Small Quantity Generators Treating Dangerous Waste

What is Treatment by Generator?

Treatment by generator (TBG) refers to methods that generators may use to treat their own dangerous wastes on site without first obtaining a dangerous waste treatment permit. This publication discusses how, under certain conditions, Small Quantity Generators (SQGs) may also use TBG.

Background

SQGs are conditionally regulated dangerous waste generators and are not subject to most of the dangerous waste regulations, if they meet the conditions in WAC\(^1\) 173-303-070(8)(b). To meet these conditions, SQGs must designate their waste, manage it safely, and ensure it is delivered to a facility described in the rule WAC 173-030-070(8)(A-H). This rule allows for on-site dangerous waste treatment under specific circumstances.

It’s unlikely that an SQG could meet the requirements of the rule allowing on-site treatment. However, Ecology allows SQGs to treat their waste on site if they comply with the following six requirements for treatment. These requirements apply only to the area where the waste is being treated and not to the entire facility. SQGs not following this guidance may be required to follow Large Quantity Generator (LQG) regulations or stop treating their waste.

Requirements for Treatment

1. Treat wastes only in containers and tanks (WAC 173-303-170(3)(c) allows an exception for treatment of low risk, state-only special waste).

2. Use containers that meet all container standards (WAC 173-303-200(1)(b)(i), and by reference WAC 173-303-630).

3. Use tanks that meet all tank standards (WAC 173-303-200(1)(b)(ii), and by reference WAC 173-303-640).

4. Maintain a written log of all dangerous waste treated on site, including the date of treatment and the amount of each dangerous waste treated (WAC 173-303-170(3)(b)).

5. Label or mark each treatment tank or container with the words “Dangerous Waste” or “Hazardous Waste” and identify the major risk (WAC 173-303-200(1)(d)).

6. Establish an emergency coordinator, post emergency response information, and respond to any emergencies (WAC 173-303-201(2)(c)).

---

\(^1\) Washington Administrative Code

Allowable Treatment Methods
SQGs are only allowed to use the following eight Ecology-approved treatment methods for treating wastes on site. Ecology has published guidance for:

<table>
<thead>
<tr>
<th>Method</th>
<th>Publication Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtration</td>
<td>#96-413</td>
</tr>
<tr>
<td>Evaporation</td>
<td>#96-414</td>
</tr>
<tr>
<td>Carbon Adsorption</td>
<td>#96-415</td>
</tr>
<tr>
<td>Solidification/Stabilization</td>
<td>#96-416</td>
</tr>
<tr>
<td>Elementary Neutralization</td>
<td>#96-417</td>
</tr>
<tr>
<td>Separation</td>
<td>#96-418</td>
</tr>
<tr>
<td>Polymerization</td>
<td>#14-04-002</td>
</tr>
<tr>
<td>Aldehyde Deactivation</td>
<td>#14-04-003</td>
</tr>
</tbody>
</table>

Treatment must not:
- Use a process involving heat that destroys the waste or its constituents.
- Involve applying waste to the land or mixing it into the soil (land treatment).
- Use detonation or open burning.
- Allow the generation of extreme heat or pressure.
- Cause a fire, explosion, or violent reaction.
- Produce uncontrolled toxic or flammable mists, fumes, dusts, or gases.
- Threaten to damage the structural integrity of the facility or device containing the waste.
- Threaten human health or the environment.

Examples of illegal treatment include:
- Evaporation of liquid wastes containing volatile organic compounds.
- Air-drying shop towels contaminated with dangerous waste solvent.

Example of Elementary Neutralization Treatment for an SQG Laboratory
Many labs generate corrosive wastes that are readily treated for sewer disposal, including acidified samples or acid baths for cleaning glassware. The acidic waste has a pH less than 2.0 and is a corrosive dangerous waste (waste code D002). The lab chooses to neutralize their spent acid waste as a TBG activity, taking the following steps:

- **Notify Ecology of treatment by generator activity.**
  - If the lab has an active RCRA site ID number, they must submit a revised Site Identification form to reflect the TBG activity (checkbox #7 in Section 10 of the form).²
  - If the lab does not have an active RCRA site ID number, no notification is required.

- **Accumulate acidic waste in a container or tank that:**
  - Is closed.
  - Is in good condition and compatible with the acidic solution.

² The dangerous waste regulations require SQGs with active RCRA ID numbers to notify Ecology whenever they have a change in dangerous waste activity or important information changes, such as company name, ownership, or mailing address. They also have the option of withdrawing an unneeded ID number by contacting Ecology headquarters at 360-407-6700.
- Is properly labeled with a dangerous waste label and a corrosive risk label.

- **Post emergency response information near the waste treatment area and near a communication device and train employees on proper emergency response, which should include, at a minimum:**
  - Name and telephone number of the site emergency coordinator, fire department phone number, and appropriate spill reporting phone numbers.
  - Locations of fire extinguishers, fire alarms, and spill control materials.

- **Treat acidic waste by adding a neutralizing agent, maintaining a controlled reaction to ensure employee safety.**

- **Maintain a treatment log.** Enter the date and amount treated for each batch of acidic waste treated. Include other useful information, such as the type of acid, beginning and ending pH, and initials of person who treated the waste.

- **Count pounds of acidic waste treated** in addition to all other dangerous waste generated on site per month to determine generator status.

- **Stay below the SQG monthly generation limit**. If the lab exceeds the limit they are a Medium or Large Quantity Generator and must have an active EPA/state ID Number.

### Ecology Assistance

For more assistance please contact a hazardous waste specialist at one the following Ecology offices:

3 An SQG generates less than 2.2 pounds of acutely hazardous waste (AHW) or state toxic WT01 extremely hazardous waste (EHW) and less than 220 pounds of total dangerous waste per month. The SQG’s total on-site accumulation must remain less than 2,200 pounds of total dangerous waste and 2.2 pounds for AHW and WT01 EHW. (Note that spill cleanup materials from “P” listed commercial chemical products and a few “K” listed wastes are also AHW, but have a 220 threshold limit.)