

Wastewater Management Regulations Fact Sheet

REGULATORY SUMMARY

These regulations govern management of pollutants entering waters of the United States through wastewater discharges. Their goals 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 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, you will need to help small businesses 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 (POTW) will not have difficulties processing pollutants discharged into the sanitary sewer system upstream. 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.

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

If categorical pretreatment standards apply to a small business, they 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 Region 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 to make wastewater a hazardous waste. The challenge for Small Business Assistance Programs (SBAP) staff is that it may be necessary for to interact with several local POTW authorities, each with unique discharge limits and performance requirements, to assist small businesses on an ongoing basis with wastewater regulatory requirements.

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. You will have to review the requirements of the jurisdiction in which the small business is located to determine permit triggers or direct the small business to the appropriate authority. If you have many small business clients in a particular jurisdiction, it may save time if you 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 how that is done?
- 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.
- Signage, or lack of, that prohibits drain disposal of chemicals.

THE POLLUTION PREVENTION CONNECTION

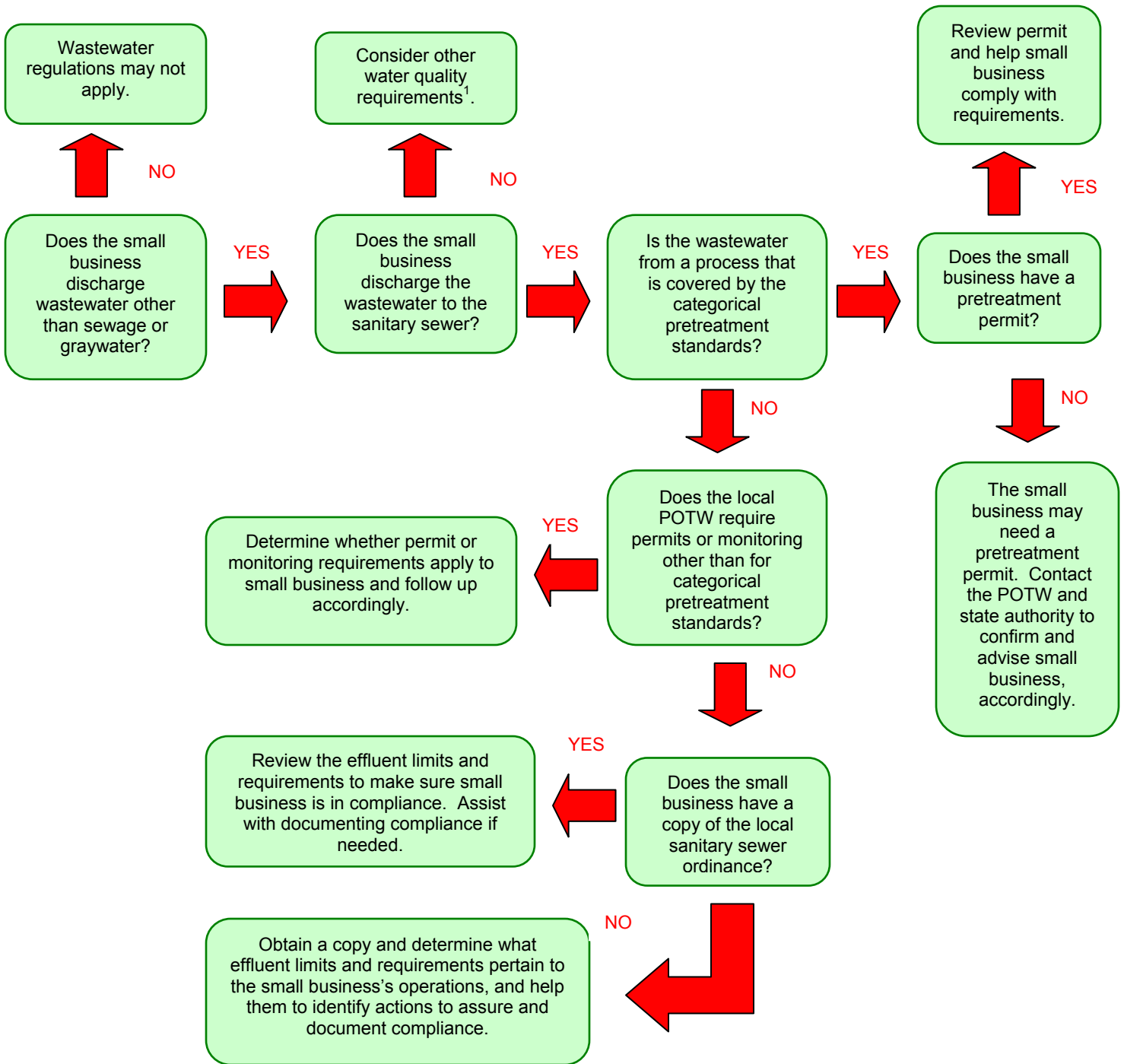
- Use less toxic, water based materials in the process to eliminate regulated discharges.
- Don't mix highly toxic wastewater with other discharges; consider collecting it and managing as a hazardous waste instead.
- Modify processes to use less water.
- Recycle or reuse wastewater before discharging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

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