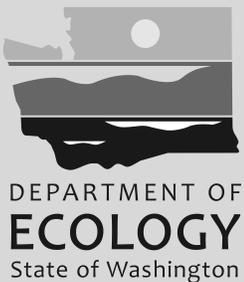




Shop Guide

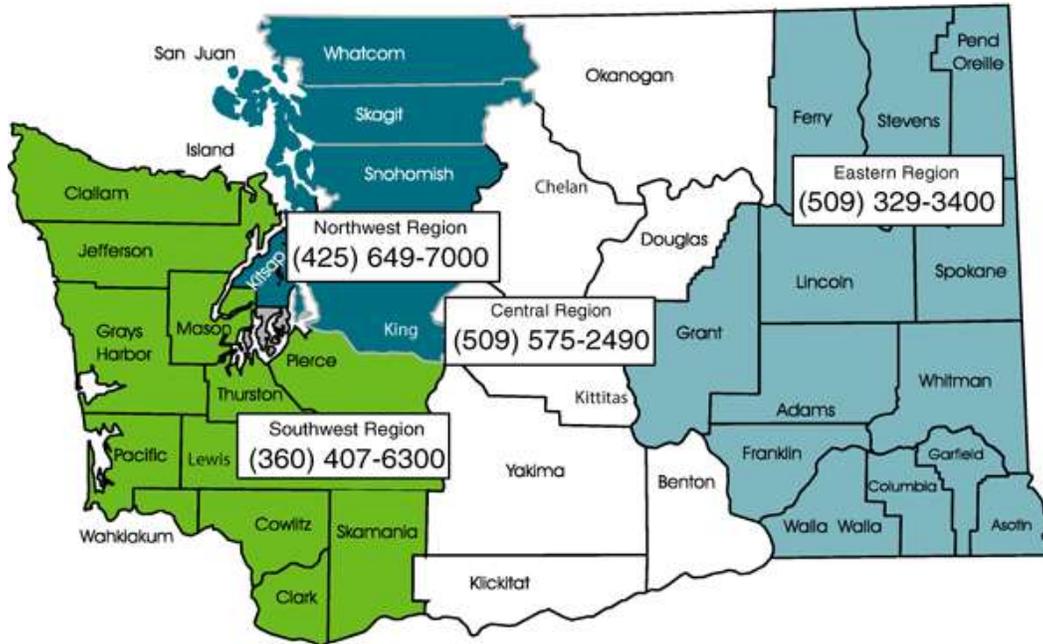
For Dangerous Waste Management



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Department of Ecology Regions

<http://www.ecy.wa.gov/programs/hwtr>



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Introduction

If handled improperly, many common workshop wastes can threaten the safety of your facility, its workers, and the community. This guide will help you:

- Comply with dangerous waste regulations and avoid costly penalties.
- Improve workplace safety.
- Save money by handling wastes properly.
- Gain customers who want to choose a shop that protects the environment.
- Be prepared in case a dangerous waste inspector visits your site.

Find more resources at the Department of Ecology's (Ecology) website:

www.ecy.wa.gov/programs/hwtr.

Get free help from your regional Ecology office:

Northwest Regional Office, Bellevue	425-649-7000
Southwest Regional Office, Lacey	360-407-6300
Central Regional Office, Yakima	509-575-2490
Eastern Regional Office, Spokane	509-329-3400

Identify Waste: Designation

Your business is responsible for complying with the laws about the safe handling and disposal of your waste. In Washington, hazardous waste and other kinds of waste with certain criteria are called dangerous waste. The laws that govern these kinds of waste are called the [Dangerous Waste Regulations](#), Chapter 173-303 Washington Administrative Code (WAC).

The process of knowing whether you have dangerous waste is called designation. This guide mentions common wastes, but you may have other types of wastes or mixtures that are not described here. Designation is a big part of knowing how to handle your waste. You must designate all of your waste streams to determine whether they are dangerous.

To get information about designating waste, please contact your regional Ecology office or visit our website at www.ecy.wa.gov/programs/hwtr/managewaste.html.

Parts Washers

Sink-type parts washers used for cleaning smaller parts and tools have solvent tanks that usually contain one or more of these solvents:

- Mineral spirits
- Stoddard solvent
- Petroleum naphtha
- Citrus-based solvent

These spent solvents are usually ignitable, toxic, or pick up hazardous material such as heavy metals and become dangerous wastes the moment the waste tank is replaced with a fresh tank. If the spent solvent is recycled, you can claim “recycling credits” to reduce your Pollution Prevention Planning fee (this applies only to businesses that are required to prepare Pollution Prevention Plans).

Keep different types of solvents in separate, labeled, closed containers.

- Don't mix solvents with any other waste.
- Don't mix solvents into used oil.
- Don't use spray cans over solvent tanks; it can contaminate the solvent in the tank.

To reduce the amount of dangerous waste from parts washers:

- Make solvent last longer by pre-cleaning parts with a rag or brush to remove the heaviest dirt.
- Make sure the solvent is actually too dirty to use before replacing it with new solvent.
- Keep the lid closed when not in use. This prevents accidental mixing with other chemicals and minimizes evaporation.
- Use a water-based cabinet-type parts washer if appropriate. These work like a dish washer and often do not require hazardous solvents. Test the sludge to be sure it doesn't contain regulated levels of heavy metals.

If you're getting a parts washer, choose one with an attached still or cartridge filter. This will make your solvent last longer and generate less dangerous waste. Used filters may be a dangerous waste, but still reduce the total amount of waste.

Aerosol Cans

Aerosol cans are not dangerous waste if they are used until empty, with the exception of cans that contained certain pesticides. Partially full (for instance, if the nozzle doesn't work) or full discarded cans may be a dangerous waste because the contents are under pressure and may be toxic or flammable.

You have two options for disposing of aerosol cans with hazardous contents:

1. Send the can with its contents to a permitted dangerous waste facility.
2. Puncture the can with a commercial puncturing device. Drain and collect the contents (and aerosol). Manage the collected liquid as dangerous waste. This means putting a dangerous waste label and risk label on the container and keeping it closed when not in use. Recycle empty cans as scrap metal.

Dangerous waste aerosol cans with liquid or drained contents must be accumulated, counted, labeled, and reported according to dangerous waste requirements.

Check labels and Safety Data Sheets (formerly Material Safety Data Sheets or MSDS) to make sure the product does not add unnecessary hazards to your shop. Look for less hazardous formulations. Buying the product in bulk and using refillable spray bottles may generate less aerosol can waste.

Shop Towels

Shop towels (towels, wipes, or rags) containing solvents, paints, stains, inks, or other chemicals may be ignitable, toxic, or have “listed” solvents that cause them to be dangerous waste. You must manage them as dangerous waste. This means they must be properly contained, labeled, accumulated, counted, shipped, and reported.

Note: used towels containing oil or solvents can spontaneously start fires even when no flame is present and should be kept in closed, fireproof metal containers.



If you send your soiled cloth towels to a permitted commercial laundry, and you handle them properly, they are not dangerous waste. This can save you money.

To recycle your towels through a laundry, you must follow these guidelines:

- Remove free liquids before tossing soiled shop towels in containers. Use simple means like hand wringing (while wearing proper protective equipment) or compressing them. Collect and reuse the liquids. If not directly reused, these liquids may be dangerous waste.
- Do not dispose of solvents by pouring them into containers of used shop towels. This is illegal.
- Do not accumulate used towels longer than 180 days before recycling.
- For safety reasons, keep incompatible wastes separated. For example, don't mix towels with alcohols amid towels with acids. Keep hazardous and non-hazardous shop towels segregated, following the instructions of your recycler.
- Make sure used shop towels contaminated with hazardous substances are collected, transported, and accumulated in closed containers. Label containers with “contaminated shop towels.” If a commercial laundry picks up your towels, they may provide you with a collection and shipping container. Place oily or flammable towels in closed, fireproof containers.
- It is your responsibility to guarantee that the recycling facility you use is meeting local sewer discharge limits and other applicable environmental regulations. Do not use recyclers that discharge dangerous wastewaters to a drain field or cleaning solvents directly to the air.

Used Oil

Used motor oil (petroleum or synthetic), transmission fluid, brake fluid, lubricating oil, compressor oil, gear oil, and metal working fluids without chlorinated compounds, are all considered used oil. They can be mixed without designating the mixture as dangerous waste.

Used oil is also not considered a dangerous waste if recycled; this may include using it as fuel in a furnace. Recycling can save you money, so don't mix solvents or other wastes into used oil. Used oil contaminated with dangerous waste, such as solvent, is dangerous waste. Even small amounts of chlorinated solvents or aerosol products (like brake or carburetor cleaner) could turn a whole container of used oil into dangerous waste that cannot be recycled.

Used oil filters are not dangerous waste if they are fully drained for 24 hours. Send drained filters to a scrap metal recycler.

Don't dispose of used oil into a dumpster, storm drain, septic tank, dry well, or sewer.

Don't pour used oil on the ground or use it for dust suppression.

Recycle your used oil following these guidelines:

- Keep used oil in a separate container marked "USED OIL ONLY."
- Place container in a secure area away from floor or storm drains. Containers must be closed at all times, except when adding or removing used oil.
- Don't mix used oil or "do-it-yourselfer" used oil with any other waste if you plan to burn it in your shop for heating.



Spent Antifreeze

Spent antifreeze is toxic and may contain lead and other hazardous contaminants. If spent ethylene glycol antifreeze is recycled, it does not have to be counted as a dangerous waste or require a Uniform Hazardous Waste Manifest.

Recycle your spent antifreeze following these guidelines:

- Do not mix any other material with antifreeze.
- Label containers "Spent Antifreeze."
- Avoid spills by keeping containers closed except when adding or removing waste.
- Maintain containers so they do not leak, rupture, or tip over when opened, handled, or accumulated.
- Place containers on a non-porous concrete surface.
- Don't dispose of spent antifreeze into a sewer, storm drain, septic tank, or dry well.
- Never pour antifreeze on the ground.

Light Bulbs

Some spent light bulbs may be dangerous waste because they contain mercury, which is very toxic. These types of light bulbs include fluorescent, neon, and high-intensity discharge (such as, mercury vapor, metal halide, or high-pressure sodium).

If such light bulbs are recycled and handled properly, they may be managed as “Universal Waste” rather than dangerous waste by following these guidelines:

- Light bulbs cannot be crushed under Universal Waste regulations. Because glass bulbs are easily broken, keep lamps in structurally sound containers like cardboard boxes or fiber drums. Keep containers closed when not adding lamps.
- You may accumulate waste light bulbs for one year from the date they are generated. To document this, mark the container or individual bulb with the first date of storage. An extension to the one-year accumulation limit may be allowed to facilitate proper recovery, treatment, or disposal.
- Clearly label bulb containers with one of the following: “Universal Waste –Lamps,” “Waste Lamps,” or “Used Lamps.”
- Immediately clean up broken bulbs. Place the debris in a closed container with a dangerous waste label and a risk label that says “Toxic” and manage the broken material as dangerous waste.
- You may self-transport waste bulbs, complying with applicable U.S. Department of Transportation (USDOT) regulations found at www.phmsa.dot.gov.

Batteries

Most batteries are dangerous waste, but you can manage them more easily as “Universal Waste” when you recycle and manage them according to the following guidelines:

- Clearly label or mark individual batteries or containers with one of the following: “Universal Waste –Batteries,” “Waste Batteries,” or “Used Batteries.”
- You may accumulate batteries for one year from the date they are generated. To document this, mark the collection container or individual battery with the first date of accumulation. An extension to the one-year accumulation limit may be allowed to facilitate proper recovery, treatment, or disposal.
- Place damaged or leaking batteries in closed containers to prevent releasing toxic materials to the environment. Before combining different types of batteries in the same container, make sure they are compatible with one another and the container. Some batteries contain acids that are highly corrosive, for example.
- You may self-transport batteries, complying with applicable USDOT regulations. You must tape the terminals of most battery types to prevent sparking or fires while in transit.

Paint Wastes

Solvent-based paint wastes are usually dangerous waste. These include thinners, cleanup solvents, waste paints, and paint booth filters. Some latex and acrylic waterborne paints are also dangerous waste. Containers for these wastes must be properly labeled and kept closed when not in use. The waste must be accumulated, counted, and reported according to the dangerous waste requirements.

■ Reduce Paint Waste

- Buy only as much paint as you need.
- Don't get in the habit of mixing a standard amount of paint for every job (1 quart, 1 pint, etc.). Mix and use the least amount of coating possible.
- Give leftover paint to customers for touch-ups.
- Return unused paint to the manufacturer if not past the expiration date. It may be possible to sell it through an industrial materials exchange service.
- Reduce the number of different coatings and colors you use when possible.

■ Spray Gun Wastes

- For most painting operations, spray guns must be washed in an enclosed solvent recirculating gun washer. This helps you get more “mileage” from your solvent, reduces solvent evaporation loss, saves labor, and reduces worker exposure.
- If you do not use an automatic gun washer, get more use from your solvent and generate less waste by using a two-stage cleaning method. Use previously used thinner or gun wash solvent for the first rinse. Then use fresh solvent to clean guns. Save that solvent to use as the first rinse next time. This will cut your waste in half. Containers of solvent must be labeled.
- Don't clean guns by spraying thinner into the air or onto booth filters.



■ Paint Booth Filters

Paint booth filters may be dangerous waste. It depends on whether they contain paint with heavy metals like chromium, nickel, or lead or whether the filter is made with certain flame retardants. Test filters to determine if they are dangerous waste or if they can be disposed of more economically as solid waste.

■ Thinners and Solvents

Thinners and solvents frequently used in paint preparation, painting, and cleanup include acetone, toluene, xylene, or MEK (methyl ethyl ketone). They typically become dangerous waste because they are “listed,” ignitable, or toxic.

- Don't mix thinner and solvents with other types of waste.

- Don't leave the product or waste thinner drum uncovered because it can evaporate.
- Reduce solvent waste:
 - Add spigots or pumps to solvent containers.
 - Use solvent until it loses its cleaning effectiveness, not just because it looks dirty.
 - Reuse flushing and rinsing solvents for thinning, when appropriate.
- Send waste solvents and paint thinners to a recycler. If spent solvent is recycled, you can claim "recycling credits" to reduce your Pollution Prevention (P2) Planning fee (this applies only to businesses that are required to prepare P2 Plans).
- Save money by using a still to reclaim your solvent on site for further use.
 - Keep a daily log of the date, amount of spent solvent distilled, and the amount awaiting distillation. These records are needed to determine your generator status and reporting requirements.
 - Don't throw still bottoms (leftover sludge or solid cakes) in the dumpster or trash. They need to be handled and disposed of as dangerous waste.

■ Solvent Recycling

If solvent is treated and reused over and over, there is a counting exemption. Count the greatest amount of spent material that needs treatment on any day during a calendar month. This is all of the spent material that you must count and report for the month. Also, count all residual dangerous waste.

■ Designate Paint Waste

Most solvent-based paint wastes are dangerous waste because they are ignitable or contain toxic chemicals or heavy metals. Some waterborne paints are dangerous waste because they contain toxic chemicals. Check the Safety Data Sheets for any components in the paint that would make it designate as dangerous waste.

Waterborne paint waste that does not designate as listed or characteristic may still designate as dangerous if it contains toxic components. Facilities have the option to send the waste for lab testing. If the paint waste passes a fish bioassay test, the waste is not considered dangerous and does not have to be managed as dangerous waste.

■ Other Tips

- Use coatings that are less toxic. Stay informed about new developments in water-based top coats.
- Use optimum gun settings and spray tips for each job.
- Thin coatings by using heat rather than solvents where possible.
- Use disposable liners for paint containers and spray gun cups. Disposing of liners creates less waste than disposing of rinsing material.
- Schedule jobs in batches to reduce the number of cleanups.

Operator technique can change spray gun efficiency by up to 50 percent and affects the quality of your product. Training and experience makes more of a difference than the type of equipment used.

Some spray equipment manufacturers provide training videos that you can use to train new employees or refresh experienced ones. Some companies videotape painters in action so they can review their own performance and technique. Ecology staff can provide information on other training resources, including paint gun simulators that allow a painter to practice spraying and evaluate their efficiency in real time.

Dangerous Waste Accumulation

■ Time Limits

How long you are allowed to accumulate wastes depends on the amount of dangerous waste you generate and accumulate each month. See the Appendix for your time limit.

■ Storage Area

You should have a specific area in your shop for accumulating dangerous wastes. This area should:

- Be well-marked with “Hazardous Waste”/“Dangerous Waste” signs, and be access-restricted.
- Have a floor made of impervious material, like concrete. It should be free of cracks.
- Be indoors or under cover outside and protected from rain water.
- Have no active floor drains in the area. A sealed drain means no contamination can leave the area through the drain.
- Have at least 30 inches of space between rows of waste containers.
- Have no more than two waste containers stacked on each other.
- Be inspected weekly for signs of leaks or damage.
- Have clear labels on every container.
- Have a secondary containment system to hold leaks and spills. Build or buy a containment system such as a dike, berm, or commercial spill-containment pallet.

■ Satellite Accumulation

You may keep limited amounts of dangerous waste near the work stations where they are generated in “satellite accumulation areas.” In these you may accumulate up to 55 gallons of each dangerous waste with no time limit. When full, label the containers and move them to the central accumulation area within three days. Containers must be:

- Near the place where the waste is created.
- Kept closed at all times except when adding or removing waste.
- Under control of the operator making the waste.

- Arranged so chemically incompatible wastes can't come in contact with each other.
- Labeled with the date, the words "Dangerous Waste" or "Hazardous Waste," and the hazard (toxic, corrosive, flammable, etc.).

Note:

- The satellite accumulation allowances are not available to small quantity generators.
- These requirements are for dangerous wastes and do not apply to spent antifreeze that is recycled or used oil.

Waste Containers

Inspect your dangerous waste containers regularly. They must be:

- Closed except when adding or removing waste. If you need to add waste frequently, consider using a screw-in funnel with latching lid, or a lever-type drum ring if using an open-top drum.
- In good condition (no rust, bulging, or other defects).
- Handled to prevent rupture or leaks.
- Properly labeled. The label must be easy to read and show "Hazardous Waste" or "Dangerous Waste," the nature of the hazard (toxic, corrosive, flammable, etc.), and the date waste was first added. Free, printable labels are available from www.ecy.wa.gov/programs/hwtr.
- Made of material that is compatible with the waste. Use metal drums for solvents. Use polyethylene drums for acids or caustics.



Spills and Drips

Material that spills, leaks, or drips is waste unless it's reused. Clean up waste spills, drips, and leaks promptly, so they don't spread. Containment and accumulation areas must be kept dry and clean.

Keep spill cleanup supplies handy and train employees how to use them. Know whether cleanup residues and absorbent pads must be handled as dangerous wastes. Select compatible absorbents – use the right tool for the job.

For small spills use absorbent granules (kitty litter), absorbent pads, or other absorbent materials. It may create less dangerous waste than washing with water. Designate and properly dispose of spill debris.

Report significant spills and releases to each of the following:

- National Response Center: 1-800-424-8802
- Washington Emergency Management Division: 1-800-258-5990 or 1-800-OILS-911
- You must report any spill that endangers human health or the environment, regardless of size.

Shipping and Disposal

■ Hazardous Waste Transporters

Use a reputable transporter with a valid RCRA Site ID number (see page 11). It is your responsibility to choose a proper transporter. Selecting a company that is financially able to respond to accidents is important.

■ Manifests

A Uniform Hazardous Waste Manifest must accompany dangerous waste when it is shipped off site. Your transporter can help fill out this form properly. Retain one of the copies signed by the transporter and someone in your shop.

When the transporter delivers the waste to the receiving facility, the facility accepts the waste and signs each copy of the manifest. The transporter takes a copy, the facility keeps a copy, and the facility sends you the last copy. This proves the waste arrived at its destination. Keep all manifests for at least five years.

As an incentive to recycle certain dangerous wastes such as used oil, spent antifreeze, batteries, and light bulbs, Washington State allows these wastes to be sent off site to a recycler without a Uniform Hazardous Waste Manifest. A receipt, bill of lading, or other documentation will work. Keep these records for at least five years.

■ Small Quantity Generators

Small quantity generators (SQG) of dangerous waste have more options for shipping their wastes. Many community household hazardous waste (HHW) facilities accept dangerous waste from SQGs. SQGs may transport their own waste to a permitted dangerous waste facility or HHW facility. A Uniform Hazardous Waste Manifest, receipt, bill of lading, or other documentation can be used.

The USDOT has rules governing how and what you transport. See www.phmsa.dot.gov for more information on required containers, labels, and shipping papers.

Counting and Reporting Your Waste

■ Count your waste

Different rules apply depending on how much dangerous waste you generate and accumulate (see Appendix 1). These levels are called “generator status.” Generator status is determined by the maximum amount of dangerous waste produced in a month during a calendar year and by the amount of waste accumulated at any one time.

Generator Status	Generates Monthly	Accumulates On Site
Small Quantity Generator (SQG)	Below 220 lbs of dangerous waste and 2.2 lbs of acutely hazardous waste or WT01 toxic waste	Up to 2,220 lbs dangerous waste (or 2.2 lbs of acutely hazardous waste and /or WT01 dangerous waste) per month.
Medium Quantity Generator (MQG)	Between 220-2,200 lbs of dangerous waste	Up to 2,200 lbs of dangerous waste per month
Large Quantity Generator (LQG)	More than 2,200 lbs of dangerous waste or 2.2 lbs of acutely hazardous waste or WT01 toxic waste	No limit

Document the amount of each dangerous waste you generate each month. Don’t use shipping manifests for this purpose because shipment records often lump several months of wastes together. This might falsely increase your generator status. Waste must be counted and reported in pounds, including liquids.

The weight of your waste can be calculated by weighing one gallon and multiply that weight by the total number of gallons or converting gallons to pounds.

Multiply the Quantity by the Conversion Factor	Example
If you do not know the density: multiply by 8.34, the density of water (1 gal water =8.34 lbs)	50 gallons of wastewater, multiplied by 8.34 = 417 lbs
If density is measured in lbs per gallon (lbs/gal): multiply by the density	50 gallons of wastewater with a density of 7.9 lbs/gal is multiplied by 7.9. = 395 pounds
If density is measured by specific gravity: multiply by 8.34 then multiply this product by the specific gravity	50 gallons of wastewater multiplied by 8.34 = 417 lbs 417 pounds multiplied by a specific gravity of 1.2 = 500.4 lbs

■ Get a RCRA Site Identification Number

Many dangerous waste generators must have a RCRA Site ID Number (also known as a Site ID#). SQGs do not need a Site ID#, however their dangerous waste transporter may require one. For more information on obtaining a Site ID#, call 800-874-2022 or visit Ecology’s website at www.ecy.wa.gov/programs/hwtr/waste-report/notification.html.

■ Report your waste annually

If you have an active RCRA Site ID#, you must submit a Dangerous Waste Annual Report, even if you did not generate any dangerous waste that year. If you are an SQG and do not have a Site ID#, you are not required to report. Annual reports are due by March 1. Keep copies for at least five years. To file an annual report, call 800-874-2022 or go to www.ecy.wa.gov/programs/hwtr/waste-report/index.html.

■ Pollution Prevention Plans

You must file an annual Pollution Prevention Plan if:

- You generate more than 2,640 pounds of dangerous waste per year, or
- You file a Toxics Release Inventory (TRI) report.

Many recycled wastes are not counted toward the 2,640 pound threshold. Your facility may be able to avoid the planning requirement by reducing or recycling your waste. For more information go to www.ecy.wa.gov/programs/hwtr/P2/index.html.

Do You Treat Your Waste?

If you treat your dangerous waste on-site, you may be subject to “Treatment by Generator” (TBG) requirements. Some examples of treatment include:

- Neutralization
- Solidification
- Evaporation
- Polymerization
- Pharmaceutical waste
- Filtration
- Carbon adsorption
- Separation and distillation
- Aldehyde Deactivation

■ Treatment for recycling

TBG requirements do not apply if you recycle treated waste. This waste must be managed under dangerous waste requirements until it enters the recycling unit. Recycled waste must be counted and reported, along with any resulting dangerous waste residues.

You must keep a daily log of the amount of dangerous waste treated and the amount of dangerous waste residues that result from the treatment.

If a material, such as cleaning solvent or distilled thinner is treated and reused over and over, you can use a counting exemption. Count the greatest amount of spent material awaiting recycling on any single day in a month and all residual dangerous waste.

There is another special exemption for waste that is treated and reused in a “closed loop” system. The treatment system is fully-connected to the equipment producing the original waste. An example is a parts washer with a built-in still.

In such cases, the waste to be treated does not have to be counted and reported, however all residual dangerous waste from this recycling process (like sludge or filters) must be counted.

■ Treatment for disposal

Follow these TBG requirements if you are not recycling your treated waste: The treatment tank or container must be marked with the date when the waste was first added. It must be emptied every 90 days (or 180 days for generators of 220-2,200 lbs/month with no time limit for SQGs).

- Any residues from the treatment process that are dangerous wastes must be counted and managed as such.
- Generators must keep a written log of the quantity of each dangerous waste treated, the treatment methods, and dates of treatment.
- When filing your Dangerous Waste Annual Report:
 - Note in the *Comment Section* of the Site Identification form that the process is treatment by generator.
 - Count the total quantity (as wet weight) of waste before treatment. Also count the weight of any remaining material that is dangerous waste. Use these figures for annual reporting and generator status.
- If you discharge wastewater from a TBG activity, you must comply with the domestic sewage exclusion.

■ Requirements for specific treatment processes

- *Evaporation* — Treat only inorganic wastes mixed with water, such as spent caustics, rinse waters, and water-based machining coolants. The evaporator must meet all applicable accumulation requirements. Use secondary containment around the evaporator to catch spills. Don't evaporate to dryness; leave some water in the remaining sludge. Dispose of the remaining sludge properly.
- *Solidification* — Solidified waste must pass the Paint Filter Liquids Test. This test, Method 9095 of the EPA document *Test Methods for Evaluating Solid Waste, Physical /Chemical Methods*, SW-846 measures the amount of free liquid in the waste. The waste must be solidified using a non-biodegradable solidification process. Solidified waste must be stable in its final disposal destination.
- *Carbon filtration* — Any treated effluent and backwash from the process must be managed under state or federal regulations. The spent carbon is either regenerated in a safe manner without discharge of dangerous waste to the air or handled as a hazardous or non-dangerous waste accordingly.

More Help

Find helpful resources at Ecology's website: www.ecy.wa.gov/programs/hwtr

Designating Dangerous Waste, www.ecy.wa.gov/biblio/96436.html

A guide for determining whether a material is a dangerous waste.

Help line for Dangerous Waste Annual Reporting (Turbowaste): 1-800-874-2022.

Shoptalk newsletter, subscribe at: www.ecy.wa.gov/programs/hwtr/shoptalkonline/

Helpful waste management information, tips, and regulatory updates.

Dangerous waste training modules: www.ecy.wa.gov/programs/hwtr/workshops/

Dangerous Waste Regulations Self Audit Checklist:

<https://fortress.wa.gov/ecy/publications/summarypages/ecy070384.html>

Be prepared. This checklist shows what dangerous waste inspectors routinely look for when they visit your site.

Dangerous Waste Regulations, Chapter 173-303 Washington Administrative Code

www.ecy.wa.gov/programs/hwtr/reg_comp_guide/173-303.HTM



Guide for Dangerous Waste (DW) Generators in Washington State Quick Reference Guide

Publication #98-1252 - HWTR

Revised June 2014

Dangerous Waste Regulations			
	Large Quantity Generator (LQG) Generates > 2,200 lbs/mo DW or >2.2 lbs/mo of Acute Hazardous Waste (AHW) or WT01 (EHW)	Medium Quantity Generator (MQG) Generates 220-2,200 lbs/mo	Small Quantity Generator (SQG) Generates <220 lbs/mo DW or <2.2 lbs/mo of Acute Hazardous Waste (AHW) or WT01 (EHW)
Dangerous Waste Designation	Determine if waste is covered by regulations. WAC 173-303-070	Determine if waste is covered by regulations. WAC 173-303-070	Determine if waste is covered by regulations. WAC 173-303-070(8),070
Identification Number and Required Notices	File DW Site Identification Form to notify and obtain ID number. WAC 173-303-060,170	File DW Site Identification Form to notify and obtain ID number. WAC 173-303-060,170	Not required. WAC 173-303-070(8)
Labeling, Marking of Waste During Accumulation	Label with the words "Hazardous Waste" or "Dangerous Waste," the start date, and the risk. WAC 173-303-200(1)(c),(1)(d)	Label with the words "Hazardous Waste" or "Dangerous Waste," the start date, and the risk. WAC 173-303-200(1)(c),(1)(d)	Major risk label required by L&I/DOSH and some local Health Departments. WAC 173-303-070(8)
Waste Generation Amount	More than 2,200 lbs/mo DW or more than 2.2 lbs/mo Acute Hazardous Waste (AHW) or WT01 (EHW). WAC 173-303-200	Between 220 lbs/mo and 2,200 lbs/mo. WAC 173-303-200	Less than 220 lbs/mo DW less than 2.2 lbs/mo AHW or WT01 (EHW). WAC 173-303-200
Waste Accumulation Amount	No volume limit. WAC 173-303-200(1)	Not to exceed a total of 2,200 lbs. WAC 173-303-201(1),(2)	Not to exceed a total of 2,200 lbs. WAC 173-303-070(8)(a)
Accumulation Time Limit	90 days. WAC 173-303-200	180 days. WAC 173-303-201(2)(a)	No limit. WAC 173-303-070(8)
Satellite Accumulation Areas	55 gallons DW or 1 quart AHW. WAC 173-303-200(2)	55 gallons DW or 1 quart AHW. WAC 173-303-200(2)	Does not apply.
Accumulation Area and General Inspections	Must be scheduled, documented, and deficiencies corrected. WAC 173-303-200(1)	Must be scheduled, documented, and deficiencies corrected. WAC 173-303-201, 202	Not required. WAC 173-303-070(8)

Dangerous Waste Regulations

	Large Quantity Generator (LQG) Generates > 2,200 lbs/mo DW or > 2.2 lbs/mo of Acute Hazardous Waste (AHW) or WT01 (EHW)	Medium Quantity Generator (MQG) Generates 220-2,200 lbs/mo	Small Quantity Generator (SQG) Generates <220 lbs/mo DW or <2.2 lbs/mo of Acute Hazardous Waste (AHW) or WT01 (EHW)
Personnel Training	Required written plan.	Familiarize employees with proper waste handling and emergency procedures. Also see Cont. Plan & Emergency Procedures below.	Written plan not required by DW regulation, but Hazard Communications required by L&I/DOSH.
	WAC 173-303-200(1)(e),330	WAC 173-303-201(2)(c)	WAC 173-303-070(8)
Preparedness and Prevention	<ul style="list-style-type: none"> Minimize fire, explosion, release. Communication systems (internal and external), fire control. Test/maintain communication and control equipment. Access to communications or alarm system. Adequate aisle space. Arrangements with local authorities. 	<ul style="list-style-type: none"> Minimize fire, explosion, release. Communication systems (internal and external), fire control. Test/maintain communication and control equipment. Access to communications or alarm system. Adequate aisle space. Arrangements with local authorities. 	Not required.
	WAC 173-303-200(1)(e)	WAC 173-303-200(1)(e)	WAC 173-303-070(8)
Contingency Plan and Emergency Procedures	<ul style="list-style-type: none"> Written plan. Arrangements with local emergency response agencies (ER). Emergency coordinator (EC) (phone, address). Emergency equipment list. Evacuation plan. Plan distribution to police, fire departments, hospitals, and local agencies. Plan must be amended if it fails in an emergency or there are changes in the facility, equipment, or personnel. EC must respond. 	<ul style="list-style-type: none"> Emergency coordinator (EC) onsite/on call. Post: EC name and phone number. Post: Location of fire extinguishers/spill control/fire alarm. Post: Fire department phone. Familiarize employees with proper waste handling and emergency procedures. EC must respond. 	Not required. Check L&I/DOSH.
	WAC 173-303-200(1)(e)	WAC 173-303-201(2)(c)	WAC 173-303-070(8)
Additional Reporting for Emergencies	Report spill, fire, explosion, release.	Report spill, fire, explosion, release.	Report spills if threat to human health and the environment.
	WAC 173-303-145,200(1)(e)	WAC 173-303-145,201(2)(c)(iv)	WAC 173-303-070(8)(b)(ii),145

Dangerous Waste Regulations

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Waste Containers	<ul style="list-style-type: none"> • Good condition. • Non-leaking. • Compatible with waste. • Closed/protected. • 30" aisle space. • Response to spills. • Leaks, emergencies. • Weekly inspections. • Ignitable, reactive, incompatible waste. • Containment system. 	<ul style="list-style-type: none"> • Good condition. • Non-leaking. • Compatible with waste. • Closed/protected. • 30" aisle space. • Response to spills. • Leaks, emergencies. • Weekly inspections. • Ignitable, reactive, incompatible waste. • Containment system. 	Manage waste in way that does not pose a threat. Local regulations may apply.
	WAC 173-303-200(1)(b), 200(1)(b)(i)	WAC 173-303-200(1)(b), 200(1)(b)(i)	WAC 173-303-070(8)
Waste Tanks	<ul style="list-style-type: none"> • Assessment. • Design, installation. • Containment, release, direction. • Operating requirements. • Daily inspections. • Response to spills, leaks. • Closure, post closure. • Ignitable, reactive, incompatible waste. 	<ul style="list-style-type: none"> • Operating requirements. • Daily/weekly inspections. • Closure, post closure. • Ignitable, reactive, incompatible waste. • Freeboard requirement. • Ignitable, reactive, incompatible waste. 	Local regulations may apply.
	WAC 173-303-200(1)(b), 200(1)(b)(i)	WAC 173-303-202	WAC 173-303-070(8)
Disposal of Dangerous Waste	Ship to permitted TSD or DW recycler. Uniform Manifest Form required.	Ship to permitted TSD or DW recycler. Uniform Manifest Form required.	Ship off-site or treat on-site: permitted TSD or permitted to manage moderate risk waste or legitimate recycle or other permitted solid waste facility.
	WAC 173-303-200(1)(a)	WAC 173-303-200(1)(a)	WAC 173-303-070(8)
Packaging, Labeling, Marking for Transport	Package, label and mark per USDOT (49 CFR).	Package, label and mark per USDOT (49 CFR).	Refer to DOT Regulations.
	WAC 173-303-190(1),(2),(3), (5),(6)	WAC 173-303-190(1),(2),(3), (5),(6)	WAC 173-303-070(8)
Placarding for Transport	Must offer placard.	Must offer placard.	Refer to DOT Regulations.
	WAC 173-303-190(4)	WAC 173-303-190(4)	WAC 173-303-070(8)
Manifest	Use for shipments off-site.	Use for shipments off-site.	Not required – only bill of lading.
	WAC 173-303-180	WAC 173-303-180	WAC 173-303-070(8)
Annual Reporting	File every year.	File every year.	File every year, if have ID#. Site Identification form only.
	WAC 173-303-220(1), 170(2)	WAC 173-303-220(1), 170(2)	WAC 173-303-070(8)(b)(iv)

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Exception Reporting	45 days: if no signed manifest from TSD returned. WAC 173-303-170(2)	45 days: if no signed manifest from TSD returned. WAC 173-303-220(2)	Not required. WAC 173-303-070(8)
Recordkeeping	5 years: manifests 5 years: annual reports, exception reports, test results. WAC 173-303-210(1),(2),(3)(a)	5 years: manifests 5 years: annual reports, exception reports, test results. WAC 173-303-210(1),(2),(3)(a)	Not required, but encouraged. WAC 173-303-070(8)
Waste Minimization	<ul style="list-style-type: none"> • For generators > 2,640 lbs/yr: plan to minimize waste required. • Written plan and program in place to minimize hazardous waste volume, toxicity. • Submit executive summary to WDOE. • 5 year updates. WAC 173-307	<ul style="list-style-type: none"> • Good faith effort to minimize waste and selected best waste management method. • For generators > 2,640 lbs/yr: Plan to minimize waste required. • Submit executive summary to WDOE. • 5 year updates. WAC 173-307	Not required.
Recycled, Reclaimed, Recovered Waste	Depending on the circumstances, recycled used oil, recycled car batteries, other recycled wastes partially or fully exempt. WAC 173-303-120,500-525	Depending on the circumstances, recycled used oil, recycled car batteries, other recycled wastes partially or fully exempt. WAC 173-303-120,500-525	Depending on the circumstances, recycled used oil, recycled used batteries, other recycled wastes partially or fully exempt. WAC 173-303-120,500-525
Regulating Agency	Ecology	Ecology	Ecology/ County Health District
Universal Waste	Standards for universal waste management (batteries, mercury-containing equipment, and lamps). WAC 173-303-573	Standards for universal waste management (batteries, mercury-containing equipment, and lamps). WAC 173-303-573	Standards for universal waste management (batteries, mercury-containing equipment, and lamps). WAC 173-303-573

This Quick Reference Guide summarizes the requirements for each generator status under the *Dangerous Waste Regulations* (Chapter 173-303 WAC), but does not replace them. Always refer to the regulations for details or call a hazardous waste specialist at your nearest Ecology Regional Office.

Central Regional Office 509-575-2490
Northwest Regional Office 425-649-7000

Eastern Regional Office 509-329-3400
Southwest Regional Office 360-407-6300

To ask about available formats for the visually impaired please call the Hazardous Waste and Toxics Reduction Program at 360-407-6700. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Inspect Your Dangerous Waste Drums

TIGHTEN BUNGS

Keep bungs tight except when adding waste to the container.

LATCH FUNNELS

Keep funnels closed and latched when not in use. Funnels must be screwed in with gaskets.

GROUND DRUMS

Prevent igniting flammable waste by grounding drums.

TIGHTEN LIDS

Make sure contents cannot spill if tipped over.

AISLE SPACE

Leave at least 30" of aisle space between rows of drums. Rows must be no more than two drums wide.

LABEL IT

Labels must be visible.

NO LEAKS

Keep drums free of corrosion, bulges, and other damage.

SECONDARY CONTAINMENT

Secondary containment must be large enough to contain 10% of the free liquid in all containers or 100% of the free liquid in the largest container, whichever is larger.

To request a large, color copy of this poster:
Call 360-407-6700
Email hwtrpubs@ecy.wa.gov

