

National Pollutant Discharge Elimination System (NPDES)

Pretreatment

Section 402(b)(8) of the Clean Water Act (CWA) requires that certain publicly owned treatment works (POTWs) receiving pollutants from significant industrial sources establish a pretreatment program to ensure compliance with these standards. Any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (mgd) is required to establish a pretreatment program if it receives pollutants from industrial users which may pass through or interfere with the operation of the POTW. In some cases this requirement may be waived for the municipality if the state exercises its option to assume local responsibilities and run the pretreatment program.

Industrial User: Indirect discharger to a POTW.

Significant Industrial User (SIU): An indirect discharger that is the focus of control efforts. Includes all industrial users subject to Categorical Pretreatment Standards (40 CFR 403.6 and Chapter 1, Subchapter N), and any other industrial users that discharge an average of 25,000 gallons per day or more of process wastewater to the POTW (with some exceptions), contributes a waste stream that makes up 5% or more of the average dry weather capacity of the POTW, or is otherwise designated by the permitting authority.

The Regional Administrator or Director of an authorized state may require a POTW with a design flow of 5 mgd or less to develop a POTW pretreatment program under specific circumstances. Program development could be determined to be necessary to prevent interference with or pass through of the POTW based on the nature, or volume, of the industrial influent, a history of treatment process upsets and violations of POTW effluent limitation(s), and contamination of municipal sludge.

The pretreatment program was developed to control industrial discharges to POTWs and to meet the following objectives:

• To prevent pass through of pollutants. A pass through of pollutants is when pollutants move through the treatment process without being adequately removed.

- To prevent interference with POTW processes, including interference with the use or disposal of municipal sludge. Certain influent characteristics can negatively impact the biological treatment process of the POTW, or otherwise contaminate the removed solids to the extent that they cannot be disposed of consistent with their intended disposal method.
- To improve opportunities to recycle and reclaim municipal and industrial wastewater and sludges. The pretreatment program also helps ensure POTW personnel health and safety.

The requirements to develop and implement a POTW pretreatment program are included as enforceable conditions in the POTW's NPDES permit. NPDES permits drive the development and implementation of pretreatment programs by requiring the following:

- Adequate legal authority.
- Maintenance of an industrial user inventory.
- Development and implementation of local limits to protect the POTW infrastructure and sludge quality.
- Control mechanisms issued to significant industrial users (SIUs).
- Compliance monitoring activities.
- Swift and effective enforcement.
- Data management and recordkeeping.
- Reporting to the approval authority (EPA or state).
- Public participation.

A POTW with a pretreatment program must have the legal authority enabling it to do the following:

- Deny or condition new or increased contributions of pollutants, or changes in nature of pollutants, to the POTW by industrial users.
- Require compliance with applicable pretreatment standards and requirements by industrial users.
- Control through a permit, order, or similar means the contribution to the POTW by each industrial user to ensure compliance with applicable pretreatment standards and requirements. These control mechanisms must have certain conditions as laid out in § 403.8(f)(1)(iii) and be enforceable.
- Require the development of compliance schedules where necessary by each industrial user for the installation of technology required to meet applicable pretreatment standards and requirements, and submission of all notices and self-monitoring reports to assess and ensure compliance.
- Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance with applicable pretreatment standards and requirements independent of information submitted by the industrial user (including the authority to enter the premises of the industrial user).
- Obtain remedies for noncompliance (e.g., injunctive relief, penalties).
- Comply with confidentiality requirements.

Further, at a minimum, the POTW must have procedures to do the following:

- Identify and locate all possible industrial users that might be subject to the POTW pretreatment program.
- Identify the character and volume of pollutants contributed to the POTW by the industrial users.
- Notify industrial users of applicable pretreatment standards and applicable requirements under CWA sections 204(b) and 405 and RCRA Subtitles C and D.
- Receive and analyze self-monitoring reports.
- Conduct sampling, inspections and other surveillance activities to determine compliance with applicable pretreatment standards and requirements independent of information supplied by the industrial user.
- Investigate instances of noncompliance.
- Comply with public participation requirements, including annual public notice of industrial users determined to be in significant noncompliance during the previous 12-month period.

Also, as part of the POTW pretreatment program, POTWs must have adequate resources and funding to implement the program, evaluate the need for and, as necessary, develop local limits and develop an enforcement response plan.

For more information regarding the pretreatment program, please visit:

https://www.epa.gov/npdes/national-pretreatment-program