

Treating Waste Under Permit-by-Rule

This document provides guidance for generators who treat dangerous waste on-site under the “Permit-by-Rule” provisions, outlined in the *Dangerous Waste Regulations*¹ (see citation list on the right).

Permit-by-rule requirements

Many businesses generate dangerous wastes that can be effectively treated on-site using physical, chemical, or biological treatment methods. These businesses may qualify for a Permit-by-Rule (PBR)¹ if they:

- Have a National Pollutant Discharge Elimination System (NPDES) Permit, State Waste Discharge Permit, or Pretreatment Permit. The permit must address the waste stream in question and the facility must comply with all the requirements of the permit.
- Treat waste in one of the following types of treatment units²:
 - Elementary neutralization unit (ENU).
 - Wastewater treatment unit (WWTU).
 - Totally enclosed treatment facility (TETF).

If the facility meets the above criteria, the Department of Ecology (Ecology) allows waste treatment under PBR if the facility:

- Designates all waste at the point of generation (prior to mixing³).
- Includes each treated dangerous waste stream in a general waste analysis plan⁴.
- Writes a contingency plan and emergency procedures⁵ and meets security requirements⁶.
- Notifies Ecology that they treat dangerous waste on-site⁷.
- Provides an annual report of waste treatment activities to Ecology⁸ and keeps a record on-site of all emergency activities⁹.

Where to find information in the *Dangerous Waste Regulations* Chapter 173-303

- 1 WAC 173-303-802(5)
- 2 WAC 173-303-040
- 3 WAC 173-303-070
- 4 WAC 173-303-300
- 5 WAC 173-303-350 through -360
- 6 WAC 173-303-310
- 7 WAC 173-303-060
- 8 WAC 173-303-390
- 9 WAC 173-303-380
- 10 WAC 173-303-283
- 11 WAC 173-303-145

Performance Standards

A facility operating with a PBR must meet certain minimum performance standards¹⁰ to minimize risks and prevent the degradation of human health or the environment. The facility must:

- Develop a written preventative maintenance program that addresses concrete structures, pipes, pumps, tanks, and other equipment used to transfer or accumulate dangerous waste.
- Seal concrete floors, trenches, sumps, and curbs. Construct or line these structures (along with pipes and tanks) with material compatible with the waste. Seal all cracks and gaps.
- Empty all catch-pans or basins, concrete trenches, sumps, and sinks regularly. Do not allow material to accumulate over time in these units.

Complete weekly visual inspections of concrete systems, tanks, pumps, valves, pipes, and other equipment used to transfer, accumulate, or treat dangerous waste. Keep records of all inspections for a minimum of five years. Note any problems and corrective actions taken.

Other important requirements for on-site management of waste

- Determine which chemicals are incompatible and separate them to prevent chemical reaction(s) during routine use or emergency events.
- Do not mix materials. Mixing can adversely affect your ability to recycle, reuse, treat, or dispose waste. It can also damage equipment, create harmful vapors, generate extreme heat or pressure, or cause fires or explosions.
- Dispose of process wastes properly. Keep them out of septic systems and storm sewers.
- Clean up drips and small spills immediately. Report large spills to Ecology¹¹. Identify spill cleanup procedures, equipment, and responsible personnel.
- Train employees about standard operating procedures, waste management practices, and emergency response procedures. The Department of Labor and Industries requires this for certain businesses and the *Dangerous Waste Regulations* require it for all regulated generators.
- Designate and manage all generated wastes (such as treatment sludge).
- For more information on counting waste visit Ecology's Web site at www.ecy.wa.gov/programs/hwtr/waste-report/how_to_count_DW.htm.

Permit-by-Rule example cases

Example Case 1

A metal plating facility pumps corrosive and metal-bearing wastewater into 55-gallon containers for batch treatment prior to discharge under a local pretreatment permit. Would this qualify for PBR?

No. The waste is not managed in one of the following treatment systems:

- **Elementary Neutralization Unit (ENU):** The facility's system does not meet the definition of an ENU because they adjust the pH of and remove metals from the water. An ENU is limited to only treating corrosive wastes.
- **Wastewater Treatment Unit (WWTU):** The facility's system does not meet the definition of a WWTU because the 55-gallon container where they treat the waste does not meet the definition of a "tank" or "tank system."
- **Totally Enclosed Treatment Facility (TETF):** The facility's 55-gallon container does not meet the definition of a TETF because the drum does not directly connect to the production process and could release waste into the environment while pumping in or out of the drum.

Example Case 2

A facility generates a corrosive characteristic waste. They treat the waste in a series of lagoons to remove the hazardous characteristic and then discharge the treated effluent to the local Publicly Owned Treatment Works (POTW) under their wastewater discharge permit. Does the activity qualify for PBR?

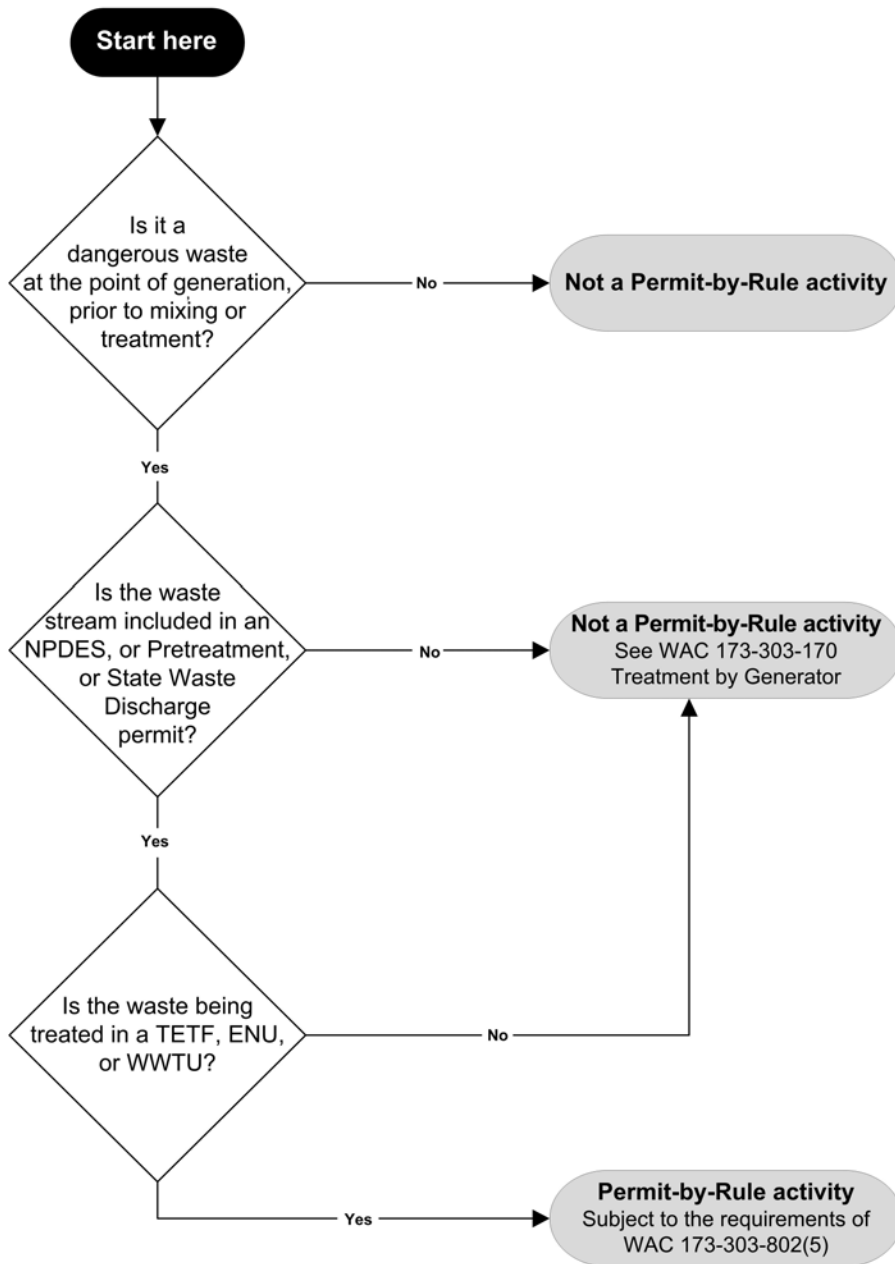
No. The facility does not manage the waste through an ENU, WWTU, or TETF. The lagoons, or "surface impoundments," do not meet the definition of any of these.

Example Case 3

A printed circuit board manufacturer has a pretreatment permit from their local sewer utility to batch treat dangerous wastewater and discharge the treated effluent to the POTW. They are in compliance with their discharge permit. The facility treats the dangerous wastewater in a series of tanks and then pumps the treated water into two holding tanks prior to batch discharge. Before discharging, the facility tests the wastewater to ensure that it meets their discharge limit. Does this qualify for PBR?

- Yes. The facility treats the waste in a wastewater treatment unit, has a discharge permit from the local sewer utility, and complies with that permit.

To Qualify for Treatment Under Permit-by-Rule



Special accommodations:

To ask about the availability of this document in a version for the visually impaired call the Hazardous Waste and Toxics Reduction Program at 360-407-6700. Persons with hearing loss, call 711 for Washington Relay Service.