

Shop Guide for Dangerous Waste Management



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Publication and Contact Information

This document is available on the Department of Ecology's website at: https://apps.ecology.wa.gov/publications/summarypages/0904015.html.

For more information contact:

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Additional Resources

Find helpful resources at the <u>Washington State Department of Ecology website</u>.² Common useful resources include:

- <u>Dangerous waste designation</u>:³ Guidance to determine whether a material is a dangerous waste.
- Help line for Dangerous Waste Annual Reporting (Turbowaste): 1-800-874-2022. Email at Turbowaste@ecy.wa.gov.
- <u>Shoptalk newsletter</u>: ⁴ Helpful waste management information, tips, and regulatory updates.
- <u>Dangerous Waste Regulations Self-Audit Checklist</u>: 5 Be prepared. This checklist shows what dangerous waste inspectors routinely look for when they visit your site.
- Dangerous Waste Regulations, <u>Chapter 173-303 Washington Administrative Code</u>.⁶

To speak to a dangerous waste specialist, contact your regional Ecology office.

¹ http://ecology.wa.gov/accessibility

² https://ecology.wa.gov/Waste-Toxics

³ https://ecology.wa.gov/Designation

⁴ https://ecology.wa.gov/Shoptalk

⁵ https://apps.ecology.wa.gov/publications/SummaryPages/2104016.html

⁶ http://bit.ly/173-303

Department of Ecology's Regional Offices Map of Counties Served



Southwest Region | Central Region | Eastern Region

Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	15700 Dayton Ave. N Shoreline WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman 4601 N Monroe Spokane, WA 99205		509-329-3400
Headquarters	Across Washington	PO Box 46700 Olympia, WA 98504	360-407-6000

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Introduction

If handled improperly, many common workshop wastes can threaten the safety of employees, the community, and the environment. This guide may help you:

- Improve workplace safety.
- Handle wastes properly.
- Comply with dangerous waste regulations.
- Be prepared in case a dangerous waste inspector visits your site.

Additional information on proper dangerous waste management may be found at the <u>Department of Ecology's Hazardous Waste and Toxics Reduction (HWTR) Program website.</u>⁷



Figure 1: Manage your dangerous waste properly to keep your workers and the environment safe.

Identify Dangerous Waste: Designation

Your business is responsible for complying with laws regarding your waste's safe handling and disposal.

In Washington, hazardous waste and other kinds of waste that meet certain criteria are called dangerous waste. The <u>Dangerous Waste Regulations</u>, 8 Chapter 173-303 Washington Administrative Code (WAC), govern the management and disposal of dangerous waste.

The process of determining if your waste is 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. All waste streams must be designated properly to determine whether they are dangerous.

For more information about <u>designating waste</u>, ⁹ please contact your regional Ecology office or <u>visit our</u> website. ¹⁰

⁷ https://ecology.wa.gov/Waste-Toxics

⁸ http://bit.ly/173-303

⁹ https://ecology.wa.gov/Designation

¹⁰ https://ecology.wa.gov/DWGuidance

Parts Washers

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

- Mineral spirits
- Stoddard solvent
- Petroleum naphtha

- Citrus-based solvent
- Biological agents

When a solvent becomes too dirty to use and is to be replaced, the spent solvent must be designated. These wastes may be ignitable or toxic, or may have picked up hazardous materials in use, such as heavy metals.

If the spent solution is recycled, you may be able to claim recycling credits to reduce your Pollution Prevention (P2) Planning fee (this applies only to businesses that are required to prepare P2 Plans).

If the solution cannot be recycled, follow these best management practices:

- For solvent parts washers, 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 and must be properly designated before disposal.
- Make solvent last longer by pre-cleaning parts with a rag or brush to remove the heaviest dirt.
- Do not use spray cans over solvent drums and other containers; they can cause a non-dangerous waste solvent to become a dangerous waste.
- Keep the lid closed when not in use. This prevents accidental mixing with other chemicals and minimizes evaporation.
- Do not mix solvents with any other waste.
- Do not mix solvents into used oil.
- Use a water-based cabinet-type parts washer, if possible. 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.

Aerosol Cans

Aerosol cans are not dangerous waste if they are used until empty, with the exception of cans that contained certain pesticides.

For additional information about managing aerosol cans, see the Ecology publication <u>Focus on: Aerosol Can Management</u>. ¹¹ Discarded partially full cans may contain dangerous waste if the contents are toxic or ignitable. You have two options for disposing of aerosol cans with hazardous contents:

- 1. Manage them as dangerous waste.
 - Send the can with its contents to a permitted dangerous waste facility.
 - Count and report this waste according to dangerous waste regulations.
- 2. Empty them before disposal.
 - Puncture the can with a commercial puncturing device.
 - Drain and collect the contents.
 - Manage the collected liquid as dangerous waste.

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 $^{^{11}\,}https://apps.ecology.wa.gov/publications/SummaryPages/0704005.html$

- Count and report this waste according to dangerous waste regulations.
- Dispose of empty cans; once they are empty, they can be recycled as scrap metal.
- Empty the can only by using it for its intended purpose.



Figure 2: Shop towels can be designated as dangerous waste.

Shop Towels

Shop towels (towels, wipes, or rags) containing solvents, paints, stains, inks, or other chemicals may be ignitable, toxic, or have <u>listed solvents</u>¹² that cause them to be dangerous waste. Cleaning parts can contaminate shop towels with metals like lead or cadmium. Brake fluids, antifreeze, acids, and various other chemicals can cause towels to become dangerous waste.

If the contaminant is a dangerous waste, then you should check to see if the shop rags used are also a dangerous waste. A few points to remember for safety:

- Keep incompatible wastes separated. For example, don't mix towels with alcohols and towels with acids. We recommend not mixing hazardous and non-hazardous shop towels.
- Make sure used shop towels contaminated with hazardous substances are collected, accumulated, and transported in closed, fireproof metal containers. Used towels containing oil or solvents can spontaneously ignite even when no open flame is present.

Solvent-Contaminated Wipes

In January 2019, Ecology adopted rules that conditionally exclude solvent-contaminated wipes sent for cleaning and reuse ("reusable wipes") from the definition of solid waste. This rule also excludes solvent-contaminated wipes that are disposed of ("disposable wipes") at a permitted treatment, storage, and disposal (TSD) facility.

What counts as a solvent-contaminated wipe?

- Wipes contaminated with one or more of the F001 through F005 solvents listed in WAC 173-303-082 or the corresponding P- or U- listed solvents.
- Wipes exhibiting a dangerous waste characteristic due a listed solvent (P, U, or F listed).

- Wipes exhibiting ignitability from any solvent.
- Wipes exhibiting dangerous waste criteria found in the dangerous waste regulations and not designated by 40 C.F.R. Part 261.¹³

Wipes that designate only for state toxicity or persistence criteria qualify under the same exclusion as solvent-contaminated wipes.

How to manage reusable and disposable solvent-contaminated wipes that meet the exclusion criteria:

- Place wipes in a non-leaking, closed container that will contain free liquids, if they occur.
- Label containers "Excluded Solvent-Contaminated Wipes" and launder or dispose of them within 180 days.
- Send wipes to an eligible laundry facility **OR** dispose of them as solid waste to a permitted hazardous waste landfill, dangerous waste combustor, boiler, or industrial furnace.
- Document how you meet the above requirements.
- Refer to Solvent-contaminated wipes webpage 14 for more information.

Wipes that do not qualify for the exclusion include those that are:

- Contaminated with listed dangerous waste other than eligible solvents.
- Designated as dangerous waste due to federal characteristics of toxicity, corrosivity, or reactivity because of contact with metals or chemicals not included in the F001 – F005 category.
- Contaminated with trichloroethylene (TCE) and to be disposed.

Oil-Contaminated Shop Towels

You can send your oil-contaminated shop towels (that are free of liquids) to a permitted commercial laundry facility or dispose of them as solid waste if the towels are only contaminated with oil, greases, or hydraulic oil; are not dripping with used oil; and do not designate as dangerous waste. Shop towels contaminated with only oil are typically not a dangerous waste, but this is not a guarantee; it is your responsibility to ensure they aren't dangerous waste. Laundering shop towels can save you money.

Best management practices to launder oil-contaminated shop towels include:

- Removing free liquids before putting soiled shop towels in containers. Collect the liquids.
- Not disposing of wastes by pouring them into containers of used shop towels. This may cause your towels to become a dangerous waste and require additional management.
- Taking advantage of a commercial laundry facility. They may provide you with a collection and shipping container.

Used Oil

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

Used oil is also not considered 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 your used oil. Used oil contaminated

¹³ WAC 173-303-080, -90, -100

¹⁴ https://ecology.wa.gov/dw-solvent-wipes

with dangerous waste, such as solvent or brake cleaners, can also designate as dangerous waste. Even small amounts of chlorinated solvents or aerosol products (like brake or carburetor cleaner) can turn a whole container of used oil into dangerous waste that cannot be recycled as used oil.

Non-terne—plated used oil filters are not dangerous waste if they are fully drained. Filters typically drain in 24 to 48 hours. Send drained filters to a scrap metal recycler.

Do not dispose of used oil into a dumpster, storm drain, septic tank, dry well, or sewer.

Do not pour used oil on the ground or use it for dust suppression.

Recycle your used oil following these requirements:

- Keep used oil in a container marked "Used Oil."
- Containers must be closed at all times, except when adding or removing used oil.
- Ecology recommends placing the container in secondary containment and in a secure area away from floor or storm drains.
- Do not mix used oil with any other waste.

See the Used oil webpage¹⁵ for more details.

Spent Antifreeze

Spent antifreeze is toxic, and may contain lead and other hazardous contaminants. For more details about managing spent antifreeze, see Ecology's <u>Focus on: Spent Antifreeze</u>. ¹⁶ 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 when transported.

Recycle your spent antifreeze by following these requirements:

- Do not mix any other material with antifreeze.
- Do not mix with used oil.
- Keep spent antifreeze in containers marked "Spent Antifreeze."
- Store in a manner to prevent releases to the environment:
 - o Maintain containers so they do not leak, rupture or tip over when opened, or handled.
 - Place containers on an impermeable surface or in secondary containment.
- Do not dispose of spent antifreeze in a sewer, storm drain, septic tank, or dry well.
- Never pour antifreeze on the ground.

¹⁵ https://ecology.wa.gov/UsedOil

¹⁶ https://apps.ecology.wa.gov/publications/SummaryPages/0304017.html



Figure 3: Some used light bulbs are classified as dangerous waste.

Light Bulbs

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

Light-emitting diode (LED) lamps must be designated prior to disposal. Check with your recycler to see if they accept LED lamps.

Used light bulbs may be managed as <u>universal waste</u> ¹⁷ rather than dangerous waste by following <u>these</u> requirements: ¹⁸

- 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 accumulation, or clearly and accurately maintain records for each bulb or when the first waste bulb is placed in the container.
- Clearly label bulb containers with one of the following:
 - Universal Waste Lamps
 - Waste Lamps
 - Used Lamps
- Immediately clean up broken bulbs. Place the debris in a closed container with a dangerous waste label and a hazard label marked "Toxic," and manage the broken material as dangerous waste.
- You may self-transport universal waste bulbs, complying with applicable U.S. Department of Transportation (USDOT) regulations found at <u>Pipeline and Hazardous Materials Safety</u> Administration.¹⁹

¹⁷ https://ecology.wa.gov/universal-waste

¹⁸ https://apps.ecology.wa.gov/publications/SummaryPages/2104017.html

¹⁹ https://www.phmsa.dot.gov/

Batteries

Most batteries are dangerous waste, but you can more easily manage them as universal waste when you recycle them by following these requirements:

- Clearly label or mark individual batteries or containers with one of the following:
 - Universal Waste-Batteries
 - Waste Batteries
 - 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 universal waste batteries, but you must comply with applicable USDOT regulations. You must tape the terminals of most battery types to prevent sparking or fires while in transit.

Lead acid batteries may also be reclaimed (including regeneration), which can be a more cost-effective option for generators. Refer to the <u>lead acid battery waste regulations</u>²⁰ in WAC 173-303-520 for details.

Paint Wastes

Solvent-based paint wastes are usually dangerous waste. These include thinners, cleanup solvents, and waste paints. Some latex and acrylic water-based 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 regulations.



Figure 4: Follow Ecology's recommendations to reduce your paint waste.

²⁰ https://app.leg.wa.gov/wac/default.aspx?cite=173-303-520

Reduce Paint Waste

Ecology recommends these best management practices to reduce paint waste:

- Buy only as much paint as you need.
- Mix and use the least amount of paint needed for the job.
- 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.
- Manage your paint inventory so products are used before they expire.
- Reduce the number of different coatings and colors you use when possible.
- Scrape product paints from their containers using all reasonable means before placing the paint can in the trash or recycling as scrap metal.
- Check with local handlers for paint recycling options.

Spray Gun Wastes

Follow these best management practices for spray gun wastes:

- Washing spray guns in an enclosed solvent recirculating gun washer helps you get more use 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 with a two-stage cleaning method. Use previously used thinner or gun wash solvent for the first rinse. Then use fresh solvent to clean the spray guns. Save that solvent to use as the first rinse next time. This will cut your waste in half.
- Do not clean guns by spraying thinner into the air or onto booth filters.

Paint Booth Filters

Paint booth filters may be dangerous waste if they contain paint with heavy metals like chromium, nickel, or lead, or if they are made with certain flame retardants. Test filters to determine if they are dangerous 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, and/or toxic.

Ecology recommends these management practices:

- Do not mix thinner and solvents with other types of waste.
- Do not leave the product or waste thinner drum uncovered because it can evaporate.
- Reduce solvent waste:
 - Add spigots or pumps to solvent containers to keep them closed and reduce evaporation.
 - Use solvent until it loses its cleaning effectiveness.
 - o Reuse flushing and rinsing solvents as thinners, when appropriate.
- Save money by using a distillation unit (still) to reclaim your solvent on-site for further use:
 - Still bottoms (pucks, leftover sludge, or solid cakes) must be designated to determine if they are dangerous waste prior to disposal.
 - Keep a log of the amount of spent solvent accumulated before it's placed in the still. The largest amount accumulated at one time in the month will count toward your generator category.

- o Refer to Ecology's Guide to On-site Distillation²¹ for more information.
- Send waste solvents and paint thinners to a recycler. If spent solvent is recycled, you can claim recycling credits to reduce your P2 Planning fee (this applies only to businesses that are required to prepare P2 Plans).

If you have questions about disposal of paint, and latex paint in particular, see the <u>Paint stewardship:</u> <u>PaintCare</u>²² webpage. PaintCare will accept latex paint from anyone, including households and businesses. However, the program only accepts oil-based paints and other paints that may be dangerous waste from households or small quantity generators.

Counting Your Waste

Different waste management rules apply depending on how much dangerous waste (DW) you generate and accumulate. These levels are called "generator categories." Generator category is determined by the maximum amount of dangerous waste generated in a month. The generator categories are small quantity generator (SQG), medium quantity generator (MQG), and large quantity generator (LQG).

Each type of dangerous waste has a set quantity exclusion limit (QEL). The <u>Dangerous Waste Regulations</u>²³ list types of waste, characteristics, hazards, QELs, and more. By knowing your waste's listing, you can determine its QEL. For example, acute hazardous wastes (WT01) and P-listed wastes have a QEL of 2.2 pounds.

As you measure your waste, document the amount (in pounds) of each dangerous waste you generate each month and compare the amount you generate to the QEL in the following table to determine your generator category for that month. Your generator category may change from month to month.

The weight of your waste can be calculated by multiplying the weight of one gallon by the total number of gallons generated. For more detailed information see the Counting Dangerous Waste²⁴ webpage.

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²¹ https://apps.ecology.wa.gov/publications/SummaryPages/2004030.html

²²https://ecology.wa.gov/Waste-Toxics/Reducing-recycling-waste/Our-recycling-programs/Paint-stewardship

²³ http://bit.ly/173-303

²⁴ https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Dangerous-waste-guidance/Dangerous-waste-basics/Counting-dangerous-waste

Table 1: How much of each type of dangerous waste a generator can create each month.

Generator category	Amount of DW with a monthly QEL of 2.2 pounds	Amount of DW with a monthly QEL of 220 pounds	Amount of DW cleanup residue with a monthly QEL of 2.2 pounds ²⁵
Large quantity	Greater than 2.2	Any amount	Any amount
generator	pounds		
Large quantity	Any amount	Greater than or equal	Any amount
generator		to 2,200 pounds	
Large quantity	Any amount	Any amount	Greater than 220
generator			pounds
Medium quantity	Less than or equal to	Greater than 220	Less than or equal to
generator	2.2 pounds	pounds and less than	220 pounds
		2,200 pounds	
Small quantity	Less than or equal to	Less than or equal to	Less than or equal to
generator	2.2 pounds	220 pounds	220 pounds

Dangerous Waste Accumulation

Time Limits

The length of time you are allowed to accumulate wastes depends on the amount of dangerous waste you generate each month. The accumulation time limits for each generator category are:

LQGs: 90 days.MQGs: 180 days.

 SQGs do not have a time limit; however, if you store more than 2,200 pounds of dangerous waste (or 2.2 pounds acutely hazardous or extremely hazardous waste) on-site, you become subject to the LQG's conditions for exclusion rules (previously known as the LQG's accumulation standards).

Waste Containers

Inspect your dangerous waste containers regularly. Dangerous waste containers must be:

- Securely closed, except when adding or removing waste.
 - If you need to add waste frequently, consider using a screw-in funnel with a latching lid, or a lever-type drum ring if using an open-top drum.
- In good condition (no severe rust, bulging, or other defects).
- Safely 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 hazards associated with the waste (toxic, corrosive, flammable, etc.).
 - The date waste was first added to the container (MQGs and LQGs only).
 - o Free, printable labels are available from Ecology's Print Free Labels webpage. 26
- Made of material that is compatible with the waste.

²⁵ This column refers to any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste or WT01 extremely hazardous waste.

²⁶ https://ecology.wa.gov/PrintDWLabels



Figure 5: It's your responsibility to inspect your dangerous waste containers regularly.

Satellite Accumulation (MQGs and LQGs)

Limited amounts of dangerous waste may be kept near the workstations where they are generated. These areas are called "satellite accumulation areas." In satellite accumulation areas, you may accumulate up to 55 gallons of dangerous waste or one quart liquid (or 2.2 pounds) of acutely hazardous waste without a time limit.

Containers must be:

- Near the place where the waste is generated.
- Kept closed at all times except when adding or removing waste.
- You may only vent a container if it is necessary for the proper operation of equipment or to prevent dangerous situations (such as build-up of extreme pressure).
- Under control of the operator generating the waste.
- Arranged so chemically incompatible wastes can't come in contact with each other.
- Properly marked or labeled with the words "Dangerous Waste" or "Hazardous Waste," and the hazards associated with the waste (toxic, corrosive, flammable, etc.).
- Clearly marked with an accumulation start date and moved to the central accumulation area within three days of becoming full.

Satellite accumulation regulations do not apply to small quantity generators. SQGs must manage dangerous waste in way that does not pose a threat to human health or the environment.

Generators cannot treat their dangerous waste in satellite accumulation areas.

These requirements are for dangerous wastes and do not apply to other wastes such as spent antifreeze that is recycled, universal waste, or used oil.

More details are available on Ecology's Accumulation²⁷ webpage.

Central Accumulation Area (MQGs and LQGs)

The central accumulation area is the area where dangerous waste is held prior to shipment off site for proper disposal.

Ecology requires the facility:

- Use a secondary containment system to hold leaks and spills, such as a dike, berm, or commercial spill-containment pallet for liquid dangerous waste.
- Allow for at least 30 inches of space between rows of waste containers.
- Inspect weekly for signs of leaks or damage.

Ecology recommends:

- Constructing the floor with impervious material, like concrete. It should be free of cracks.
- Accumulating waste indoors or under cover outside, protected from weather.
- Closing active floor drains leading to the sewer or storm water. A sealed drain means no contamination can leave the area through the drain.

Shipping and Disposal

Hazardous Waste Transporters

It is your responsibility to choose a hazardous waste transporter. Use a permitted transporter with a valid EPA/state ID number. Selecting a company that is financially able to respond to accidents is important; it is your responsibility to ensure your dangerous waste is properly disposed of.



Figure 6: Safely ship your dangerous waste by using a permitted transporter.

Manifests for Medium and Large Quantity Generators

For MQGs and LQGs, a Uniform Hazardous Waste Manifest must accompany dangerous waste when it is shipped off site. Your transporter can help fill out this form, but it is your responsibility to make sure it is completed correctly. Retain one of the copies signed by the transporter and someone in your shop. Your transporter may use the EPA e-Manifest system. E-Manifest allows generators to track their shipped dangerous waste. Ask your transporter for details.

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 final signed copy within 45 days. This proves the waste arrived at its destination. Keep all copies of 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.

Shipping Waste as a Small Quantity Generator

SQGs have more options for off-site disposal of their dangerous waste. Many community moderate-risk waste facilities accept dangerous waste from SQGs. Small quantity generators may also offer their wastes to a permitted treatment, storage, and disposal facility. Check with your county health department regarding collection sites and collection events. SQGs may transport their own waste, and are not required to use the Uniform Hazardous Waste Manifest. A receipt, bill of lading, or other documentation can be used for the record of disposal.

USDOT has rules governing how and what you transport, too. See the <u>Pipeline and Hazardous Materials Safety Administration</u>²⁸ for more information on required containers, labels, and shipping papers. SQGs that self-transport their waste should also check with the WA State Utilities and Transportation Commission for any applicable rules, licenses, and permits that may be required.

Get a Site EPA/State Identification Number

Many dangerous waste generators must have an EPA/state ID number (also known as a Site ID#). SQGs do not need a Site ID#; however their dangerous waste transporter or the receiving treatment, storage, and disposal (TSD) facility might require you have one. For more information on obtaining a Site ID#, call 1-800-874-2022 or visit Ecology's Notification of dangerous waste activity webpage.²⁹

Spills and Drips

Material that spills, leaks, or drips is waste unless it is reused as-is. Clean up waste spills, drips, and leaks promptly so they do not spread. Keep containment and accumulation areas clean and dry.

Keep spill cleanup supplies available and train employees how to use them properly. Select absorbents compatible to your wastes. For small spills, use absorbent granules (kitty litter), absorbent pads, or other absorbent materials. Determine whether cleanup residues and absorbent pads must be handled as dangerous wastes after a cleanup.

²⁸ https://www.phmsa.dot.gov/

²⁹ https://ecology.wa.gov/DWNotification



Figure 7: Report all dangerous waste spills immediately.

<u>You must report any spill</u>³⁰ that endangers human health or the environment, regardless of size. Post emergency contact information near your dangerous waste accumulation areas. 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

Dangerous Waste Annual Reports

SQGs that do not have an active EPA/state ID are not required to file an annual report. Facilities with an active EPA/state ID# must submit a Dangerous Waste Annual Report, even if no dangerous waste was generated that year.

You must follow these filing requirements:

- Contact Ecology at 1-800-874-2022 or go to Ecology's Dangerous Waste Annual Reporting³¹ to report.
- File annual reports by March 1.
- Keep copies for at least five years.

Treating Dangerous Waste On Site

If you treat your dangerous waste on-site, you may be subject to <u>Treatment by Generator (TBG)</u> requirements. ³² Some examples of treatment include:

- Neutralization
- Filtration
- Solidification
- Carbon adsorption

- Evaporation
- Separation and distillation
- Polymerization
- Aldehyde Deactivation

³⁰https://apps.ecology.wa.gov/publications/SummaryPages/2004036.html

³¹ https://ecology.wa.gov/DWReport

³² https://apps.ecology.wa.gov/publications/SummaryPages/2004017.html

Treatment of Dangerous Waste

You must follow these TBG requirements if you are treating your waste:

- Treatment tanks cannot accumulate dangerous waste prior to treating for 90 days (LQGs) or 180 days (MQGs).
- The accumulation time begins when waste first enters the tank.
- SQGs may treat dangerous waste under specific requirements. See Ecology publication Small Quantity Generators Treating Dangerous Waste.33
- Dangerous waste treatment should occur only in central accumulation areas.
- 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 and dates of treatment.
- When filing your Dangerous Waste Annual Report:
 - o Check the "Treatment by Generator (TBG)" box on the Site Identification form. You can note the type of treatment you perform in the comments section of the form.
 - Count the total quantity of waste (as wet weight) before treatment. Also count the weight of any remaining material that is dangerous waste. Use these amounts for annual reporting and determining generator category.
- If you discharge wastewater to the sewer from a TBG activity, you must comply with all applicable Clean Water Act requirements and the dangerous waste domestic sewage exclusion.³⁴

Requirements for Specific Treatment Processes

You must follow these requirements for each of the following 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.
 - o 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 in the EPA's Test Methods for Evaluating Solid Waste, Physical /Chemical Methods, SW-846, 35 measures the amount of free liquid in the waste.
 - o The waste must be solidified using a non-biodegradable solidification process.
 - Solidified waste must be stable in its final disposal destination.
- Neutralization: Aqueous dangerous wastes with pH below 2.0 or above 12.5 can be neutralized by adding base or acid to bring the pH within the non-dangerous waste range. Treatment must:
 - Be done in accumulation tanks or containers,
 - o Meet local solid waste rules for solid waste disposal after treatment,
 - Meet federal land disposal treatment standards, and
 - Be done in a manner that does not pose a risk to human health or the environment.

³³ https://bit.ly/SQGsTreatingDW

³⁴ WAC 173-303-071(3)(a)

³⁵ https://www.epa.gov/hw-sw846/sw-846-compendium

Appendix A: Inspect Your Dangerous Waste Drums Poster

INSPECT YOUR DANGEROUS WASTE DRUMS



To request a large, color copy of this poster, call 360-407-6700 or email hwtrpubs@ecy.wa.gov.

Inspect Your Dangerous Waste Drums Poster Text

Tighten bungs and lids

Keep bungs and drum rings tight except when adding waste to the container. Contents must not spill if tipped over.

Ground drums

Prevent sparks by electrically grounding your flammable waste drums.

Make space

Leave at least 30" of aisle space between rows of containers. Rows must not be more than two containers wide. This allows for unobstructed inspection of each container.

Check condition of containers

Prevent spills by using containers free of corrosion, bulges, and other damage.

Latch funnels

Keep funnels closed and latched when not in use. Funnels must be secured to the drum and have gaskets.

Label³⁶

Label with the words "hazardous waste" or "dangerous waste." Use words or pictograms to identify hazards (e.g., ignitable, corrosive, reactive, toxic).

Add start date

Mark the container with an accumulation start date. Do not exceed your accumulation time limit. LQG = 90 days, MQG = 180 days.

Secondary containment

Ensure the containment area can hold 10% of all free liquids or 100% of the largest container, whichever is greater.

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³⁶ Label containers so they're legible or recognizable from 25 ft (or letters at least 1/2" tall).

³⁷ To read more about medium and large quantity generator rules, see WAC 173-303-172 and WAC 173-303-200, respectively.