

Introductory Pretreatment Workshop

January 21-13, 2009

Sponsored by:
California River Basin
Water Quality Control Board

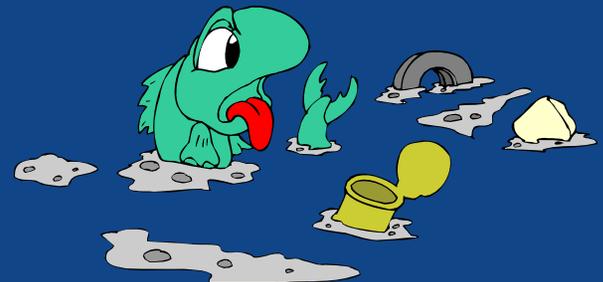


TETRA TECH, INC.



The Time Before Pretreatment

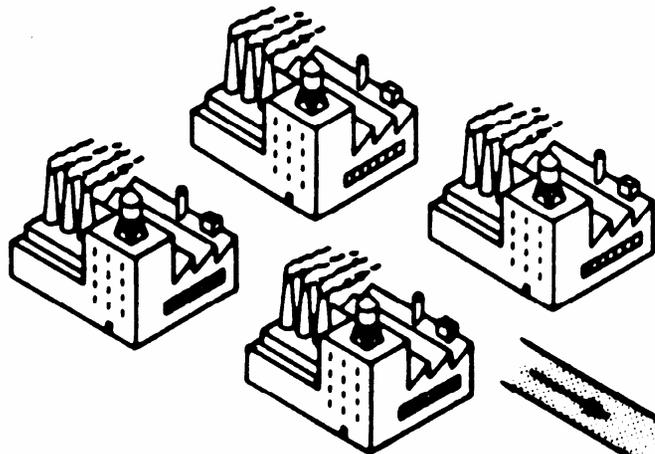
- The industrial boom of the 1950s and 60s brought scenes on the evening news of
 - Dying fish
 - Burning rivers
 - Thick black smog engulfing major metropolitan areas



40 CFR Part 403

- **U.S. Code of Federal Regulations(CFR)**
 - > **Title 40 - Protection of the Environment**
 - > **Chapter I - Environmental Protection Agency**
 - > **Subchapter N - Effluent Guidelines and Standards**
 - > **Part 403 - General Pretreatment Regulations for Existing and New Sources of Pollution**





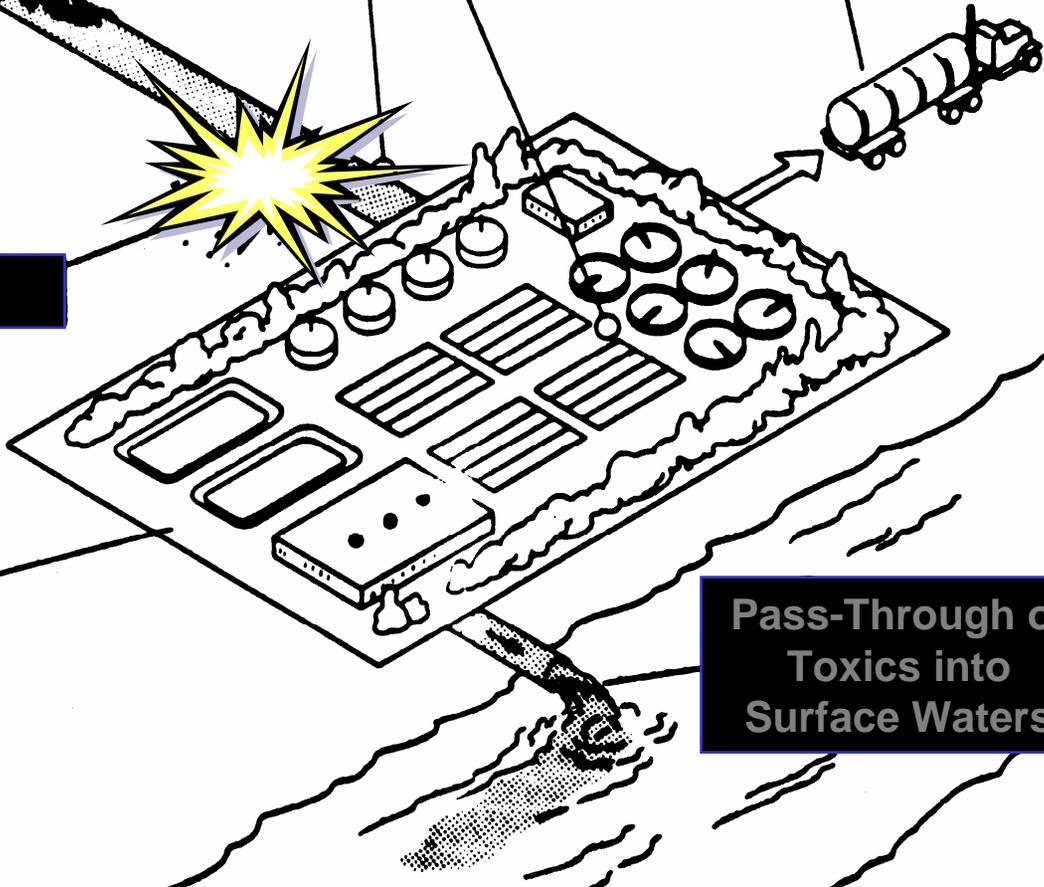
Limitations on Sludge Disposal Options and/or Greater Expense

Corrosion of Collection System and/or Treatment Plant

Explosions

Interference with Wastewater Treatment Facility

Pass-Through of Toxics into Surface Waters



40 CFR Part 403

Objectives

- To prevent the introduction of pollutants into POTWs which will:
 - interfere,
 - pass through, and/or
 - be incompatible.
- To improve opportunities to recycle and reclaim wastewaters and sludges.
- To protect POTW workers.







Who Must Develop a Program?

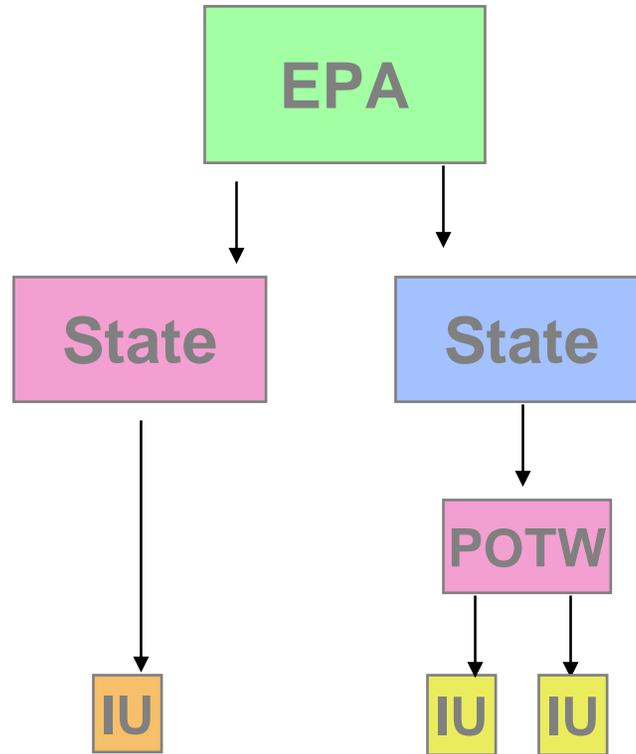
- POTWs with:
 - combined design flow > 5 MGD, and
 - receiving flow from CIUs, and/or
 - receiving pollutants which pass through or interfere.
- Approval Authority may require program be developed, regardless.
- NPDES State's may assume responsibility.



Approval Authority
vs.
Control Authority



Delegated States



 - Approval & Control Authority

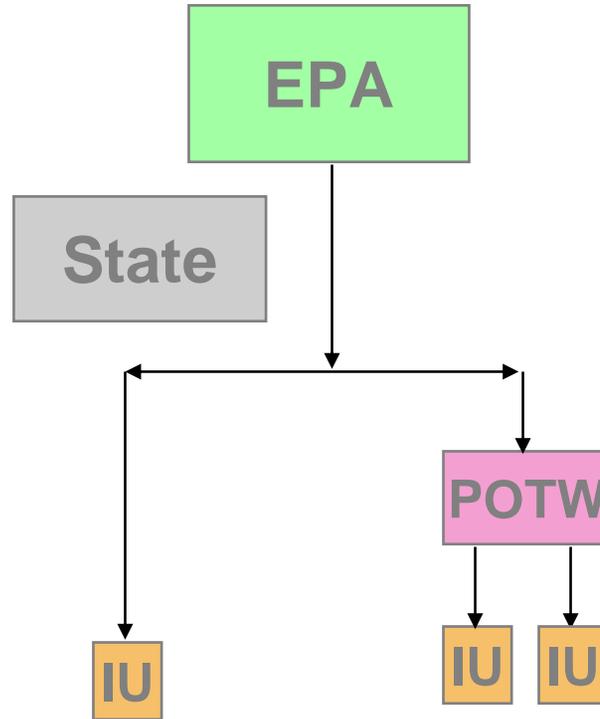
 - Approval Authority

 - Control Authority

 - Industrial User
in approved program

 - Industrial User

Non-Delegated States



 - Approval & Control Authority

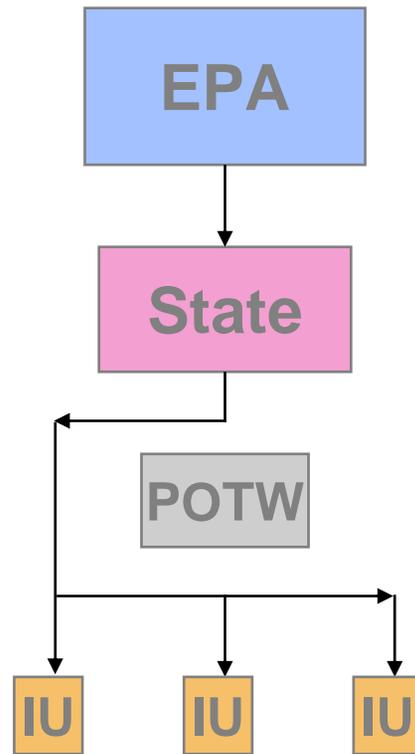
 - Control Authority

 - Industrial User in approved prog

 - Non-Delegated States

 - Industrial User

40 CFR § 403.10(e), States



 - Approval Authority

 - Industrial User

 - Control Authority

 - no pretreatment program

Local Pretreatment Programs

§ 403.8

- **Requirements of a POTW developed pretreatment program**

§ 403.9

- Contents/legal authority of a POTW pretreatment program

§ 403.11

- POTW pretreatment program approval procedures

§ 403.18

- Modifications of POTW Pretreatment Programs



Program Requirements Affecting IUs

§ 403.5 • General & specific prohibitions

§ 403.6 • Categorical standards

§ 403.7 • Removal credits

§ 403.13 • Variances for fundamentally different factors

§ 403.15 • Net/Gross calculation



POTW and IU Requirements

§ 403.12 • POTW & IU reporting requirements



Specific IU Rights

§ 403.16 Upset Provisions

Exceptional incident, unintentional, temporary non-compliance beyond CIU's control. Negligence NOT a defense

§ 403.17 Bypass Provisions

Intentional diversion around IU's treatment processes. Prohibited unless unavoidable to prevent death, injury, severe property damage, and no feasible alternatives exist. 10-days notice required.



What Minimum Procedures Make Up a Pretreatment Program?

[40 CFR § 403.8(f)(2)]

- **Industrial Users**
 - identify, locate, and notify
 - receive, sample, and analyze
 - survey, investigate, and enforce
- **Public**
 - allow participation
 - notify of violators



Minimum Pretreatment Program Procedures, continued

[40 CFR § 403.8(f)(2)]

- **Additional procedures:**
 - **Funding**
 - **Local limits**
 - **Enforcement Response Plan**
 - **SIU list**



Legal Authority, a Must

- **State law**

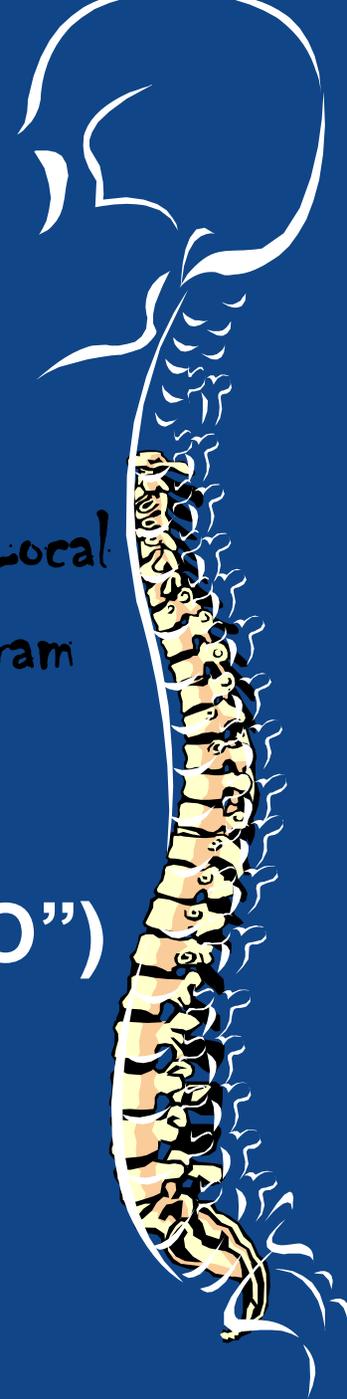
The Backbone of a Local
Pretreatment Program

- **Local regulations**

- Sewer Use Ordinance (“SUO”)

or

- Rules and Regulations



POTW Legal Authority

[40 CFR § 403.8(f)(1)]

- **Deny or condition discharges**
- **Require compliance**
- **Control through permit or similar means**
- **Require compliance schedules to comply**
- **Inspect, survey, and monitor**
- **Enforce**
- **Comply with confidentiality requirements**
- ***See EPA Model Pretreatment Ordinance***



Resources *(40 CFR 403.8(f)(3))*

- Personnel
- Equipment
- Funding



Local Regulations

- Sewer Use Ordinance
Single Municipality/District
- Rules and Regulations
*Multi-Jurisdictional
Authorities/Districts*



General Prohibitions

- **Pass-through** - *Discharge which exits the POTW into waters of the U.S. in quantities or concentrations which, alone or in conjunction with other sources, results in a violation of any provision of the POTW's discharge permit.*
- **Interference** - *Discharge which, alone or in conjunction with other sources, inhibits or disrupts the POTW's treatment processes or sludge disposal practices and is the cause of a discharge permit violation and/or prevents proper sludge disposal.*





Specific Prohibitions [40 CFR § 403.5(b)]

- (1) Pollutants which create a fire or explosion hazard;**
- (2) Pollutants which will cause corrosive structural damage to the POTW;**
- (3) Solid or viscous pollutants causing obstruction and resulting in interference;**
- (4) Pollutants released at a flow rate and/or concentration causing interference**

Specific Prohibitions [40 CFR § 403.5(b)]

- (5) Heat in amounts which will inhibit biological activity in the POTW resulting in interference;
- (6) Oils in amounts that will cause interference or pass through;
- (7) Pollutants which result in the presence of toxic gases, vapors, or fumes; and
- (8) Trucked or hauled pollutants, except at discharge points designated by the POTW.





