

The Pretreatment Streamlining Rule

Overview of Changes to the National Pretreatment Regulations

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Objectives of Presentation

Today's Agenda

- Issue-by-Issue Discussion.
 - Required vs. Optional

- Summary of Issues and Changes to POTW Pretreatment Programs.

The changes in the pretreatment streamlining regulations may be treated as non-substantial modifications to a pretreatment program if the local legal authority directly reflects the Federal requirements. Iowa Administrative Code adopts 40 CFR 403 by reference.

Issue-by-Issue Discussion

List of Streamlining Issues

1. Pollutants not Present – Optional
2. General Control Mechanisms – Optional
3. BMPs as Local Limits – Optional
4. Slug Control Plans – Required
5. Use of Equivalent Concentration Limits - Optional

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List of Streamlining Issues (cont)

6. Grab vs. Composite Samples - Required
7. SNC- Publication - Optional
8. SNC- Changes to the Definition - Required
9. Removal Credits - Optional
10. Equivalent Mass Limits - Optional

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List of Streamlining Issues (cont)

11. Miscellaneous Changes:

- Signature requirements for POTWs - Required
- Signature requirements for SIUs - Required
- Changes to the Net/Gross rule - Required
- Non-Categorical reporting change - Required
- Notification of changed discharge - Required

12. Classification Scheme for CIUs - Optional

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Pollutants Not Present

Previous Rule

- All Categorical Industrial Users must sample:
 - For all pollutants regulated by the standard.
- Unless:
 - Sampling for surrogate pollutants allowed, or
 - Certification (TTOs)

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Pollutants Not Present – Final Rule

If a CIU can demonstrate a pollutant is:

- not present in its process waste stream,
- not expected to be present at levels greater than that of the intake water, and
- not increased due to activities of the CIU

Then the CIU may request a waiver for monitoring that pollutant.

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Pollutants Not Present – Final Rule

Procedural

- CIU is still subject to all categorical standards, whether they must sample or not.
- CIU must apply for the waiver and demonstrate that a pollutant is not present.
- At the POTW's discretion a sampling waiver for that pollutant can be granted.
- Waiver must be incorporated into the control mechanism before the CIU can use the waiver.
- Waiver not available for the BMR or 90 day compliance report.

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Pollutants Not Present – Final Rule

Demonstration

- Take at least one process wastewater sample
 - prior to treatment
 - using the most sensitive EPA approved method
- Seasonal or other variability must be evaluated
- Source (Intake) water monitoring is conducted prior to water treatment or conditioning

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Pollutants Not Present – Final Rule

Certification in lieu of Sampling:

- The CIU must certify with each periodic compliance report that:
 - based upon its application for a waiver, nothing has changed that would lead to an increase in the pollutant
- Certification language is provided at 403.12(e)(2)(v).
 - Based on my inquiry of the person or persons directly responsible for managing compliance with the Pretreatment Standard for 40 CFR _____ [specify applicable National Pretreatment Standard part(s)], I certify that, to the best of my knowledge and belief, there has been no increase in the level of _____ [list pollutant(s)] in the wastewaters due to the activities at the facility since filing of the last periodic report under 40 CFR 403.12(e)(1).

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Pollutants Not Present – Final Rule

The Control Authority must:

- Document reasons for granting waiver
- Establish waiver in a permit
- Maintain documentation for 3 years after permit expires
- Monitor for the waived pollutants at least once during the life of the permit
- Make all documentation supporting the waiver available to the public upon request

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General Control Mechanisms

Previous Rule

All SIUs must have individual control mechanisms

(e.g.: permits)

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General Control Mechanisms – Final Rule

Summary of Change:

POTWs may control SIUs through general control mechanisms if:

- the necessary legal authority exists, and
- the SIUs are substantially similar.

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General Control Mechanisms – Final Rule

Procedural

■ Control authority may choose to make coverage optional or required.

Eligibility:

■ SIUs must be substantially similar i.e.:

- same or substantially similar types of operations,
- discharge the same type of wastes,
- require the same effluent limitations,
- require the same or similar monitoring

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General Control Mechanisms – Final Rule

Eligibility (cont):

- Can be used for facilities that are covered by concentration based standards and BMPs.
- SIUs subject to the same mass-based local limits can be covered by a general control mechanism
- CIUs subject to production-based Categorical Standards are not eligible.
- CIUs with CWF or Net/Gross or other calculated categorical standards are not eligible for general control mechanisms.

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BMPs as Local Limits

Previous Rule

Pretreatment rules are silent on whether POTWs can use Best Management Plans (BMPs) as local limits

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BMPs as Local Limits – Final Rule

BMPs may be used alone or in conjunction with local limits and can implement:

- General Prohibitions
- Specific Prohibitions, and
- become Pretreatment Standards

BMPs are at the sole discretion of the POTW upon approval by the Approval Authority.

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BMPs as Local Limits – Final Rule

Control Authority Responsibilities

To issue BMPs the Control Authority must:

- adopt legal authority to require compliance with BMPs
- ensure that their ERPs address enforcement of non-numeric requirements
- must document the supporting rationale for specific BMPs

BMPs and those IUs they cover should be specified in the legal authority and/or IU permit.

BMPs pair well with general permits.

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BMPs as Local Limits – Final Rule

Types of Elements found in BMPs:

- Utilization of a treatment system type (e.g. silver recovery)
- Requirements for certain practices or activities (e.g. dry cleanup)
- Prohibitions on certain practices or activities (e.g. dilution)
- O&M requirements of treatment units (e.g. cleaning schedule)
- Compliance certification, reporting and records retention
- Re-opener for revoking or modifying the BMP conditions
- Enforceability provisions
- Other requirements as determined by the POTW.

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Slug Control Plans

Previous Rules

Slug discharges are prohibited.

POTWs must evaluate, at least once every two years, whether each SIU needs a plan to control slug discharges.

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Slug Control Plans – Final Rule

Summary

- POTW must evaluate for the need for a Slug Control Plan only once.

- POTW must insert a provision in the SIU's permit to control slug discharges, if the POTW determines control is necessary. (Allows for periodic re-evaluation as needed).

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Slug Control Plans – Final Rule

Control Authority Responsibilities

- POTWs must evaluate need for a plan at least one time for each SIU:
 - By October 14, 2006 if the IU was identified as “significant” prior to rule’s effective date (November 14, 2005)
 - Within 1 year of being designated as “significant”, if the IU is designated as “significant” after the rule’s effective date

- POTWs need to document their determinations in the administrative file (generally the statement of basis or fact sheet that goes with the permit).

- Review of the slug plan/practices should continue to be made during the annual inspections per existing guidance

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Slug Control Plans – Final Rule

SIU Eligibility/Responsibilities

SIUs must immediately notify POTW of any changes at their facilities, affecting a change in slug discharge potential.

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Equivalent Concentration Limits

Previous Rule

No allowance for equivalent concentration limits where categorical standard requires a mass limit to be calculated based on the facility's flow.

E.g.: Organic Chemicals, Plastics, and Synthetic Fibers Categorical Standard (OCPSF)

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Equivalent Concentration Limits – Final Rule

Summary

Allows the Control Authority to use concentration limits in categorical standard for:

- new and existing users subject to OCPSF,
- new user subject to Petroleum Refining (Cr an Zn),
- and new and existing user subject to Pesticide Chemicals.

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Equivalent Concentration Limits – Final Rule

Control Authority Responsibilities

- The Control Authority must:
 - Document that dilution is not being substituted for treatment as prohibited by 40 CFR 403.6(d).
 - Adjust permit limits using the CWF when a wastestream is mixed prior to treatment
 - Adjust permit limits for dilution if wastestreams combine after treatment

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Use of Grab/Composite Samples

Previous Rule

Pretreatment regulations specify:

- Sampling methods for BMRs and 90-day compliance reports, (but not for periodic compliance reports):
 - A minimum of 4 grab samples for:
 - pH
 - Cyanide
 - Total Phenols
 - Oil and Grease
 - Sulfides
 - Volatile organic compounds
- Composite samples must be flow-proportional unless the Industrial User demonstrates that this is “infeasible”

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Use of Grab/Composite Samples – Final Rule

Summary of Changes

- Clarifies and updates application of sampling requirements;
- Provides flexibility to CA in certain sampling protocols

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Use of Grab/Composite Samples – Final Rule

Specifics

- Extends sampling requirements to include periodic compliance reports
- Allows POTWs to determine appropriate number of grab samples to measure pH, CN, total phenols, oil and grease, sulfides and VOCs
 - (4 grab samples still required for new facilities, new processes or installation of new treatment for BMRs and 90 day reports)
- Multiple grab samples for CN, total phenols, and sulfide may be composited in the field or lab prior to analysis.

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Use of Grab/Composite Samples – Final Rule

Specifics (cont)

- Multiple grab samples for O&G and VOCs may be composited in the laboratory prior to analysis.
- Grab samples for total residual chlorine, pH and temperature cannot be composited.
- Clarification: EPA interprets a “day” to be a 24 hour period that may not necessarily be a calendar day.
 - The CA may adopt a more specific sampling period.
 - The sample must be representative of what is discharged to the POTW.

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Use of Grab/Composite Samples – Final Rule

Specifics, (cont.)

- Removes requirement that flow-composite sampling must be “infeasible” in order to allow time-composite sampling (sampling must be “representative”)

SIU Eligibility/Responsibilities

- The IU must demonstrate that time proportional or grab sampling is representative before the CA may authorize.

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SNC - Publication

Previous Rule

- SNC violations in largest daily newspaper published in the municipality of POTW

Final Rule

- Allows publication:
 - in any paper of general circulation within the jurisdiction that provides meaningful public notice

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SNC – Application to Industrial Users

Previous Rule

- SNC applies to any non-domestic discharger

Final Rule

- SNC applies to Significant Industrial Users (SIUs) only, unless other non-domestic users:
 - cause Pass Through or Interference,
 - cause the POTW to exercise its emergency authority to halt or prevent a discharge,
 - cause imminent endangerment to human health, welfare or the environment, or
 - adversely affect the pretreatment program

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SNC – Daily Maximum and Average Limits

Previous Rule

- SNC determinations based on discharges limited to:
 - daily maximum
 - TRC
 - chronic, or
 - caused interference/pass through
 - long-term average violations (4-day, 7-day, 30-day, monthly)
 - TRC
 - chronic or
 - caused interference or pass through

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SNC – Daily Maximum and Average Limits

- Final Rule
- Expands applicability of TRC and chronic definitions to:
 - Any numeric Pretreatment Standard or Requirement
 - Including instantaneous limits
- Expands SNC of interference or pass through by not limiting it to a numeric violation.
 - Cause now includes:
 - Daily maximum
 - Long-term average
 - Instantaneous limit
 - Narrative standard

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SNC – Late Reports

Previous Rule

- SNC applies if a required report is submitted more than 30 days late

Final Rule

- Extends 30-day deadline to 45 days for SNC.

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Removal Credits – Affects of Overflows

Final Rule

- Retains current overflow formula
- Updates references to guidance
- Makes one technical correction to a footnote in Appendix G, Table 1:
 - THC or CO concentrations can be used to represent organic compounds in exit gas from incinerators
- Requires POTWs to be in compliance with:
 - all NPDES permit requirements
 - requirements in any orders or decrees issued pursuant to the *CSO Control Policy*

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Removal Credits – Sewage Sludge requirement

Advance Notice of Proposed Rulemaking (ANPRM)

- ANPRM: October 14, 2005.
- EPA requests comment on options to amend the consistent removal provisions to simplify the process for obtaining removal credits
- EPA requests comment on whether the addition of the 20 pollutants to Appendix G, Table II would be helpful to POTWs and IUs

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Miscellaneous Changes

Signatory Requirements for IU Reports

Final Rule

Report must be signed by:

- A responsible Corporate Officer, which is
 - A manager of one or more manufacturing, production, or operating facilities if the manager can:
 - Make recommendations concerning capital investment, and
 - Implement measures to assure long-term compliance
 - Provide accurate information for permit requirements, and
 - Has been delegated the authority in accordance with corporate procedures.

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Miscellaneous Changes

Signatory Requirements for POTW Reports

Previous Rule

A POTW report must be signed by a:

- Principal executive officer
- Ranking elected official, or
- Duly authorized employee if:
 - In charge of the overall operation of the POTW

Final Rule

The duly authorized employee can now also be the Pretreatment Coordinator.

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Miscellaneous Provisions

Net/Gross Calculations

Final Rule

Corrects unintended error in net/gross procedures which appeared to make the test for using such procedures more difficult to meet.

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Miscellaneous Provisions

Requirement to Report All Monitoring Data

Previous Rule

Only Categorical industries had to report all sampling data

Final Rule

Corrects omission from earlier addition of reporting requirements (1990) for non-categorical SIUs to require such Users to report all monitoring data

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Miscellaneous Provisions

Notification by IUs of Changed Discharge

Final Rule

When an IU provides notification, notice must be given to:

- the Control Authority, or
- If the POTW does not have an approved Pretreatment Program:
 - The POTW , and
 - The Control Authority

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Equivalent Mass Limits

Previous Rule

- Equivalent mass limit is not allowed to replace the concentration-based standard

HOWEVER:

- 40 CFR 403.6(d) allows CA to impose equivalent mass limits in addition to concentration-based standards where the CIU is using dilution to meet standards or where the imposition of mass limits is appropriate

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Equivalent Mass Limits

Final Rule

CIUs can request, and Control Authorities have discretion to approve, the conversion of concentration-based categorical standards to equivalent mass limits

Equiv. mass limits are not authorized for pollutants such as pH, temperature, radiation, or other pollutants which cannot be appropriately expressed as mass

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Equivalent Mass Limits

CIU Eligibility/Responsibilities

To be eligible for use of equivalent mass limits the CIU must:

- Implement water conservation measures that substantially reduce water use,
- Use treatment technologies adequate to achieve compliance with categorical standards,
- Demonstrate that dilution is not used to meet the standard and,
- Provide monitoring data to establish:
 - The actual average daily flow rate using a continuous effluent flow monitoring device and
 - The baseline long-term average production rate.

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Equivalent Mass Limits

CIU Eligibility/Responsibilities

To be eligible for use of equivalent mass limits the CIU must (continued):

- Demonstrate that it doesn't have
 - daily flow rates,
 - production rates, or
 - pollutant levels

that fluctuate so significantly that establishing mass limits would not be appropriate; and

- Have consistently complied with applicable categorical standards (at a minimum, no SNC over the last two years).

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Equivalent Mass Limits

Continuing CIU Responsibilities

CIU must comply with the following requirements to retain coverage:

- Maintain and operate control and treatment technologies adequate to achieve compliance with the mass limits;
- Record flow rates through use of a continuous effluent flow monitoring and recording device;
- Record facility's production rates and notify CA if rates vary by more than 20 percent from production rates used as basis for the mass limits;
- Employ same or comparable water conservation measures used in setting the mass limits.

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Equivalent Mass Limits

Continuing CIU Responsibilities

Failure to comply with these requirements will disqualify the CIU from coverage by equivalent mass limits and the pre-existing concentration-based Standards will become automatically enforceable.

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Equivalent Mass Limits

POTW Responsibilities

- POTWs should include the CIU continuing eligibility requirements in the CIU's control mechanism.
- The Control Authority must recalculate the equivalent mass limits as needed to reflect actual CIU production changes.
 - Especially if production drops
- Equivalent mass limits need not be recalculated for:
 - changes in flow due solely to water conservation (as long as dilution was not occurring during the mass limits previously calculated)

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This is Streamlining?

Changes in Categorical Industry Definition:

- Creates a 3-tier system for SIUs
 - 1st tier – Categorical SIUs
 - 2nd tier – “Middle Tier” CIUs
 - 3rd tier – NSCIUs

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SIU Definition

The POTW may now divide Categorical IUs into three different classifications having different requirements for:

- permitting,
- reporting,
- sampling, and
- inspection requirements.

Thus Non-domestic users can now be divided into the following categories:

- SIUs
- Non-Significant CIUs (NSCIUs) - **NEW**
- Middle Tier CIUs - **NEW**
- All other non-domestic users

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Non-Significant CIU

Current Rule

- A Categorical Industry is automatically a Significant Industrial User. No flexibility to exclude Categorical IUs from SIU status

Final Rule

- POTWs may reclassify CIUs with discharge volumes of no more than 100 gpd maximum as non-significant CIUs (NSCIU).
- This eliminates the need for certain oversight requirements.

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Non-Significant CIU – Final Rule

SIU Eligibility/Responsibilities

- The CIU discharges no more than 100 gpd daily maximum total categorical wastewater flow. Averaging not allowed.
- The CIU never discharges untreated concentrated wastes.
- The CIU must have consistently complied with Pretreatment Standards and Requirements.
- If categorical and non-categorical wastewaters can't be reliably distinguished, the combined flow is measured toward the 100 gpd exemption.
- Non-significant CIUs must still comply with all applicable Pretreatment Standards.

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Non-Significant CIU – Final Rule

SIU Eligibility/Responsibilities (cont)

- The NSCIU must annually certify that :
 - it continues to meet the NSCIU criteria, and
 - it complied w/ applicable standards and requirements.
- If not supported by sample results, the NSCIU must describe the basis for its compliance certification.
- The annual certification statement must be signed in accordance with 403.12(q) requirements

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Non-Significant CIU – Final Rule

POTW/CA Responsibilities

- CA must submit an inventory NSCIUs in its annual report
- CA must evaluate annually whether each NSCIU has complied with its reporting requirements.

What is no longer required of the CA?:

- A permit does not need to be issued,
- No annual inspection is required, and
- No annual compliance monitoring is required.

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Middle Tier Categorical Industrial Users

Previous Rule

There was no such classification

Final Rule

POTWs have the option of creating a category of CIUs that qualifies for reduced oversight.

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Middle Tier CIU – Final Rule

Summary of Change:

- If designated “Middle Tier”:
 - CIU can reduce reporting to one time per year
 - POTW can reduce inspections/samplings to one time every other year
- However, Middle-Tier CIUs must still comply with all applicable Pretreatment Standards.

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Middle Tier CIU – Final Rule

CIU Eligibility/Responsibilities

“Middle Tier” CIUs discharge no greater than:

- 0.01% of POTW’s design dry weather hydraulic capacity, or 5,000 gpd, whichever is smaller (measured by continuous effluent flow monitor unless CIU is batch discharger) AND
- 0.01% of POTW’s design dry weather treatment capacity; AND
- 0.01% of MAHL for any local limit developed by the POTW and approved by the Approval Authority

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Middle Tier CIU – Final Rule

CIU Eligibility/Responsibilities (cont)

■ Additional eligibility criteria:

- CIU has not been in SNC for any time in past 2 years
- CIU’s daily flow rates, production levels, or pollutant levels do not vary significantly where reduced reporting would be non-representative of operating conditions
- Eligibility is based on review of past 2 years of flow data (flow measurement using continuous flow monitoring).

■ If conditions cause eligibility change the Middle Tier CIU must immediately:

- notify the CA of any changes affecting eligibility requirements,
- begin complying with standard CIU requirements

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Middle Tier CIU – Final Rule

POTW Responsibilities

- POTW must retain documentation to support Middle Tier decision for 3 years after expiration of the CIU's permit
- POTW must monitor WWTP conditions that may result in changes to the Middle-Tier criteria (requiring the POTW to reassess eligibility):
 - MAHL changes.
 - POTW upgrades
- POTW should document its decision in the permit fact sheet and include the eligibility criteria in the permit.

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Non-Significant CIU and Middle-Tier CIU

	Require Control Mechanism?	Min CIU Reporting Requirements	Min POTW Inspection/ Sampling Requirements
NSCIUs	No (as long as it meets criteria)	Certification. Once per year	Not required (POTW will have to verify the CIU continues to meet applicability criteria).
Middle Tier CIUs	Yes	Once per year.	Once per two years
Standard CIUs	Yes	Once per six months	Once per year

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Summary the Pretreatment Streamlining Rule Change

Summary of Final Rule Changes

Issue	Rule Change
Pollutants not present	CAs can grant sampling waivers where CIU demonstrates that a regulated pollutant is neither present nor expected to be present
General control mechanisms	CAs may issue general control mechanisms to groups of SIUs that are substantially similar
BMPs as local limits	BMPs may be used with or in lieu of numeric local limits
Slug control plans	<ul style="list-style-type: none"> ■ POTWs may determine how often they evaluate SIUs for the need for slug control plans or other requirements ■ Any requirements must be reflected in control mech.
Equivalent Conc. Limits	CAs can use existing concentration-based standards instead of converting to flow-based mass limits for CIUs in OCPSE, Petroleum Refining, Pesticide Chemicals
Grab and Composite Sampling	Clarifies and updates application of sampling requirements; Provides flexibility to CA in certain sampling protocols
SNC – Publication	POTW can publish SNC violations in any paper of general circulation

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Summary of Final Rule Changes (cont'd)

Issue	Rule Change
SNC – Applicability	SNC criteria apply only to SIUs and to those IUs that have adversely affected pretreatment program
SNC – Daily Max. or Avge. Limits	Broadens scope of violations covered by chronic, TRC, and other violations
SNC – Late Reports	SNC violation occurs when reports submitted more than 45 days after deadline
SNC – TRC, Rolling Quarters, pH	No changes made to current rules
Removal Credits - Overflows	Retains and updates current formula to adjust removal credits by number of hours of sewer overflows per year
Removal Credits – Sewage Sludge	ANPRM asks for comment on adding pollutants to list of chemicals eligible for removal credits, and on potential ways to streamline consistent removal requirements
Miscellaneous Changes	Updates or corrects provisions re: to signatory requirements, net/gross calculations, requirement to report all monitoring data, and notification of changes

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Summary of Final Rule Changes (cont'd)

Issue	Rule Change
Equivalent Mass Limits	CIUs can request, and Control Authorities have discretion to approve, the conversion of concentration-based categorical standards to equivalent mass limits
CIU Oversight	<p>Establishes Non-Significant CIU (NSCIU) category (discharges < 100 gpd)</p> <ul style="list-style-type: none"> ■ CIU reporting can be reduced to yearly compliance certification ■ CA oversight can be reduced to annual evaluation of the CIU's certification <p>Establishes "Middle Tier" CIU category (discharges don't exceed (a) the smaller of 5,000 gpd or 0.01 % of POTW design dry weather hydraulic capacity; (b) 0.01 % of POTW design organic treatment capacity; and (c) 0.01 % of the MAHL)</p> <ul style="list-style-type: none"> ■ CIU reporting can be reduced to once annually ■ CA oversight can be reduced to one inspection and sampling event every other year

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What Changes are Optional vs. Required for POTWs?

Issue	Required/Optional	
Pollutants not present	Optional	403.8(f)(2)(v) 403.12(e)(2)
General control mechanisms	Optional	403.8(f)(1)(iii)
BMPs as local limits	Optional	403.5 403.8(f) 403.12(b),(c),(h)
Slug control plans	Required: Incorporate into the SIU's control mechanism.	403.8(f)(1)(iii)(B)(6) 403.8(f)(2)(vi)
Equivalent Conc. Limits	Optional	403.6(c)(6)

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What Changes are Optional vs. Required for POTWs?

Issue	Required/Optional	
Grab and Composite Sampling	Required: Extends sampling requirements to compliance reports.	403.12(b),(d),(e),(g), (h)
SNC – Publication	Optional	403.8(f)(2)(viii)
SNC – Applicability	Optional	403.8(f)(2)(viii)
SNC – Daily Max. or Avg. Limits	Required: Definition is expanded	403.8(f)(2)(viii)(A),(B),(C)
SNC – Late Reports	Optional	403.8(f)(2)(viii)(F)
Removal Credits - Overflows	Optional	403.7(h)

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What Changes are Optional vs. Required for POTWs?

Misc. Issue	Required/Optional	
Responsible Corporate Official	Required (if the POTW has adopted the specific Federal criteria)	403.12(l)
POTW duly authorized signatory expanded	Required if the POTW has defined this, generally in the definitions section.	403.12(m)
Net/Gross (error correction)	Required if the POTW adopted the direct Federal language.	403.15
Report all Monitoring Data	Required if the POTW limited reporting all monitoring data to CIUs only. Expands to include all SIUs.	403.12(g)(6).
Notification of Changed Discharge	This is targeted at SIUs in non-approved programs. States may need to update their regs.	403.12(j)

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What Changes are Optional vs. Required for POTWs?

Issue	Required/Optional	
Equivalent Mass Limits	Optional	403.6(c)(5)
CIU Oversight – Non-significant CIU	Optional	403.3(v)(2) 403.8(f)(2)(v), (6) 403.12(c)(1), (g), (i), (q)
CIU Tiering	Optional	403.8(f)(2)(v)(C) 403.12(c)(3), (i)

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That's all there is to it.

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