

# Ask the Inspector - NPDES

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# Introduction to the National Pretreatment Program

The national pretreatment program is a component of the NPDES program. It is a cooperative effort of federal, state, and local environmental regulatory agencies established to protect water quality. Similar to how EPA authorizes the NPDES permit program to state, tribal, and territorial governments to perform permitting, administrative, and enforcement tasks for discharges to surface waters (NPDES program), EPA and authorized NPDES state pretreatment programs approve local municipalities to perform permitting, administrative, and enforcement tasks for discharges into the municipalities' publicly owned treatment works (POTWs).

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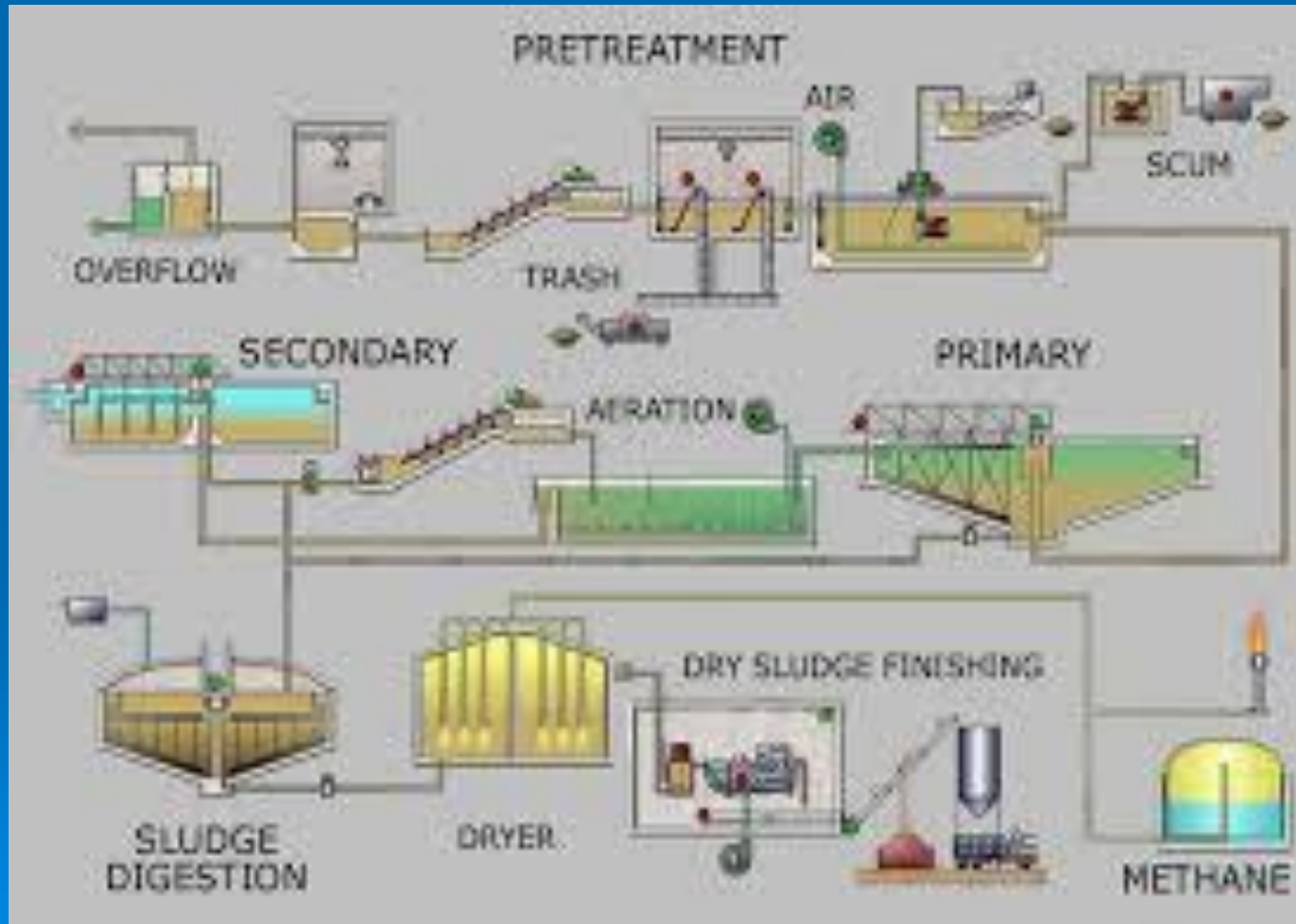
# National Pretreatment Program

- The General Pretreatment Regulations of the National Pretreatment Program require all large POTWs (those designed to treat flows of more than 5 million gallons per day) and smaller POTWs (that accept wastewater from Industrial Users (IUs) that could affect the treatment plant or its discharges) to establish local pretreatment programs.
- These local programs must enforce all national pretreatment standards and requirements in addition to any more stringent local requirements necessary to protect site-specific conditions at the POTW.
- Approximately 1,600 POTWs have developed and are implementing local pretreatment programs designed to control discharges from approximately 23,000 Significant Industrial Users (SIUs).

# Objectives of the Pretreatment Program

- Prevent introduction of pollutants that would interfere with the operation of the POTW, including interference of the use or disposal of produced sludges
- Prevent pollutants that pass through or are incompatible with treatment
- Source Reduction- Recycle, reduce, reclaim waste, wastewater and sludges.

# National Pretreatment Program



# Standards and Requirements

- Categorical pretreatment standards
- Local limits
- IU characterizations





# Categorical Pretreatment Standards

- Limitations on pollutant discharges to POTWs
- National, technology-based standards that apply regardless of a pretreatment program or permit intended to represent the greatest pollutant reductions that are economically achievable for an industry.

# Local Limits

- POTWs must create Local limits or demonstrate they are not necessary
- Designed to protect POTW receiving waters
- Local limits are needed when pollutants are received that could result in pass through or interference at the POTW
- Site specific needs (metals, solvents, pH)
- Dependent upon industrial users in the area and type of influent received at the plant



# IU Characterizations

- Significant Industrial User (SIU)
- Categorical Industrial User (CIU)
- Nonsignificant Categorical Industrial User (NSCIU)



# Significant Industrial User (SIU)

- An SIU is defined in 40 CFR Section 403.3(v) as any of the following:
- An IU subject to federal categorical pretreatment standards
- An IU that discharges an average of 25,000 gallons per day (gpd) or more of process wastewater to the POTW
- An IU that contributes a process wastestream making up 5 percent or more of the average dry-weather hydraulic or organic capacity of the POTW treatment plant
- An IU designated by the POTW as such because of its reasonable potential to adversely affect the POTW's operation or violate any pretreatment standard or requirement.

# Categorical Industrial User (CIU)

- A user who has a facility where an industrial activity is performed and is regulated by one or more federal regulations (40 CFR Parts 401-471);
- A user who discharges process wastewater to a treatment plant; or
- A user who performs a categorical activity that is assigned pretreatment limitations, reporting requirements or both.

# Nonsignificant Categorical Industrial User (NSCIU)

A Categorical Industrial User who never discharges more than 100 gpd of total categorical wastewater and never discharges any untreated concentrated wastewater.



# Specific Discharge Prohibitions

- Discharges containing pollutants that create a fire or explosion hazard in the POTW, including wastestreams with a closed-cup flashpoint of less than 140 °F (60 °C)
- Discharges containing pollutants causing corrosive structural damage to the POTW, but in no case discharges with a pH lower than 5.0 (unless the POTW is specifically designed to accommodate such discharges)
- Discharges containing pollutants in amounts causing obstruction to the flow in the POTW resulting in interference
- Discharges of any pollutants released at a flow rate or concentration that will cause interference with the POTW



# Specific Discharge Prohibitions

- Discharges of heat in amounts that will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 104 °F (40 °C) unless the Approval Authority, at the POTW's request, approves alternative temperature limits
- Discharges of petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through
- Discharges that result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that could cause acute worker health and safety problems
- Discharges of trucked or hauled pollutants, except at discharge points designated by the POTW



# Inspectors will be looking at a few areas....

- Applicable permits
- Discharge Monitoring Reports (DMRs)
- Chain of Custody for sample collection
- Previously conducted inspections
- Process-flow diagrams
- General housekeeping
- Floor drains and sinks
- Storage areas



# Common Inspection Concerns

- Failure to identify all industrial processes that generate wastewater
- Failure to notify the POTW of any changes to the overall process (add or remove equipment, bypasses, change chemicals)
- Unreported spills or unauthorized discharge into sanitary sewer

# Common Inspection Concerns

- Failure to properly collect and preserve samples
- Failure to properly complete chain of custody forms
- Failure to submit information (reports)



# Ask the Attendees



Final indoor access from the IU to the wastewater treatment plant collection line  
Photo #2 of 2



# Ask the Attendees



Final indoor access from the IU to the wastewater treatment plant collection line  
Photo #1 of 2



# Ask the Attendees



IU with chemical treatment lines- liquid levels, displacement and overflows



# Ask the Attendees





# Ask the Attendees



Floor drain in a chemical storage area



# Ask the Attendees



Sample location according to the IU Permit  
(Photos #2 & #3 of 3)



# Ask the Attendees



Upstream piping from the sample location (Photo #1 of 3)

# Additional Resources

## US EPA National Pollutant Discharge Elimination System (NPDES)

- Pretreatment Standards and Requirements- General and Specific Prohibitions



# ASK THE INSPECTORS



Any Questions or Comments?

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