

NERPCA 2025 Pretreatment Workshop

The Inherited Challenge: Taking Ownership and Breathing New Life into Your Industrial Pretreatment Program

Joy Hall, Lab Director and Pretreatment Coordinator, BNWRD Nichie Schaeffer, PE, BCEE, Baxter & Woodman

Talk Outline

- Introduction & Big Picture
- Taking Ownership
- Assessing your Program
- Challenges & Takeaways



Introduction & Big Picture

Various Scenarios of Experience

- Brand New to Pretreatment Program Implementation
- Previously in a peripheral role: lab or field only
- Familiar with some IPP components not all
- Little or no training by predecessor
- Insights & Guideposts





Joy's Story - From Behind the Fence to Program Leadership

2001 - 2019

• BNWRD Chemist

2017

Started Master's Program

2017

Succession planning to begin

2019

 Promoted to Lab Director & Pretreatment Coordinator

2020

Graduated! Master of Science





Upgrading Your Industrial Pretreatment Program

Expectation



Upgrading Your Industrial Pretreatment Program

Reality

- **Legal Authority**
- **Local Limits**

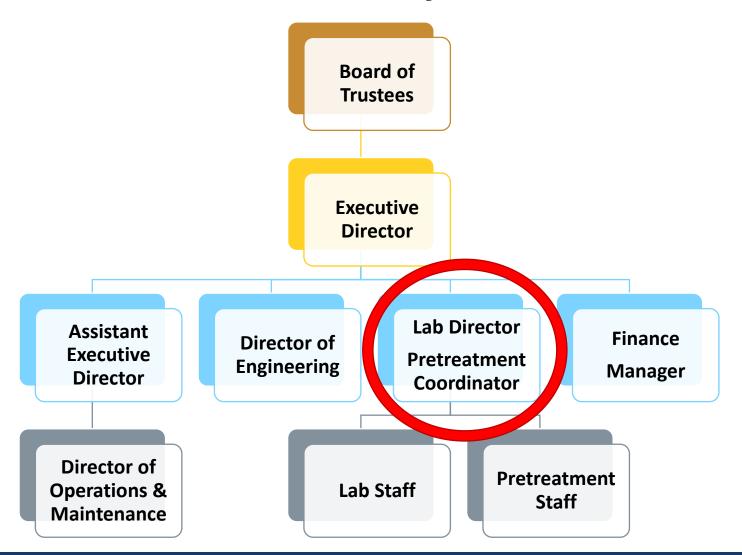
■ IU Survey

- **■** Training
- IU Monitoring
- **Complaint calls**
- **IU Inspections**
- **■** Enforcement
- **IU Classification**
- Permits

■ SM Reports



Clear the Path – Identify Internal Stakeholders



- District Elected Officials
- City Council or Elected Officials
- Manager/Administrator
- Utility Staff
- Finance
- Public Works
- Legal Department
- **Business Development**
- Building Departments

Inform Internal Stakeholders

Regulatory Compliance & Permit Requirements

Affects Responsibilities

Current & Potential IU's

Affects planning, budgets, risks, WWTP, LL

ERP & Compliance Record

Affects legal, financial, resources, planning

Program resources and funding

Decision makers understand the importance





ADDRESS INTERNAL MISCONCEPTIONS

Misconception

✓ The Pretreatment Program ONLY involves large industry

- ✓ Non-compliance ONLY impacts the industry
- ✓ The Pretreatment Coordinator ONLY issues permits & monitors industrial reports

Reality

- ✓ Program applies to ANY industry discharging pollutants into the sewer system. Ensures compliance with federal, state, and local discharge limits.
- ✓ Non-compliance can harm the POTW, leading to upsets, permit violations, or sludge disposal issues.
- ✓ Role includes site inspections, education, enforcement, develop local limits, IU survey, IU spills, coordinate with regulatory agencies

Clear the Path – Identify External Stakeholders











External Partners

- **USEPA**
- State Agency
- Approval Authority
- Municipal Officials
- Waste Haulers/Vendors
- Industrial Users
- Tributary Communities

Inform External Stakeholders

Clearly explain expectations

- Permits & Compliance
- Enforcement & Penalties
- Sampling & Reporting

Builds

- Trust & Transparency
- Improved Compliance
- Regulatory Alignment
- Improved Collaboration







ADDRESS **EXTERNAL** MISCONCEPTIONS

Misconception

- ✓ A permit is not required if hazardous waste is not generated.
- ✓ If the pretreatment staff has not sampled an IU discharge recently, compliance is not an issue.
- ✓ The program is another layer
 of government regulation that
 makes operations harder for
 businesses to succeed.

Reality

- ✓ Permits cover ANY discharge that could impact the collection or treatment system.
- ✓ Industries are responsible for selfmonitoring & submitting accurate reports. Pretreatment staff conducts its own sampling to VERIFY compliance.
- ✓ The goal is to protect workers, the collection & treatment system, the facility, public health, & the environment. Compliance prevents sewer backups, environmental contamination, and more strict federal regulations.

Foster Conversations

Seek input from internal stakeholders

 Collaborate to align goals with utility operations



Build trust & Transparency,
 Improve collaboration,
 Improve compliance

Invite discussion with peers

Join or create a discussion group





Foster Conversations

Engage with Regulatory Agencies

Ensures regulatory requirements are met



Benchmark against successful programs

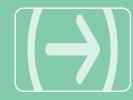
 Identify strengths and weaknesses



Strengthening Your Program



What to Assess?



How to Prioritize?



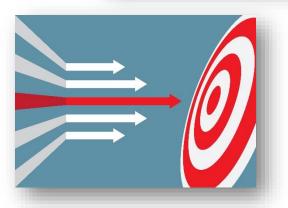
Actions to Take



Resources

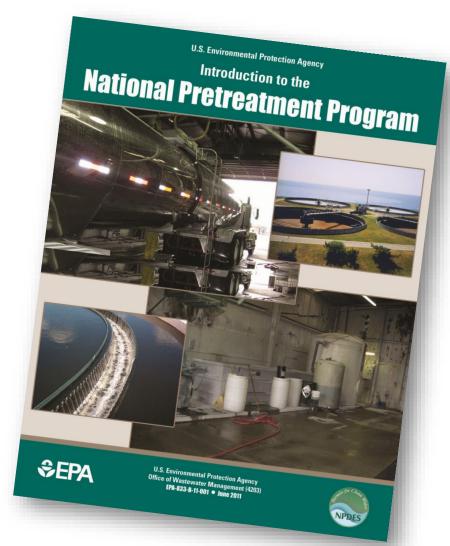






Core Responsibilities – Program Components to Assess

- IU Sampling (SMRs & Control Authority)
- Treatment Plant Sampling
- **IU Permits / Control Mechanisms**
- Annual PT Report
- Annual IU Inventory
- Annual Site Inspections
- **Local Limits**
- Legal Authority / Enforcement and ERP
- **IGAs**
- Recordkeeping



Prioritizing Components for the Assessment

Immediate or Day to Day

Infrequent

Bigger, Takes
More Time

Prioritizing Components for the Assessment

Address Now

- Easy
- In Poor Shape
- Missing
- Incomplete
- Budgeted in Fiscal Year
- Required from PCI
- Required by NPDES Permit
- Any current Non-Compliance

Address Later

- Hard / More Involved
- In Good Shape
- Found / In File
- Complete
- Not Budgeted in Fiscal Year
- Recommendation from PCI

Program Cadence – Variable Frequencies

Day to Day

- SMR Data
- NOVs
- RNOVs
- Tracking
- IU Notice of Changes

Infrequent

- SA SMRs
- Calibrations
- Slug LoadPlans Updates

Annual

- CA Sampling
- IU Inventory
- Annual Report
- SiteInspections
- PlantSampling*

Long Cycle

- Ordinance
- Local Limits
- ERP
- IGAs
- IU Permit Renewals**

^{*} Metals-Conventional and Priority Pollutants as required by WWTP NPDES equivalent permit

^{**}Depending on the permit type and duration — could be annual or multi-year

Monitoring and Reporting

- Look at current quarter
- Are all SMRs in? Next Due dates?
- Check IU permits for reporting due dates SMR and other Reporting
- CA sampling done for the year?
- SMR Tracking updated?





Enforcement

- Identify violations from current SMR or CA sampling
- Coordinate / confirm resampling with IU
- Any outstanding NOVs not yet issued?
- Expecting NOV responses from IUs?
- NOV Tracking updated?



Control Mechanisms

Check permit expiration dates

Duration is 5 years MAX

If within a year of expiration – plan a renewal campaign

content –
Classification,
most stringent
limit,
monitoring
location

IU Inventory / Survey

Has current year inventory been done? Underway? Not Started?

Survey campaign, or coordinate survey screeners?

Coordination with Building Department, Business Development, other internal depts.

Full Survey of Service Area or Maintenance year?

Found IUs that need to be permitted?





Annual Pretreatment Report

Confirm
when yours
is due in
your State or
Region

Confirm submitted for calendar year

If not, coordinate with Approval Authority

Are all SIU / CIU listed?

Are the most stringent pollutant limits (Daily Categorical vs. Local Limits) identified for each SIU?

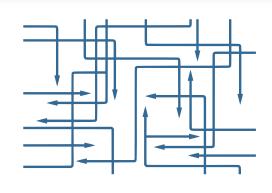
SNC published?

Bonus Task – Get registered for CDX and NeT PPR for Electronic Reporting

Annual IU Site Inspections

- All SIU completed for calendar year?
- Any IU changes that need to be reflected in discharge permit?
- Process changes triggering classification change?
- Last time the SI form was reviewed?
 Short/Long? Compare to others





Semi-Annual – Depends on State

- Influent, Effluent, Sludge Metals and Conventional Pollutants (Depends on State)
- Check NPDES permit for requirement and frequency

Annual Priority Pollutants

- Check if complete otherwise schedule
- Confirm ALL pollutants quantified
- If not, check lab or resample before end of CY
- If Priority Pollutants in Effluent or Sludge → Investigate

Waste Water Treatment Plant Sampling



Check NPDES permit for other IPP requirements!



Local Limits



NPDES Permit requirement – permit cycle?



WWTP Improvements?



Changes in SIU loading?



Documentation with rationale for technical basis?

Legal Authority

- Pretreatment

Ordinance

Date of last adoption?

Have Approval Documentation?

Any program changes not reflected in current ordinance?

Incorporated streamlining requirements?

Streamlining options may be helpful

Currently in review by Approval Authority?





Enforcement / Enforcement Response Plan

- Any IUs in continued non-compliance with a specific pollutant?
- Trending violations?
- Do you have your ERP?
- When was it last updated?
- Does your current enforcement procedures match the ERP?
- Are you following your ERP for escalation of enforcement?
- Follow your ERP as it's written → Change it if you don't like it or it doesn't meet requirements

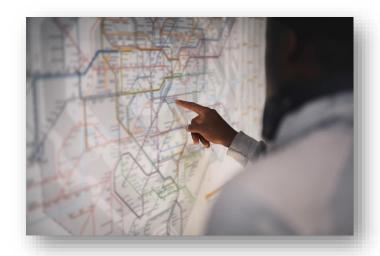




Inter-Governmental Agreements (IGA or IJA)

- Have Tributary service areas?
- Do you have IGAs in place?
- Do they have required PT language for your scenario?





Recordkeeping

Where are the hard files?

Corresponding Electronic files?

Have last 3-years of documents + current year? (litigation longer)

Organized or a mess?

Tracking – SMRs, NOVs, RNOVs, IU Permit Renewals, TOMP Spill/Slug Plan Renewals, Plant Sampling, CA Sampling

Prioritize & Plan - Create a Realistic Timeline



Develop Phased Timeline

- Short term 3-6 months
- Mid-term 1-2 years
- Long term 3-5 years

Evaluate Program Improvements

- Update Local Limits / SUO
- Revise enforcement protocols
- Expand industrial outreach

Immediate Priorities

- Urgent compliance
- Regulatory Deadlines
- IU Violations

Set
Measurable
Success
Indicators

- Enforcement action reductions
- Response times

Resources

- Introduction to the National PT Program 2011 (EPA)
- Industrial User Inspection and Sampling Manual for POTWs 2017 (EPA)
- **40 CFR 403**
- Your State's WEF Member Association → PT committee
- Regional and Neighboring POTW's/ PT Coordinators
- Network THIS ROOM!
- Your Approval Authority
- Consultants
- https://groups.io/g/Pretreatment
- https://www.epa.gov/npdes/national-pretreatment-programpublications



Welcome to Pretreatment – 2019 Case #1



- 1. Old CIU building
- 2. New CIU bought building
- 3. CIU very secretive and chaotic
- 4. Building was gutted and restored
- 5. Previous permit format needed update

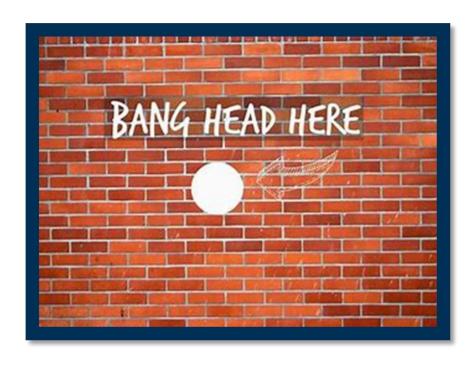
Challenge #1

Lack of Communication

- Municipality & District receive different information
- Municipality & Industry did not understand the role of the IPP
- Industry was used to getting what they want through political connections
- Upper IU management did not pay attention in meetings



Challenge #2



Constraints – Staff Availability and Expertise

- IU Upper Management kept changing
- One consistent staff knew the "old" way
- Contact person would not listen
- Pretreatment Staff = Only Me
- No training

"Know" what you don't know!

Challenge #3

Lack of documentation

Site plans out of date

Old CIU altered plumbing, not documented

No formal permit application, permits outdated

The BMR was not completed prior to process discharge.

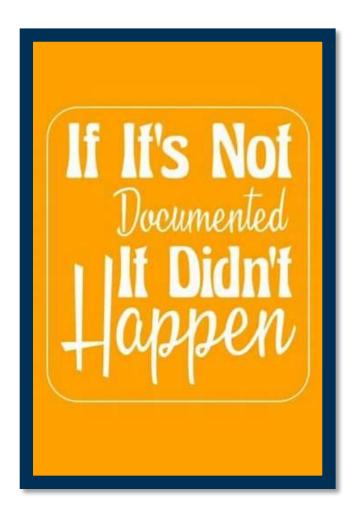
 One staff member believed it was tied to production numbers









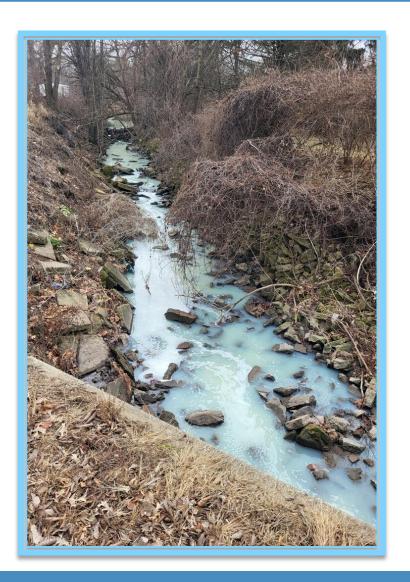


Insights Gained

- Build relationships with external partners
- Hold training sessions to inform internal & external stakeholders
- Meet in-person
- Stand your ground
- Ask for assistance
- DOCUMENT EVERYTHING

Case #2 – Pretreatment Perseverance

R&D **Discovered Industrial Facility Industrial Explosion** Spill #1 **User Survey Potential** Spill #2



Case #2 – Pretreatment Perseverance

Challenge



Complicated Scenario

- External stakeholders not completely onboard
- IU did not understand role of the District and the IPP
- IU in litigation with another entity
- Inaccurate and incomplete documents
- Had a third-party providing misinformation

Case #2 – Pretreatment Perseverance

Insights Gained

Keep Internal and External stakeholders informed and updated

Update SUO/ERP

Have consistent follow-up and tracking, stand firm

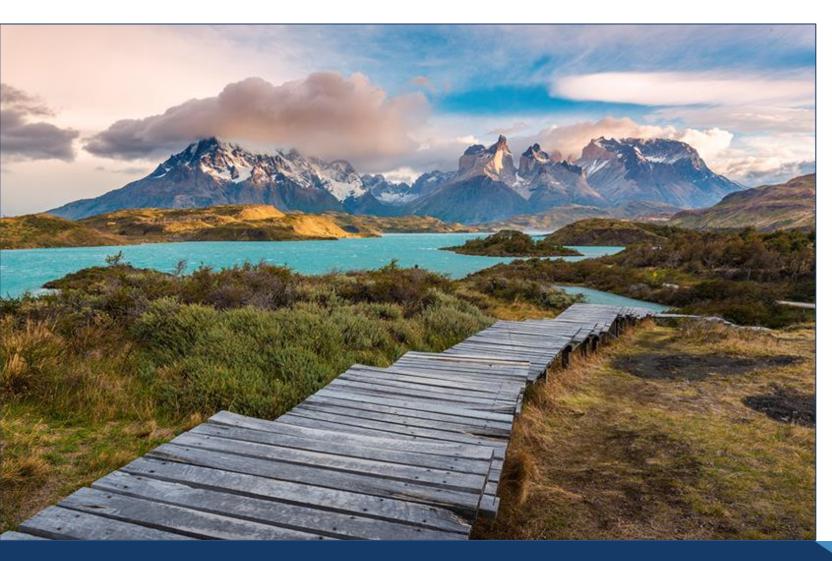
Add a certification statement to documents

Check IU's outside of normal work hours

DOCUMENT EVERYTHING



Take Ownership



- **Breathe**
- **Take time**
- Define your vision
- **Be honest**
- Be proactive
- Stay organized
- **Reach out to others**
- DOCUMENT EVERYTHING

Public Service Announcement



visit www.nacwa.org/toilets

TOLETS AGE TRASH

Only Flush the 3 P's: Pee, Poop, & Toilet Paper

Contact Information



Nichole Schaeffer, PE, BCEE

Regulatory Services Department Manager Baxter & Woodman, Inc. (815) 444-3372 nschaeffer@baxterwoodman.com



Joy Hall

Laboratory Director and Pretreatment Coordinator Bloomington Normal Water Reclamation District (309) 827-4396 jdhall@bnwrdil.gov