



What the State Wants You to Know About Pretreatment

November 5, 2025

Department of Environmental Quality



Today's Overview

- Why Pretreatment? Where did it come from?
- The Pieces of Pretreatment
 - EPA
 - NC DEQ DWR
 - Local Municipalities/POTW
 - Significant Industrial Users
- DWR Expectations
- PFAS/1,4 Dioxane Draft Rule Making

Pretreatment Program History

- 1972 Clean Water Act- requires control of industrial discharges
- 1978- Federal Pretreatment regulations established [40 CFR Part 403]
- 1982- EPA approval of the NC Program [15A NCAC 2H .0900]
- 1983-84 - majority of NC POTW Pretreatment Programs approved
- 1987-90 - major revision to NC and Federal pretreatment regulations
- 2005 – Streamlining revisions to Federal pretreatment regulations
- 2011 – revisions to NC pretreatment regulations to incorporate streamlining



Pretreatment in North Carolina

- 113 Active PT programs
- 626 Active SIUs
 - 34% Metals
 - 14% textile
 - 11% food processors
 - 5 % pharmaceuticals
 - 5% laundries
 - 4% OCPSF

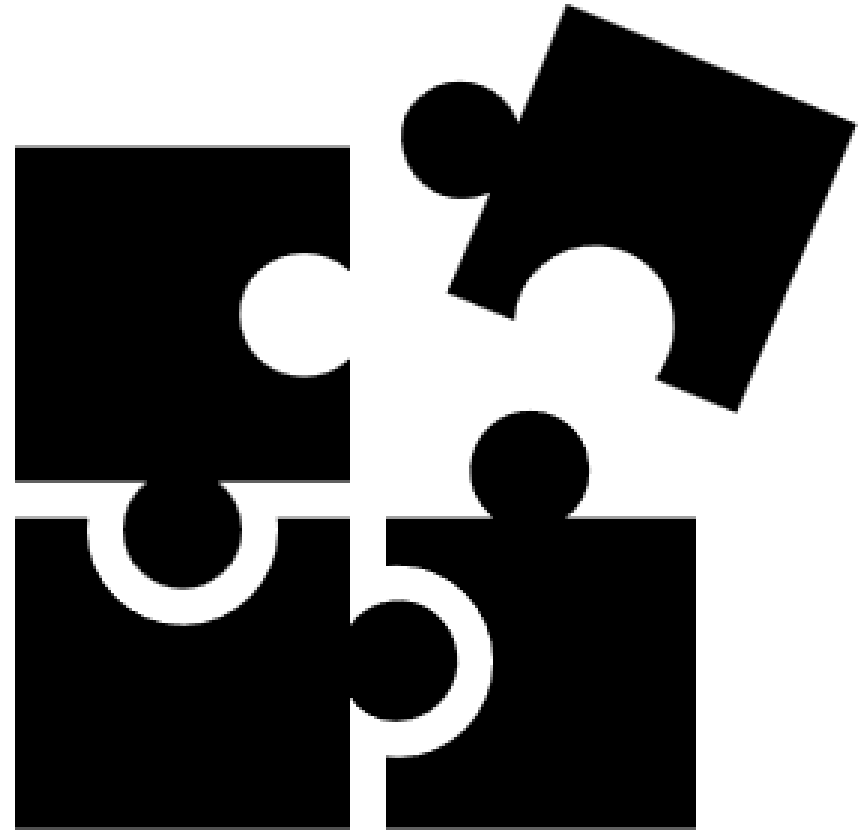


Pretreatment or Pretreatment (Program)?

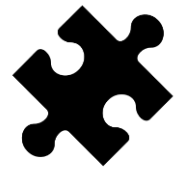
- Pretreatment:
 - the process of treating non-domestic wastewater from industrial and commercial facilities to remove harmful pollutants before it is discharged into a municipal sewer system or a Publicly Owned Treatment Works (POTW).
- Pretreatment (Program):
 - a regulatory program designed to prevent or control pollutants that could interfere with POTW operations, harm public health, or pass through the treatment plant into receiving waters such as rivers and lakes.



*Pieces of
Pretreatment:
Where do we all fit?*



Why Pretreatment?



• Federal Government- EPA

- Clean Water Act (CWA)- establishes goals for POTWs to protect the waters of our country and the need for wastewater management through compliance monitoring at POTWs (NPDES Program) and through Pretreatment Programs.
 - Delegates authority to the States.



• The State- NC DEQ DWR

- Delegated authority to implement the NPDES program
 - Pretreatment Program is a requirement of a POTW's NPDES permit.
- Approval Authority
 - Reviews all the Program elements for adequacy and/or approval



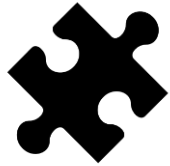
POTWs are the Control Authority

- The POTW is defined as the Control Authority in Federal, State, and Local Statutes, Rules, and Regulations
 - POTW has the Authority and the Responsibility to Control their Users as much as is necessary to protect the environment and their POTW.
 - Only POTW's will operate as an Approved Pretreatment Program from NC DEQ
 - A POTW is **REQUIRED** to have a Pretreatment Program if they accept process wastewater from a Significant Industrial User (SIU)

POTW Toolbox

- State and Federal Regulations
 - 15A NCAC 0.0900
 - 40 CFR 403- General Pretreatment Regulations
 - Categorical Standards that must be included in a Categorical Industrial User Permit
- Sewer Use Ordinance (SUO) – local law that gives the POTW the legal authority to implement and enforce their pretreatment program.
 - May contain local limits that are more stringent than the federal categorical standards of 40 CFR.
- Industrial User Permit (IUP)- permit issued to you, the industrial user, by the POTW
 - Legally enforceable, State approved, ensures protection of the POTW
 - Local permits to industrial users that are NOT CATEGORICAL may also be issued for protection.
- Enforcement Response Plan (ERP)- outlines the POTW's response to violations
 - State approved and must be followed in all enforcement cases.
- NPDES Permit- permit issued to the POTW
 - Standard conditions require the implementation of the Pretreatment Program

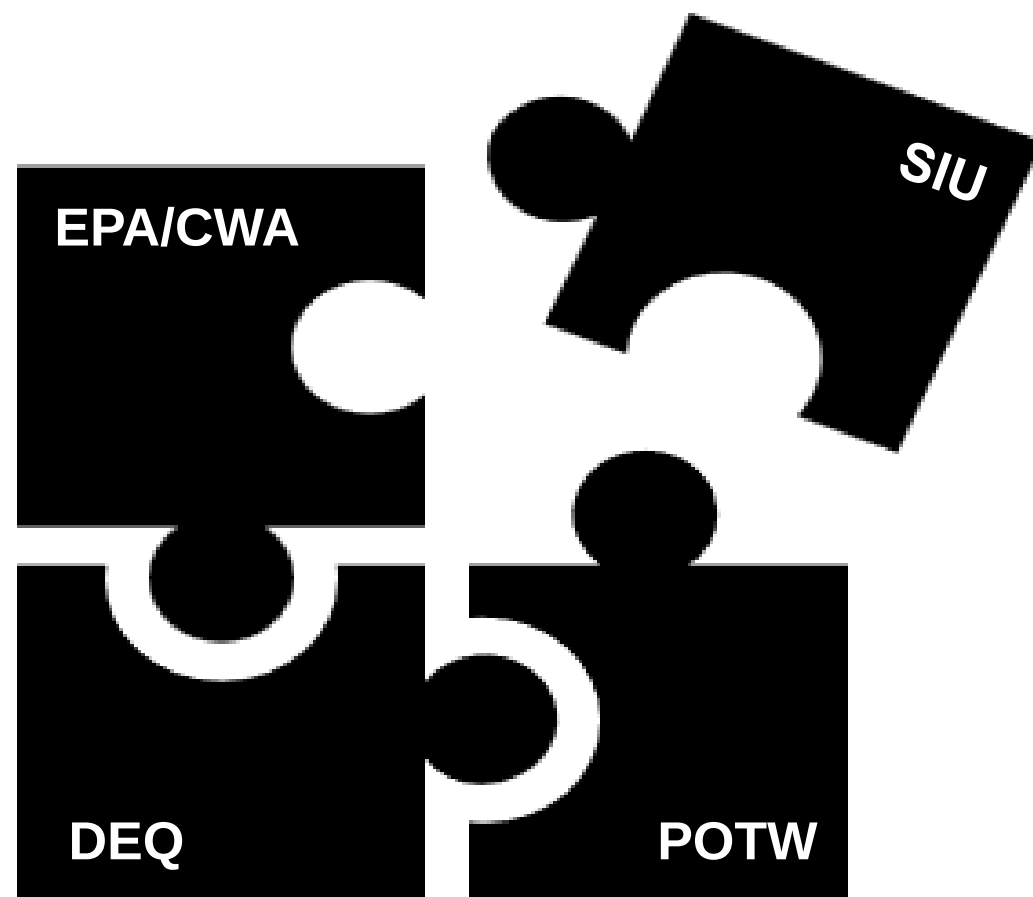




- READ the permit
- KNOW the permit
- COMPLY with the permit

Do we sense a theme?

- Lastly, COMMUNICATE with your POTW



Am I an SIU?

- >25,000 gal/day process wastewater
- >5% of allowable loading for flow, BOD, TSS or NH₃
- covered by Federal Pretreatment Regulations = Categorical Industrial User (CIU)
 - All CIUs are SIUs but not all SIUs are CIUs
- **any facility with potential for negative impact to POTW**



- State and Federal Regulations
 - 15A NCAC 0.0900
 - 40 CFR 403- General Pretreatment Regulations
 - Categorical Standards that must be included in a Categorical Industrial User Permit
- POTWs Sewer Use Ordinance (SUO) – Gives guidelines and expectations for IUs and discharges into the sewer system.
- Industrial User Permit (IUP)- permit issued to you, the industrial user, by the POTW
 - Legally enforceable, State approved, ensures protection of the POTW
 - Sampling requirements, limits, special conditions, standard conditions
- Enforcement Response Plan (ERP)- outlines the POTW's response to violations
 - Request a copy, know the responses expected and consequences of further violations
- NPDES Permit- permit issued to the POTW
 - Does this apply to you? Indirectly! – provides understanding of your own permit
 - Publicly available



DWR's Expectations

- Fully implemented approved pretreatment programs
 - Permitting
 - Permits are written to protect the POTW (and as a result the stream) and incorporate all applicable categorical standards.
 - Conditions cover any special circumstances at the SIU. This is used to protect both the POTW and the SIU.
 - Any industrial user that has the potential to cause harm (i.e., passthrough or interference) to the POTW is permitted, if need be.
 - Inspections
 - Conducted Annually
 - Treatment Units are operational
 - SIU Staff is trained and aware
 - Sampling
 - Sampling frequencies and locations representative of the SIU's discharge
 - All pollutants of concern are sampled for at the SIU's
 - Enforcement/Compliance
 - POTW is following the approve Enforcement Response Plan (ERP)
 - Compliance with ALL permit conditions and limits



- Ask your POTW for help
 - Before a violation occurs, about your permit and the conditions, before making any changes/expansions
 - They are your Control Authority
- DEQ involvement
 - Most communication happens between DEQ and the POTW
 - DEQ can assist in discussions between SIUs and the POTW, but we are not there to pick sides.

Draft Rulemaking

- Draft Rules for PFAS and 1,4 Dioxane Monitoring and Minimization
 - [Water Quality Committee](#)
 - [Meeting Information | NC DEQ](#)
- Will be an action item November 12, 2025, in the Water Quality Committee
 - Next step will be to move to the full Environmental Management Commission (EMC)
 - This could be November 13th or at the next quarterly meeting in January- depends on actions at the WQC.
 - Then out to public comment for 30 days.
- Example Draft rules require monitoring and minimization (PFOS/PFOA/GenX, specifically)
 - 15A NCAC 02H .0923
 - Monitoring and minimization for Significant Industrial Users (SIUs) through the Pretreatment Program at the local municipality
 - 15A NCAC 02B .0512
 - Monitoring and minimization for Industrial Direct Dischargers (IDD)
 - Monitoring ONLY for Publicly Owned Treatment Works (POTWs)
 - with local pretreatment programs

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Draft Rulemaking- Overview

- Baseline sampling: Quarterly samples for one year, at the SIU effluent discharge to the POTW. Reported to the POTW.
 - Any detections for PFOS, PFOA, and GenX = ongoing sampling = semiannual sampling
 - Ongoing sampling continues until four consecutive sampling events show non-detects
- Minimization Plans
 - If determined to need ongoing sampling, the SIU will be required to develop a
 - minimization plan to reduce or eliminate PFOS, PFOA and GenX loading to the POTW.
 - POTWs will report SIU monitoring and minimization activities to the Division via the Pretreatment Annual Report, due annually on March 1st for the previous calendar year.

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Questions?



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