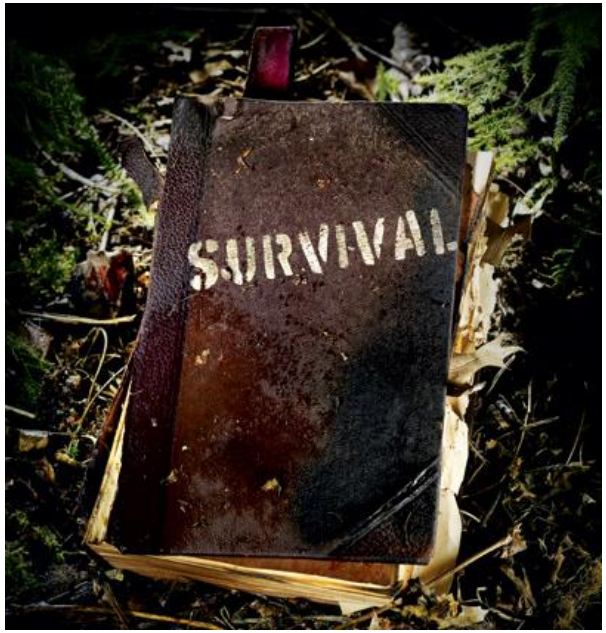
PRETREATMENT SURVIVAL: WHERE SIUS STUMBLE



NC-PC Industry Day – November 5, 2025

CUYAHOGA RIVER, OHIO
JUNE 1969

CLEAN WATER ACT HISTORY

- 1969-Over 41 million fish kills
- 1970- 30% drinking water had chemicals exceeding recommended limits
- 1971- 87% swordfish had Mercury levels unfit for human consumption
- 1972- 2/3 of country's lakes, rivers and coastal waters were unsafe for fishing or swimming.

CLEAN WATER ACT HISTORY

Federal Clean Water Act passed on October 18, 1972.

"Objective of CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

Section 307(b) mandated the creation of "pretreatment" systems for controlling industrial discharges.

PRETREATMENT

- Treatment of industrial wastewater at the industrial facility prior to discharge into a municipalities sewer system

- Administrative activities involved in regulating discharges from industries into the sewer system

PRETREATMENT REGULATIONS

- **40 CFR 403**

Federal Regulations for Pretreatment Programs

- **15A NCAC 02H .0900**

North Carolina Pretreatment Programs

PRETREATMENT SURVIVAL TIPS

SURVIVAL TIP #1

DO *NOT* TELL YOUR REGULATORY AUTHORITY:

1. An Incorrect Factual Understanding (Lie)

2. “None of their business”

3. “They do not know what they are doing”

DO *NOT* TELL YOUR REGULATORY AUTHORITY:

4. “They have no right to publish the name of my company in the newspaper”

5. “Get off my property!”

MAINTAIN RESPECT WITH REGULATORS

Unfunded mandate

Cooperation- (both parties)

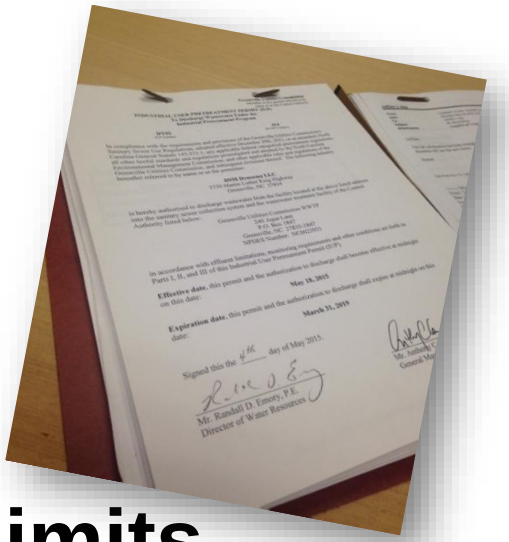
All of us are stakeholders in the protection of the POTW (Publicly Owned Treatment Works)

SURVIVAL TIP #2

BE PROACTIVE, NOT REACTIVE

- **Be interested in the "Pollutants of Concern"**
  - *What are the "**hot**" pollutants?*
- **Do your homework**
  - *READ YOUR PERMIT- not just limits*
  - *Run extra analysis if needed*
- **Ask regulatory authority how limits were derived**

BE PROACTIVE, NOT REACTIVE



- **Know what you need**
  - *READ your permit!!!*
- **Negotiate good technical limits**
  - *POTW allocation?*
  - *lbs/day versus mg/L?*
- **Achieve 100% Compliance**
  - *Focus on process daily.*

SURVIVAL TIP #3

PREVENTING VIOLATIONS

Types of Violations:

- **Effluent Limit Violations**
- **Reporting Violations**
- **Monitoring Violations**

EFFLUENT LIMIT VIOLATIONS

EFFLUENT LIMIT VIOLATION

Example

Permit Limit = 0.100 mg/L

Monitoring Result = 0.101 mg/L

Violation

Close does not count!

MONTHLY & DAILY LIMITS

Daily Max Limit- 500 mg/L

January 12- 400 mg/L

January 13- 299 mg/L

March 7- 200 mg/L

*June 24 - **501** mg/L*

1 Daily violation occurred out of 4 Daily samples. IU is in compliance. **(25%)**

Monthly Avg. Limit - 300mg/L

January 12- 400 mg/L

January 13- 299 mg/L

Jan. MA - 350

March 7- 200 mg/L

***Mar. MA -** 200*

June 24 - 501 mg/L

Jun. MA - 501

2 Monthly violations out of three samples. IU is not in compliance. **(67%)**

MONTHLY & DAILY LIMITS

MONTHLY LIMIT TO DAILY LIMIT

Monthly Avg. Limit - 300mg/L

January 12- 400 mg/L

January 13- 299 mg/L

Jan. MA - 350

March 7- 200 mg/L

Mar. MA - *200*

June 24 - 501 mg/L

Jun. MA - 501

2 Monthly violations out of three samples. IU is not in compliance. **(67%)**

Daily Max Limit - 300 mg/L

*January 12 - **400** mg/L*

January 13 - 299 mg/L

March 7 - 200 mg/L

*June 24 - **501** mg/L*

Two violations out of 4 samples. Industry is in compliance. **(50%)**

REMEMBER!

REPEATED MINOR VIOLATIONS CAN RESULT IN MAJOR VIOLATIONS

REPORTING VIOLATIONS

REPORTING VIOLATIONS

Failure To:

- Report an Effluent Violation within 24 hours
- Report Significant Change in Process
- Submit Reports On-Time (Detailed in Permit)
- Submit/Report all Data Collected

REPORTING VIOLATIONS *CONT.*

Failure to:

- Submit Flow Monitoring Reports/Calibration Records
- Submit Request for Authorization to Construct (A to C)
- Submit Slug/Spill Plans
- Submit Total Toxic Organic Statements
- File Permit Applications (Initial and Renewal)

MONITORING VIOLATIONS

MONITORING VIOLATIONS

Collect Self-Monitor Samples as Required By Your Permit

Failure to:

- Take Required Number of Samples
- Take Correct Type of Sample
- Analyze Sample In Accordance With Permit
- Follow 40 CFR 136 – EPA Sampling guidelines

- Re-sample and Submit Results within **30 Days** for Effluent Limits Violations

MONITORING TIPS

- **Make sure you monitor at the same sampling location as your regulatory authority.**
- **If you monitor more frequently than required by your permit, submit the results for compliance.**
- **If you are required to self-monitor, sample early.**

PREVENTION

✓ **READ YOUR PERMIT**

- ✓ Check Data
- ✓ Double Check Data
- ✓ Triple Check Data
- ✓ One Wrong Number = 2 violations
- ✓ Review Chain-of-Custody

PREVENTION

- ✓Review Sampling Procedures
- ✓Check Your Report Against Lab Report
- ✓Submit Information on Time
- ✓Document-Document-Document
- ✓Communication (in-house and with Control Authority)

SURVIVAL TIP #4

AVOID BAD HOUSEKEEPING

It's just Human Nature

Poor Housekeeping equates to lack of attention

Do not neglect an opportunity to create a positive image

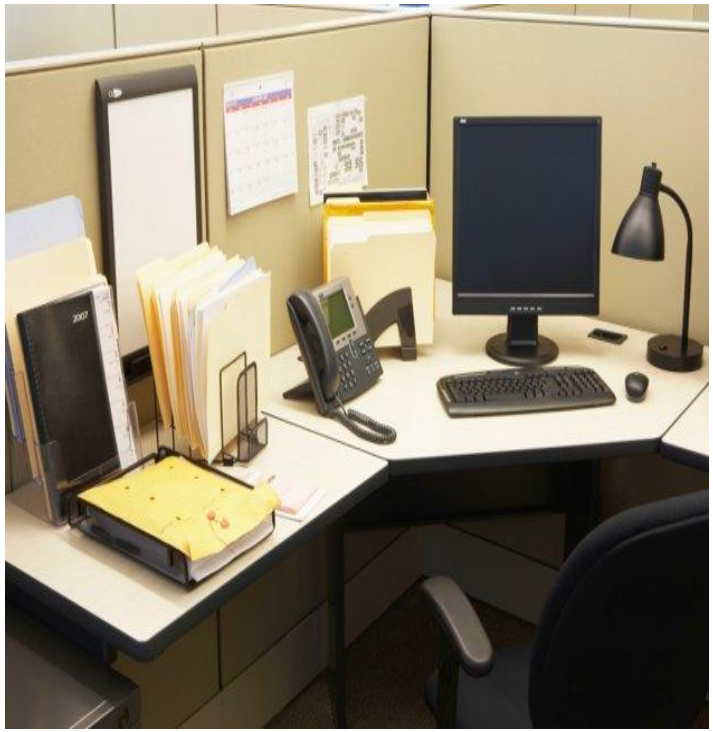
AVOID BAD HOUSEKEEPING

RECORDKEEPING

- ✓ Easily Accessible
- ✓ Orderly
- ✓ In files, NOT piles!!
- ✓ Retained according to Permit.

GOOD VS. BAD HOUSEKEEPING

GOOD VS. BAD HOUSEKEEPING



EXAMPLES

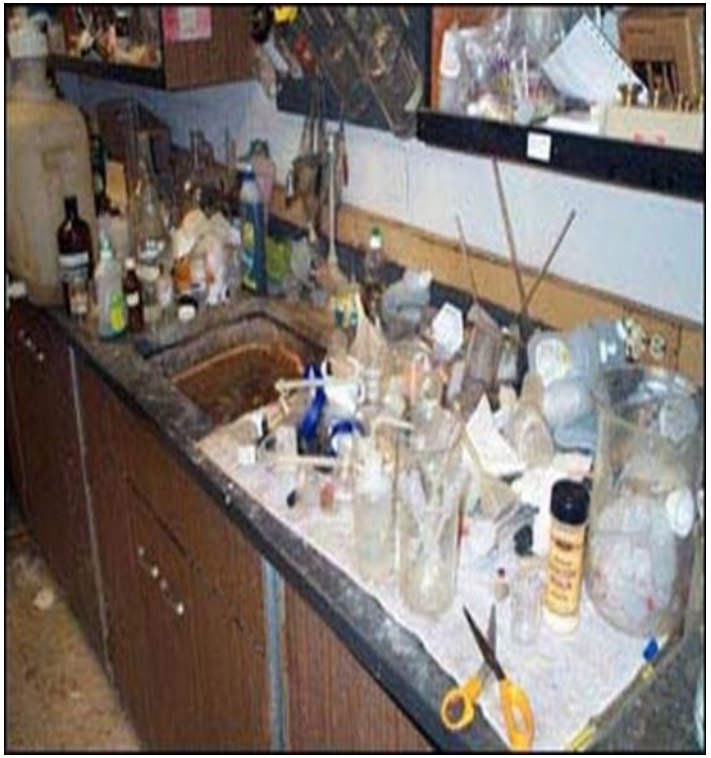
BEFORE

AFTER

POOR HOUSEKEEPING

HOUSEKEEPING

HOUSEKEEPING



SURVIVAL TIP #5

REGULATORY INSPECTIONS

- General Facility Information
- Process Activities
- Record Management
- Pretreatment System

REGULATORY INSPECTIONS

- Waste Disposal
- Chemical Storage
- Future Changes
- Spill Control

REGULATORY INSPECTIONS

- Pretend that your regulatory authority is a raw material
- Have your files organized
- Ask for a copy of the inspection report

SURVIVAL TIP #6

OFFICIAL REPRESENTATIVES

- Designate more than one person to be involved in the pretreatment program area

- Choose individuals who have the authority to make decisions and act on behalf of the company

SURVIVAL TIP #7

CONFIDENTIALITY

- **Confidentiality must be requested at time of submission**
- **Trade Secret Protection**
- **Data shall be available to State Agencies for judicial review or enforcement proceedings**
- **Wastewater Monitoring Data - *Public Record***

SURVIVAL TIP #8

MONITOR YOUR OWN REGULATORY FILES

- Conduct a Self-Audit
- Request information from your Regulatory Authority on their Public Information Policy
- Make sure your files "Speak for You"

SURVIVAL TIP #9

NOTIFICATION

- Notify your regulatory authority if you need to bypass your pretreatment system
- Notify the regulatory authority if you have a discharge that could cause a problem at the wastewater plant
- Obtain monitoring data ASAP “call the lab”
- Educate your employees
- Be proactive, not reactive

SURVIVAL TIP #10

DOCUMENTATION

If you didn't write it down, YOU DIDN'T DO IT!

OOPS!

DISASTER RECOVERY

- **Communicate (Good and Bad)**
- **Do NOT ignore Problems**
- **Demonstrate Good Faith by Concrete Actions not Promises**
- **Seek Help**

We are all stakeholders to the success of the Pretreatment Program. We must work together to survive as a business and a community.

THE END RESULT