



# Wastewater Management Regulations Fact Sheet

## REGULATORY SUMMARY

Regulations govern the management of pollutants entering waters of the United States through wastewater discharges. The goals of these regulations are to maintain fishable and swimmable waters through the use of water quality standards, and to prohibit toxic discharges in harmful amounts. This fact sheet focuses on wastewater discharges that enter the sanitary sewer system and are processed at a wastewater treatment plant before being released to a natural waterway. **Any small business that discharges anything but sewage or gray water<sup>1</sup> down the drain to the sanitary sewer should be concerned with these requirements.** There is a separate fact sheet to cover regulations for storm water discharges (*Storm Water Pollution Prevention Regulations Fact Sheet*). This fact sheet does not cover discharges to a septic system.

## WHERE TO FIND WASTEWATER MANAGEMENT REGULATIONS

**Statutory Authority:** *The Clean Water Act of 1977 (CWA)* and its amendments, primarily the *Water Quality Act of 1987*.

**Regulations:** The sections of water regulations of greatest importance to small businesses are 40 CFR:

- Subchapter N, **Parts 400-424** and **Parts 425-471** – Effluent Guidelines and Standards referred to as “categorical pretreatment standards;” and
- **403.5** – Specific Prohibitions.

In addition, small businesses will need to understand the ordinances and permit requirements of the local sanitary sewer district or authority.

## LEARNING THE LINGO

**Categorical Pretreatment Standard, or Categorical Standard,** is a U.S. Environmental Protection Agency (EPA) standard requiring permits for wastewater coming from specific sources (e.g., metal finishing). The categorical pretreatment standards are designed to reduce pollutants through pretreatment at the source, and to ensure Publicly Owned Treatment Works (POTWs) will not have difficulties processing pollutants discharged into the sanitary sewer system. The National Pretreatment Program regulates 126 Priority Pollutants that include toxic metals and organics. There are over 30 industrial categories of pretreatment standards. Each standard outlines discharge limits and prohibitions that may be incorporated into pretreatment permits for a particular type of industrial category.

**Discharge** is any addition of any pollutant to waters of the United States from any point source.

**Gray Water** is wastewater derived from normal residential or commercial uses excluding sewage, also called “black water,” from toilets. It includes wastewater from hand washing, dish washing, showering, and other uses generally associated with residential and commercial habitation, but not associated with a manufacturing or industrial process.

**National Pollutant Discharge Elimination System (NPDES) Permit** is an abbreviation for a permit issued under the authority of the NPDES program. Point dischargers to waters of the United States are required to obtain a permit, which

---

<sup>1</sup> Greywater (aka grey water, gray water, graywater) is non-industrial wastewater generated from domestic processes such as dish washing, laundry and bathing. Greywater comprises 50-80% of residential wastewater. Greywater is distinct from blackwater in the amount and composition of its chemical and biological contaminants (from feces or toxic chemicals). Greywater gets its name from its cloudy appearance and from its status as being neither fresh (white water from groundwater or potable water), nor heavily polluted (blackwater).



becomes the controlling mechanism to make sure that effluent limitations are not exceeded and water quality standards are maintained. Every POTW has a NPDES permit.

**Point Source** is a discernable, confined, and discrete conveyance from which pollutants may be discharged. Examples include a pipe, ditch, channel, container, rolling stock, or vessel.

**Publicly Owned Treatment Works (POTW)** is the formal term for a municipal wastewater treatment plant.

**Sanitary Sewer Ordinance** is a statement of use requirements that apply to all users of the local sanitary sewer system. The need to meet its own NPDES permit requirements often triggers the POTW authority to develop extensive discharge limitations and occasional permit or monitoring requirements for dischargers within their jurisdiction. All sanitary sewer ordinances reflect the Specific Prohibitions listed in 40 CFR 403.5 (b).

**Waters of the United States** is a broad term for water bodies that can be used for navigation, recreation, or drinking water. It is defined as: "All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide. Waters of the United States include, but are not limited to, all interstate waters and intrastate lakes, rivers, streams, intermittent streams, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds." See 40 CFR 122.2 for the complete definition.

## KEY PROVISIONS OF INTEREST TO SMALL BUSINESSES

### 1. Pre-treatment Standards and Permits

When categorical pretreatment standards apply to a small business, a small business will need to pre-treat their wastewater and have a permit to discharge their treated wastewater to the sanitary sewer. Permits may be issued by the State (or by the EPA Regional office if the state is not authorized). If the small business already has a permit, they may need guidance with compliance and documentation requirements. Typical requirements include: operation of control devices, wastewater monitoring and sampling, recordkeeping, reporting, and training. EPA continues to develop new categorical standards, most recently adding one for metal products and machinery operations.

### 2. Local Sanitary Sewer Ordinances

Each small business that discharges anything but sewage or gray water down the drain to the sanitary sewer needs to be aware of sanitary sewer ordinance requirements. In addition to standard limits such as pH, Biological Oxygen Demand, and Total Suspended Solids, the ordinance can include limitations on specific pollutants such as toxic metals (e.g., mercury and silver). Often these concentration limits are very low, sometimes even lower than the concentration required that results in classification of wastewater as a hazardous waste. It may be necessary to interact with several local POTW authorities, each with unique discharge limits and performance requirements, on an ongoing basis, in order to understand wastewater requirements for specific small businesses.

### 3. POTW Permits and Monitoring Requirements

In some jurisdictions where there is heavy loading of the wastewater treatment plant (because of a high density of industrial users, a high total volume of pollutants, or low flow conditions), the POTW may require permits for certain dischargers, or require them to monitor concentrations of certain pollutants to assure compliance with the sanitary sewer ordinance. It is important to be familiar with and to review the requirements of the jurisdiction in which the small business is located to determine if the permit triggers or directs the small business to meet particular requirements. If there are many small businesses in a particular jurisdiction, it may save time to obtain a copy of the sanitary ordinance and permit requirements for that jurisdiction.



## FIRST QUESTIONS FOR THE SMALL BUSINESS OWNER

- Do you need to use any water in your business processes? Can you explain what happens to the water throughout and at the end of the process?
- Do you know where drains empty on your property, both inside and outside?
- Do you have a copy of the local sanitary sewer ordinance? Have you ever called the local wastewater treatment plant to get advice on putting something down the drain?

## WHAT TO LOOK FOR

- Water connections to process equipment, especially small pipes continuously discharging to a drain.
- Evidence of residues or staining in sinks that indicate something other than gray water is going down the drain.
- Signs, or lack of signs, that prohibit drain disposal of chemicals.

## THE POLLUTION PREVENTION CONNECTION

- Use less toxic, water based materials in processes to eliminate regulated discharges.
- Don't mix highly toxic wastewater with other discharges; consider collecting toxic wastewater separately and managing it as a hazardous waste instead.
- Modify processes to use less water.
- Recycle or reuse wastewater before discharging it.

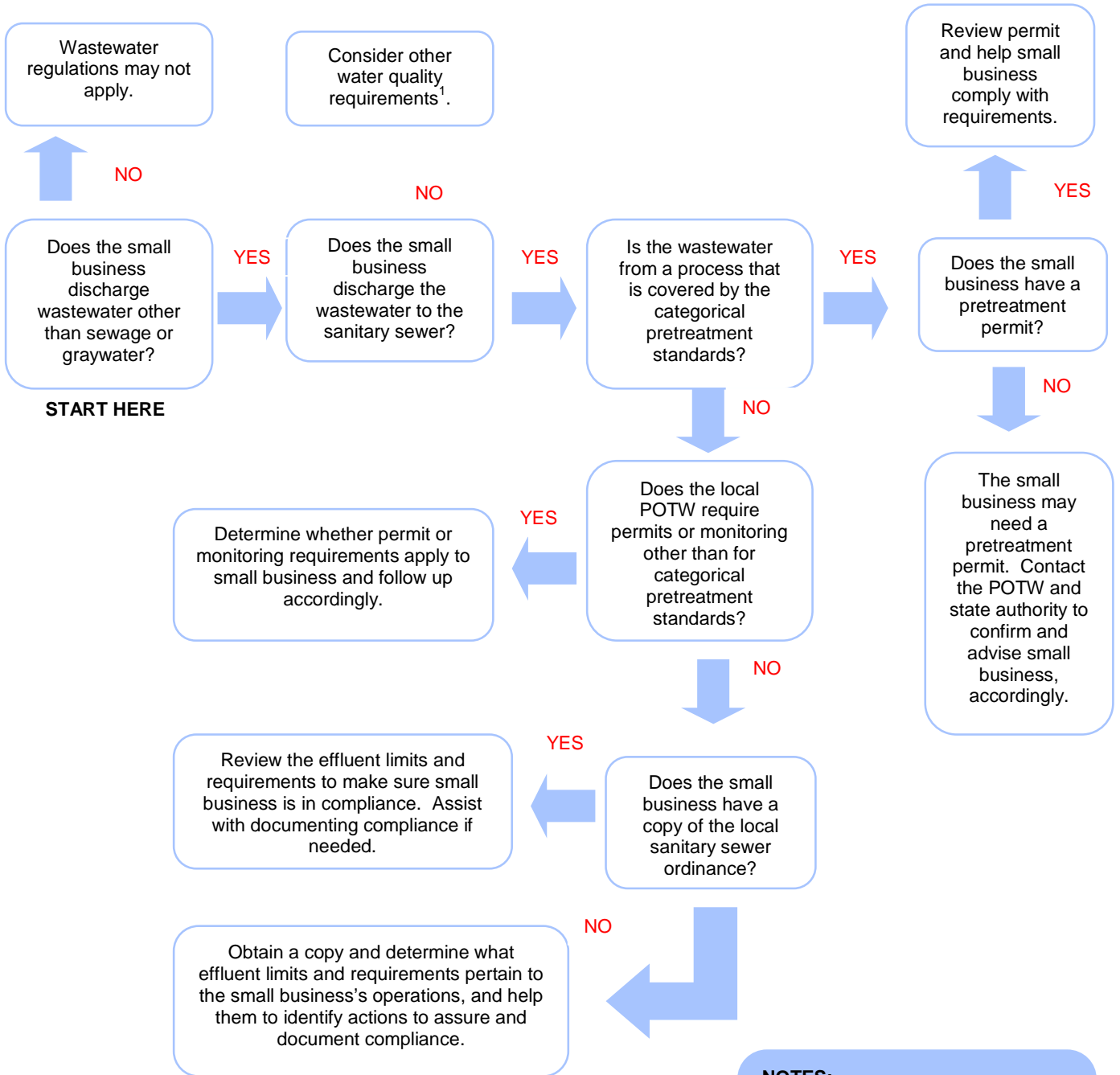
## FOR FURTHER INFO

- US EPA National Pollution Discharge Elimination System (NPDES) Pretreatment Program web site:  
[http://cfpub.epa.gov/npdes/home.cfm?program\\_id=3](http://cfpub.epa.gov/npdes/home.cfm?program_id=3).

This fact sheet provides a general overview of regulatory requirements. It is not all-inclusive and does not describe specific state and local requirements. Its purpose is to provide state SBAP staff with guidance on key provisions, so that they may recognize potential applicability to small business and be more effective when seeking interpretations from regulatory experts.



## Wastewater Management Roadmap



**NOTES:**

<sup>1</sup> For example, direct discharge permits (NPDES), storm water regulations, groundwater protection standards, or septic system prohibitions.