCI/PCA FINDINGS (cont'd)

9. Failure to identify violations in IUs' periodic compliance reports, and subsequent lack of appropriate enforcement
10. Failure to escalate enforcement in accordance with approved Enforcement Response Plan
11. Not specifying 24-hour flow-proportional composite sampling requirements in permits (or documenting why not required)
12. Secondary containment issues affecting potential for slug discharge



Questions?