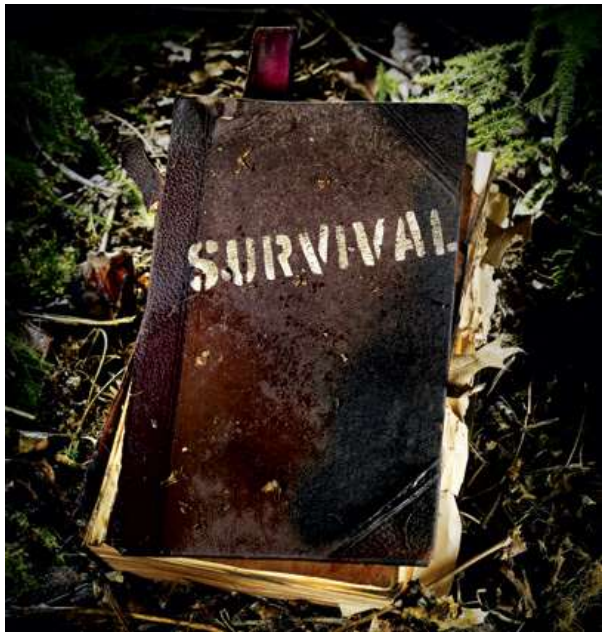
THE REGULATOR'S GUIDE TO PRETREATMENT SURVIVAL



NC-PC Industry Day

December 7, 2022

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)

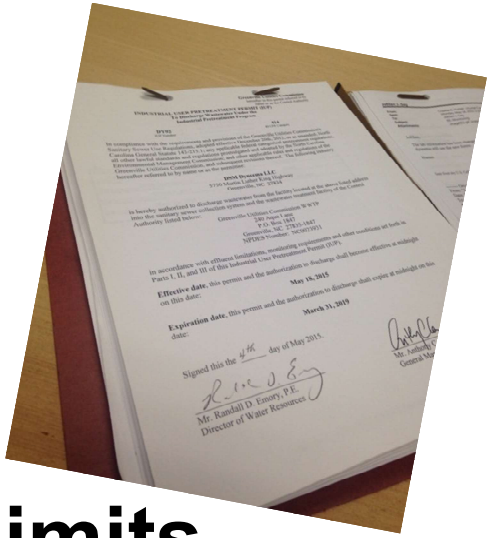
All of us are stakeholders in the protection of the POTW (Publicly Owned Treatment Works)

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

<u>Example</u>

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 not in SNC **(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 in SNC. **(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

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2 Monthly violations out of three samples. IU is in SNC. **(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 not in SNC. **(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

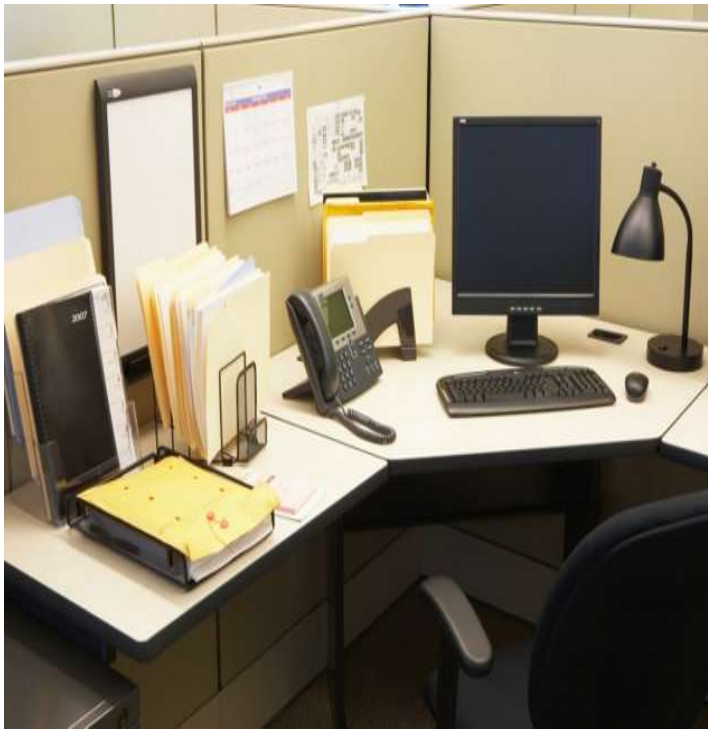
AVOID BAD HOUSEKEEPING

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