



February 2025

*NCMA Pretreatment Audit Inspections  
in North Carolina*



# *Pretreatment Goals*

- Prevent pass through of pollutants (to waters of the state)
- Prevent interference within treatment plant and / or collection system
- Protect sludge quality
- Treatment Plant worker safety
- Equitable treatment of industrial users





*Where do we all fit?*



# *Significant Industrial User (SIU) Definition*

- $\geq 25,000$  gal/day process wastewater
- $\geq 5\%$  of allowable loading for flow, BOD, TSS or  $\text{NH}_3$
- Industrial processes covered by Federal Pretreatment Regulations = **Categorical Industrial User (CIU) [40 CFR Chapter I, Subpart N]**
- any facility with potential for negative impact to POTW (passthrough, interference, sludge standards)

Ref: **15A North Carolina Administrative Code (NCAC) 02H .0903 (30)**



# Pretreatment Regulatory Structure

- North Carolina is a “qualified state” under the **Clean Water Act’s (CWA) National Discharge Elimination System (NPDES)** program (as authorized in Section 402 of the act)



- General Pretreatment Regulations for Existing and New Sources of Pollution: Title 40 Code of Federal Regulations (CFR) Part 403
  - Categorical regulations: 40 CFR Parts 405 – 471
  - State Rules: 15A North Carolina Administrative Code (NCAC) 02H .0900
  - DWR’s Requirements: Annual reports, Audits and Inspections (for DWR to meet the CWA Section 106 Grants for Pollution Control Programs requirements)
- 
- DWR (State) is the **Approval Authority**
  - POTW (Town) is the **Control Authority**
  - A **Significant Industrial User (SIU)** is also known as an **Indirect Discharger**



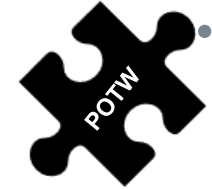
# Summary of State's Role



- Pretreatment Program Approval Authority - **NC Division of Water Resources (DWR)**
  - Requires the Publicly Owned Treatment Works (POTW) to develop a Pretreatment Program
  - Review and approval of all the POTW's *Pretreatment Program Elements*
  - Provide technical guidance to POTWs
  - Compliance & Enforcement to require POTWs to properly implement a Pretreatment Program
  - **Evaluate POTW pretreatment program implementation by conducting pretreatment compliance audits and inspections**



# *Pretreatment Audits and Inspections*



- POTW (Control Authority) must inspect each Significant Industrial User every year
  - Initial Interview
  - Site Tour
  - Pretreatment Tour
  - Sampling Review
  - Exit Interview
- DWR (Approval Authority) must inspect and audit POTWs on a rolling 5-year calendar
  - Attend an SIU inspection
  - Inspect pretreatment files for all pretreatment elements
  - 40% PT Compliance Inspections and 20% PT Audit Inspections (per EPA CWA 106 Grant Program)
    - PCI vs. PAI?

# *Pretreatment Audits and Inspections*



## SIU as the Permittee

- READ the permit
- KNOW the permit
- COMPLY with the permit
- COMMUNICATE with your POTW
- Participate in annual inspections by Control Authority (POTW)



# *Why are inspections done?*

- Fact finding
- Field verification of data
- Evaluation of adequacy of current permit
- Providing technical assistance
- Future planning
- Building rapport with SIU/IU and the POTW

# *What does an Annual Pretreatment Inspection Look Like?*

- Initial Interview
  - Has anything changed since your last inspection?
- Plant Tour
  - Visiting all areas of your facility where wastewater is generated or where there are drains that lead to the POTW
  - Are things labeled? Are production areas diked, contained, etc.? How often are these areas cleaned?
- Pretreatment Tour
  - If your facility has Pretreatment Equipment, you'll get asked about how it operates, who operates it, maintenance of it, etc.
- Sampling Review
  - How is sampling done? By your employees or an outside lab? When was your flow meter last calibrated?
- Exit Interview
  - How are your files kept – are they organized? Who can shut down production if there is a spill and how do you train on what to do if there is a spill/slug? Etc.



# *What happens when the State joins in?*

- Your inspection stays the same!
- The State is there to inspect the POTW
  - Making sure that they are inspecting SIUs properly
  - Double checking for things that the POTW may not find during an inspection as a set of "fresh eyes"
- Before entering an SIU the following occurs:
  - State reviews the SIU permit, all sample data, and any enforcement info with the POTW
  - Looking to corroborate SIU submissions with POTW records



# State → POTW Inspection Sheet

## INDUSTRIAL USER PERMIT (IUP) FILE REVIEW (3 IUP FILE REVIEWS AND 1 IU INSPECTION)

66. User Name	1.	2.	3.
67. IUP Number			
68. Does File Contain Current Permit?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
69. Permit Expiration Date			
70. Categorical Standard Applied (I.E. 40 CFR, Etc.) Or N/A			
71. Does File Contain Permit Application Completed Within One Year Prior to Permit Issue Date?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
72. Does File Contain Inspection Completed Within Last Calendar Year?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
73. a. Does File Contain Slug/Spill Control Plan? b. If No, is One Needed? (See Inspection Form from POTW)	a. <input type="checkbox"/> Yes <input type="checkbox"/> No b. <input type="checkbox"/> Yes <input type="checkbox"/> No	a. <input type="checkbox"/> Yes <input type="checkbox"/> No b. <input type="checkbox"/> Yes <input type="checkbox"/> No	a. <input type="checkbox"/> Yes <input type="checkbox"/> No b. <input type="checkbox"/> Yes <input type="checkbox"/> No
74. For 40 CFR 413 and 433 TTO Certification, Does File Contain a Toxic Organic Management Plan (TOMP)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
75. a. Does File Contain Original Permit Review Letter from Division? b. All Issues Resolved?	a. <input type="checkbox"/> Yes <input type="checkbox"/> No b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	a. <input type="checkbox"/> Yes <input type="checkbox"/> No b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	a. <input type="checkbox"/> Yes <input type="checkbox"/> No b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
76. During Most Recent Semi-Annual Period, Did POTW Complete its Sampling as Required by IUP, including Flow?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
77. Does File Contain POTW Sampling Chain-Of-Custody Forms?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
78. During Most Recent Semi-Annual Period, Did SIU Complete its Sampling as Required by IUP, including Flow?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
79. During Most Recent Semi-Annual Period, Did SIU submit all reports on time?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
80a. For categorical IUs with Combined Wastestream Formula (CWF), does file include process/dilution flows as Required by IUP?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
80b. For categorical IUs with Production based limits, does file include production rates and/or flows as Required by IUP?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
81. During Most Recent Semi-Annual Period, Did POTW Identify All Limits Non-Compliance from Both POTW and SIU Sampling?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
82. During Most Recent Semi-Annual Period, Did POTW Identify All Reporting Non-Compliance from SIU Sampling?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
83. a. Was POTW Notified by SIU (Within 24 Hours) of All Self-Monitoring Violations? b. Did Industry Resample and submit results to POTW within 30 Days? c. If applicable, did POTW resample and obtain results within 30 days of becoming aware of SIU limit violations in the POTW's sampling of SIU?	a. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A c. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	a. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A c. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	a. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A c. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
84. During Most Recent Semi-Annual Period, Was SIU in SNC?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
85. During Most Recent Semi-Annual Period, Was Enforcement Taken as Specified in POTW's ERP (NOVs, Penalties, timing, etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
86. Does File Contain Penalty Assessment Notices?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
87. Does File Contain Proof Of Penalty Collection?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
88. a. Does File Contain Any Current Enforcement Orders? b. Is SIU in Compliance with Order?	a. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	a. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	a. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
89. Did POTW Representative Have Difficulty in Obtaining Any Requested Information For You?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

FILE REVIEW COMMENTS:



# POTW → SIU Inspection Sheet

## SIU INSPECTION FORM

**Name Of Industry:** \_\_\_\_\_ **IUP #** \_\_\_\_\_  
**Address Of Industry:** \_\_\_\_\_ **IUP Expiration Date:** \_\_\_\_\_  
 \_\_\_\_\_  
**Industry Representatives:** \_\_\_\_\_ **Title** \_\_\_\_\_  
 \_\_\_\_\_  
**POTW Representatives:** \_\_\_\_\_ **Title** \_\_\_\_\_  
 \_\_\_\_\_  
**Date Of Inspection:** \_\_\_\_\_ **Time Of Inspection:** \_\_\_\_\_ am/pm  
**Purpose of Inspection:** Annual \_\_\_\_\_ Other (Describe) \_\_\_\_\_  
**POTW to which IU discharges** \_\_\_\_\_ **NPDES #** \_\_\_\_\_  
**Is SIU currently in SNC?** \_\_\_\_\_ **If yes, for what?** \_\_\_\_\_

### PART I - INITIAL INTERVIEW

Has anything changed since the last inspection or IUP application in the following:  
 COMMENTS

Product	YES / NO	_____
Raw materials used	YES / NO	_____
Manufacturing processes	YES / NO	_____
Categorical, if applicable	YES / NO	_____
Production rate	YES / NO	_____
Number of employees	YES / NO	_____
Number of shifts	YES / NO	_____

Comments: \_\_\_\_\_

**PART II - PLANT TOUR** - Visit all areas where wastewater is generated or where there are drains to the POTW.

### Plant Tour Section A - PRODUCTION AND STORAGE AREAS

- Are there floor drains in the production area? YES / NO Where do they go? \_\_\_\_\_
- Are production areas diked, contained, or otherwise constructed in such a way as to prevent harm to the WWTP, especially from spills or slugs? YES / NO Comments: \_\_\_\_\_
- Are there floor drains in the storage area? YES / NO Where do they go? \_\_\_\_\_
- Are storage tanks and areas diked, contained, or otherwise constructed in such a way as to prevent harm to the WWTP, especially from spills or slugs? YES / NO Comments: \_\_\_\_\_
- Are process and storage tanks and pipes labeled? YES / NO \_\_\_\_\_
- How are off-spec raw materials, and products disposed of? \_\_\_\_\_
- When is the production area cleaned? \_\_\_\_\_
- Is the wastewater from cleaning the production area discharged to the POTW? YES / NO \_\_\_\_\_
- What non-process wastewaters are discharged to POTW? \_\_\_\_\_

### PART II - Plant Tour Section B - PRETREATMENT SYSTEM

Ask the operator to describe pretreatment system.

- Does operator seem knowledgeable about the system? YES / NO Comments: \_\_\_\_\_
- Are all units operational? YES / NO \_\_\_\_\_
- How often does operator/maintenance person check system? \_\_\_\_\_
- Is there an operator for each shift? YES / NO \_\_\_\_\_
- How and when is sludge disposed of? \_\_\_\_\_
- Is there a schedule for preventative maintenance? YES / NO \_\_\_\_\_

Comments: \_\_\_\_\_

### PART II - Plant Tour Section C - SAMPLING POINT(S) AND FLOW MEASUREMENT

(Collect a sample if desired.)

- Does an outside lab complete sampling? YES / NO If yes, name of lab. \_\_\_\_\_
- If industry completes sampling, ask the industry representative to describe sampling procedures. Comments: \_\_\_\_\_
- Is flow measurement equipment operational? YES / NO Comments: \_\_\_\_\_
- Is there a calibration log for the flow meter? YES / NO Comments: \_\_\_\_\_

Comments: \_\_\_\_\_

### PART III - EXIT INTERVIEW

Review monitoring records and other SIU records required by IUP.

- Are files well organized? YES / NO Comments: \_\_\_\_\_
- Are sample collection / chain-of-custody forms filled out properly? YES / NO Comments: \_\_\_\_\_
- Do results in files agree with reports sent to POTW? YES / NO Comments: \_\_\_\_\_
- Who has authority to shut down production should a spill or slug discharge occur? \_\_\_\_\_
- How does SIU inform employees of whom to call at POTW in case of spill/slug? \_\_\_\_\_

If slug/spill plan is already required by POTW, review procedures.

- Is SIU implementing slug/spill plan? YES / NO Comments: \_\_\_\_\_

Comments: \_\_\_\_\_

### INSPECTION RESULTS

Slug/Spill Control Plan Needed? YES / NO

Comments, Required Or Recommended Actions: \_\_\_\_\_

**Signature Of Inspector(s)** \_\_\_\_\_ **Date:** \_\_\_\_\_  
 \_\_\_\_\_ **Date:** \_\_\_\_\_



# *DWR Municipal Unit, Pretreatment Staff (Central Office - Archdale Building)*

**Natalie Gorenssek**

(DEQ since 2023)

**Ricky Kuntz**

(DEQ since 2024)

**Keyes McGee**

(DEQ since 1999)

**Matthew Nevills**

(DEQ since 2020)

**Dr. Stephanie Zorio**

(DEQ since 2020)

**Karen Preston**  
**(Supervisor)**

(DEQ since 2024)

**Responsible for:**

***State's Pretreatment Program oversight:*** Compliance, Program Element Review, Approval Actions, Pretreatment Training, POTW & Industrial Assistance

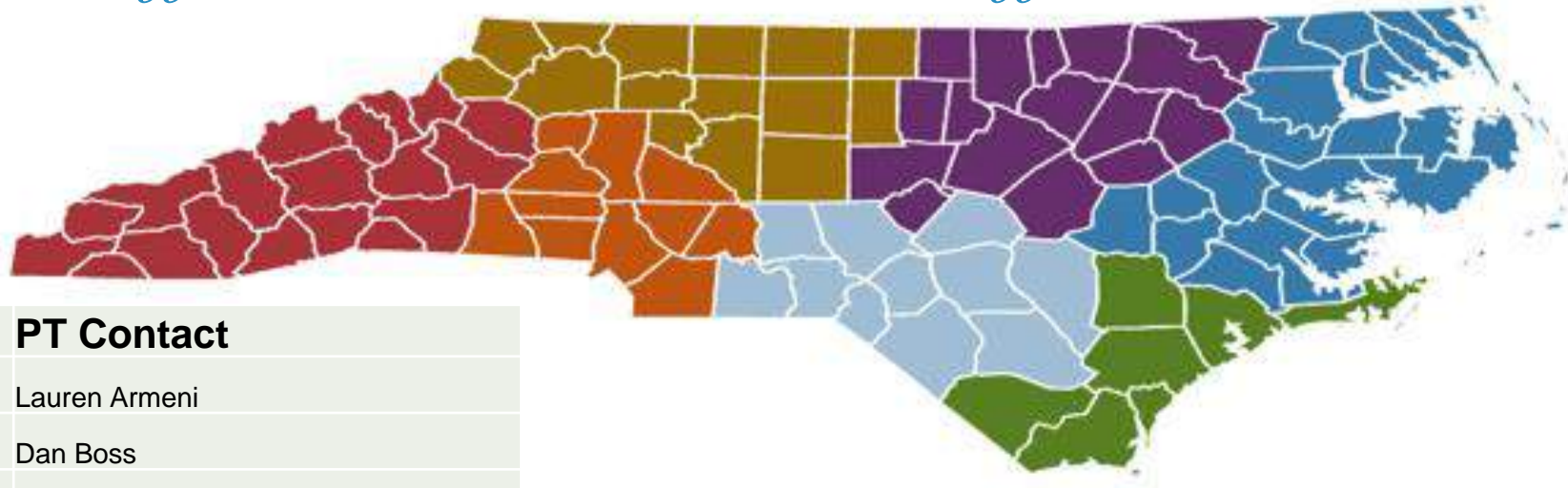


*Archdale Building, 9<sup>th</sup> Floor, 512 N Salisbury Street, Raleigh, NC 27604*

*We work daily with all NPDES Permitting Staff to assure proper implementation of Pretreatment Requirements!*



# Regional Offices' Pretreatment Staff



Regional Office	PT Contact
Asheville Regional Office (ARO)	Lauren Armeni
Asheville Regional Office (ARO)	Dan Boss
Asheville Regional Office (ARO)	Rachel Rose
Asheville Regional Office (ARO)	Melanie Kemp
Asheville Regional Office (ARO)	Richard Eguino
Asheville Regional Office (ARO)	Mikal Wilmer
Fayetteville Regional Office (FRO)	Sharon Moran
Fayetteville Regional Office (FRO)	Evelyn Hairr
Fayetteville Regional Office (FRO)	Mark Brantley
Mooresville Regional Office (MRO)	Wes Bell
Raleigh Regional Office (RRO)	Jesse Barnes
Washington Regional Office (WARO)	Robert Bullock
Washington Regional Office (WARO)	Victoria Herdt
Wilmington Regional Office (WIRO)	Ann Marie Baxter
Winston-Salem Regional Office (WSRO)	Jenny Graznak

**Red:** Asheville Regional Office  
**Brown:** Winston-Salem Regional Office  
**Light Blue:** Fayetteville Regional Office  
**Blue:** Washington Regional Office

**Orange:** Mooresville Regional Office  
**Purple:** Raleigh Regional Office  
**Green:** Wilmington Regional Office

- Email Address:
- FirstName.LastName@deq.nc.gov



## *Tips for SIU Pretreatment Success*

- Read your Industrial User Permit (IUP) permit
- Obtain copy of NPDES Permit and Factsheet
- Sample early in the compliance period
- Communicate frequently with the POTW
- Staff training to meet pretreatment requirements





# *Pretreatment Contact Info.*

Pretreatment Coordinators:

[Natalie.Gorensek@deq.nc.gov](mailto:Natalie.Gorensek@deq.nc.gov) (919) 707-3660

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[Matthew.Nevills@deq.nc.gov](mailto:Matthew.Nevills@deq.nc.gov)

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Karen Preston, Municipal Unit Supervisor

- [Karen.Preston@deq.nc.gov](mailto:Karen.Preston@deq.nc.gov) (919) 707-3871

Note: All staff uses WEBEX for phone

