

Conducting Pretreatment Compliance Inspections or Audits (PCI /PCA)

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Pretreatment Training June 2014



PCI vs. PCA

Frequency of pretreatment compliance inspections (PCIs) vs. pretreatment compliance audits (PCAs) depends on:

- Authorized State program procedures
- Section 106 funding agreements
- Performance Partnership Agreements
- Compliance Monitoring Strategy goals



PCI vs. PCA (continued)

- Similar overall process
- PCA more extensive
 - Additional interview questions (data collection, public participation, P2 resources)
 - More file reviews, site visits, or specific issues like CWF, IWS
- PCA includes Legal Authority Review



Experience Needed to Conduct a PCI/PCA

- EPA/State Policy and Guidance
- Familiarity with
 - Pretreatment program goals
 - General Pretreatment Regulations (40 CFR 403)
 - Categorical Standards



Procedures for conducting a PCI/PCA

- Send checklist if requested and legal authority review checklist (for PCAs)
- Pre-site visit preparation
- On-site visit procedures
- Post-site visit follow-up



Legal Authority Review – PCAs Only

- Fill out checklist (compare to POTW version)
- Compare with 40 CFR 403 requirements
- Include summary of deficiencies in report (including recommendations)
- Include checklist with report



Preparation for PCI/PCA

- Arrange a date for inspection
- Collect necessary items
 - Credentials/business cards
 - Reference materials
 - Safety equipment
 - Paper and office materials



Preparation for PCI/PCA (continued)

Complete

- Status Update Sheets
- Pretreatment Program Profile Data Sheets

Request the POTW to send/make available copies of program documents



Pretreatment Program Status Update & Pretreatment Program Profile

Attachments A & B – Complete prior to PCI/PCA

Can be completed by

- POTW (CA), or
- Approval Authority (RWQCB)



Obtain and review materials prior to visit

- Previous inspection/audit reports
 - Learn about issues, follow-up problems
- NPDES Permit
 - Requirements for their pretreatment program
- Enforcement actions
 - Search state/federal Web sites to see if they are/were under enforcement actions
- POTW influent, effluent, sludge, and bio-monitoring/toxicity test data



Obtain and review materials prior to visit (continued)

- Approved Program and any approved modifications
- Annual Report
 - Understand program (number of SIUs, enforcement issues, compliance sampling and inspections)



On-Site Procedures

- Introductions
- Describe process to POTW
 - Interview
 - File Reviews
 - IU Site Visits
 - Closing Conference
- Outline documents that you need



PCI/PCA Procedures

- Interview
 - Document POTW personnel's answers
 - Collect any supporting documentation
- File Review
 - Decide which IUs to concentrate on
 - City need not be present
 - Make copies of permits, and other documentation to substantiate observations
- Site Visits to IUs



Criteria for IU file review

- Selection should be representative cross section of the program
- Select both CIUs and non-categorical SIUs
 - CIUs with complex calculations
 - SIUs with compliance issues
 - New SIUs
 - SIUs with general control mechanisms or have other optional provision (if applicable)
- SIUs whose files were not reviewed previously



How to Complete a File Review

APDES # <<NPDES Permit Number>>

SECTION II: IU EVALUATION (Continued)

Industry Name					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.	Reg. Cite
Meat Packers Inc.	ABC Metal Finishing	Electroplating USA	File	File		
1	2	3	---	---	IU FILE REVIEW	
A. ISSUANCE OF IU CONTROL MECHANISM						
✓	✓	✓			1. Control mechanism application form	
✓	✓	✓			2. Factsheet	
					3. Issuance or reissuance of control mechanism	403 B(c)(1)(B)
✓	✓	✓			a. Individual control mechanism	
NA	NA	NA			b. General control mechanism	403 B(c)(1)(B)(A)
					4. Control mechanism contents	403 B(c)(1)(B)(B)
1	1	1			a. Statement of duration (≤ 5 years)	403 B(c)(1)(B)(B)(1)
✓	✓	✓			b. Statement of nontransferability w/o prior notification/approval	403 B(c)(1)(B)(B)(2)
✓	2	3			c. Applicable effluent limits (local limits, categorical standards, BMPs)	403 B(c)(1)(B)(B)(3)
Comments						
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.						

Use check mark for items that are found to be adequate

Use "NA" for items that are not applicable

To denote deficiencies or additional comments, use numbers.





SECTION II: IU EVALUATION (Continued)

File 1	File 2	File 3	File 4	File 5	Reg. Cite
IU FILE REVIEW					
A. ISSUANCE OF IU CONTROL MECHANISM (continued)					
d. Self-monitoring requirements					
✓	2	4			403.800(1)(II)(B)(4)
NA	NA	NA			
NA	NA	NA			403.12e(2)(i)
NA	NA	NA			403.12e(2)(ii)
1	✓3	4			
NA	NA	NA			
✓	✓	5			
✓	✓	✓			
✓	✓	✓			
✓	✓	✓			

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 auditor should determine if the POTW has 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	IU FILE REVIEW	Reg. Cite
					C. CA COMPLIANCE MONITORING	
✓	4	✓			1. Inspection (at least once a year, except as otherwise specified)	403.811(2)(x)
					a. If the CA has determined a discharger to be an NSCIU	403.811(2)(x)(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)(x)(C)
NA	NA	NA			▪ Inspect at least once every 2 years	
1	4	✓			2. Inspection at frequency specified in approved program	403.811(2)(x)
✓	4	✓			3. Documentation of inspection activities	403.811(2)(x)
✓	4	5			4. Evaluation of need for slug discharge control plan (reevaluation of existing plan)	403.811(2)(x)
✓	✓	✓6			5. Sampling (at least once a year, except as otherwise specified)	403.811(2)(x)
					a. If the CA has waived monitoring for a CIU	403.811(2)(x)(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)(x)(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	403.811(2)(x)
2	2	NA			7. Documentation of sampling activities (chain-of-custody; QA/QC)	403.811(2)(x)(f)
✓	✓	NA			8. Analysis for all regulated parameters	403.129(x)(1)
3	3	NA			9. Appropriate analytical methods (40 CFR Part 136)	403.811(2)(x)(f)

Comments

1. During the interview, City personnel indicated that all SIUs are inspected twice a year. Only found one inspection report for 2009.

2. COCs 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.

Auditors should evaluate the compliance inspection and sampling frequency 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.

Too Complicated? Don't Worry!!

SECTION II: IU EVALUATION (Continued)					
File	File	File	File	File	Reg. Cite
—	—	—	—	—	
					IU FILE REVIEW
					D. CA ENFORCEMENT ACTIVITIES (continued)
					2. Determination of SNC (on the basis of rolling quarters)
					a. Chronic
					b. TRC
					c. Pass through/interference
					d. Spill/slug reporting load
					e. Reporting
					f. Compliance schedule
					g. Other violations (e.g., BMPs requirements)
					3. Response to violation
					4. Adherence to approved ERP
					5. Return to compliance
					a. Within 90 days
					b. Within time specified
					c. Through compliance schedule
					6. Escalation of enforcement
					7. Publication for SNC
Comments					

There is a guidance manual that describes every question in the PCA checklist.

CHAPTER 3

Audit Checklist Instructions

D.3 Response to violation

PURPOSE: The CA is expected to respond to every violation in an appropriate manner consistent with its approved ERP.

FACTORS TO CONSIDER:

- If the CA has an approved ERP, did the CA respond to each violation as specified in the ERP?
- Effective enforcement requires a timely response by the CA to all violations. The auditor should investigate the cause of any instances where a response did not occur in a timely manner.

D.4 Adherence to approved ERP

PURPOSE: Where the CA has an approved ERP, it is required to implement that plan in all its enforcement proceedings.

FACTORS TO CONSIDER:

- Implementation of the approved ERP involves timely and appropriate enforcement and escalation of enforcement actions where violations persist. The CA should have noted and responded to any instance of noncompliance with local limits and/or categorical Pretreatment Standards. At a minimum, for minor violations, the CA should have notified the IU of the violation through a phone call, meeting, or NOV. Instances of noncompliance with any pretreatment requirement should also have resulted in a response by the CA.
- In cases where the CA's actions conformed to the ERP but were not effective (i.e., they did not result in a final resolution within a reasonable length of time), the auditor should document the situation and consider whether the ERP requires modification.

D.5 Return to compliance

PURPOSE: There are a number of criteria by which to determine effective enforcement. A return to compliance within 90 days of the initial violation is the primary goal, but even effective enforcement might take longer.

FACTORS TO CONSIDER:

- One criterion for successful enforcement is the IU's return to compliance within 90 days.

Audit Checklist and Instructions

**CONTROL AUTHORITY PRETREATMENT
AUDIT CHECKLIST AND INSTRUCTIONS**

833-B-10-001
February 2010



Office of Wastewater Management
Office of Enforcement and Compliance Assurance

Published
February
2010

http://www.epa.gov/npdes/pubs/final_pca_checklist_and_instructions_%20feb2010.pdf

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
 - CIUs subject to 40 CFR Part 413



Site Visit Procedures

- Pre-notify the IU, if necessary
- Be safe and aware
- Have necessary safety gear
- Introduction at IU
 - Sit down if possible, understand processes/fill out checklist before walking the process floor



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 non-domestic wastewater?
- Type of pretreatment system
 - Operational status during visit
- Process area
 - Housekeeping observations



Things Evaluated during a Site Visit (continued)

- 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
- Qualify may not be complete
- Explain report process
- Explain POTW response and corrective actions



RWQCB Follow-Up

- Prepare report
 - Type up site visits included with report
- Data Entry (Tetra Tech)
 - Water Enforcement National Data Base (WENDB)
 - Reportable Non-compliance (RNC) / Significant Non-compliance (SNC)
 - Integrated Compliance Information System (ICIS) required ICIS Data Elements (RIDE)



RWQCB Follow-Up (continued)

Identify necessary actions

- Revisions to the NPDES permit
- Additional compliance inspections
- Enforcement activities



Need More Information on PCI/PCAs?

Review EPA's Control Authority Pretreatment Audit Checklist and Instructions

- Use Chapter 3 as a guidance on how to complete the checklist



Other Resources

- IU Permitting Guidance Manual, 2010
- Analytical Methods Update Rule (May 2012)
- Sector Notebooks (industry overviews, manufacturing processes, typical releases, applicable statutes and regulations)

<http://www.epa.gov/compliance/resources/publications/assistance/sectors/notebooks/index.html>

- Development documents for the following effluent guidelines

<http://www.epa.gov/waterscience/guide/industry.html#exist>



Questions?

