

# **Shop Guide**

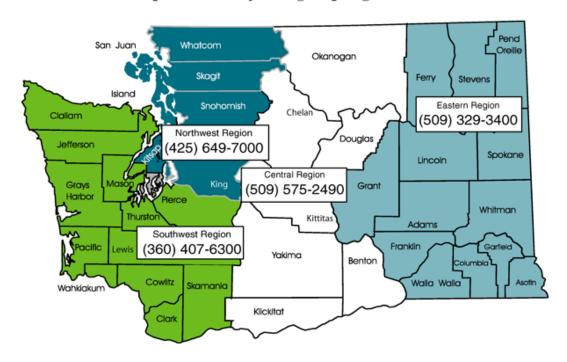
**For Dangerous Waste Management** 



Revised February 2010 Publication no. 09-04-015

## **Department of Ecology Regions**

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



Central Region 15 W Yakima Ave #200 Yakima WA 98902-3452 Northwest Region 3190 160<sup>th</sup> Ave SE Bellevue WA 98008-5452

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### Introduction

This guide helps you manage common shop wastes that threaten the safety of your facility, its workers, and the community if such wastes are improperly handled. It will help you:

- Comply with dangerous waste regulations and avoid costly penalties.
- Improve workplace safety.
- Save money by handling wastes the smartest way.
- Gain customers who know they made a wise choice when selecting a shop that protects the environment.
- Be prepared in case a hazardous (dangerous) waste inspector visits your site.

Find helpful resources at the Department of Ecology's (Ecology) website: <a href="https://www.ecy.wa.gov/programs/hwtr/index.html">www.ecy.wa.gov/programs/hwtr/index.html</a>.

Obtain free help from the Ecology office nearest you:

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

### **Parts Washers**

Sink-type parts washer solvent tanks used for cleaning smaller parts and tools usually contain mineral spirits, Stoddard solvent, or petroleum naphtha. These spent solvents are usually hazardous because they are ignitable, toxic, or pick up hazardous contaminants such as heavy metals from parts being cleaned. They become dangerous wastes the moment the waste tank is replaced with a fresh tank. If the spent solvent is recycled, you can claim a reduction in the annual hazardous waste generation fees you pay to Ecology. Call 1-800-874-2022 for more information.



Don't mix solvents with any other waste. Keep different types of solvents in separate, labeled, closed containers. Do not mix solvents into used oil. And don't use spray cans over solvent tanks. This can contaminate the solvent in the solvent 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 it is exchanged for new solvent.
- Keep the lid closed when not in use. This prevents accidental contamination with other chemicals and minimizes evaporation.
- Use an aqueous cabinet-type parts washer if appropriate. These work like a dish washer and typically do not require hazardous solvents. Test the sludge to be sure it doesn't contain regulated levels of heavy metals.

If you wish to lease or purchase a parts washer, choose one with an attached still or cartridge filter to make your solvent last longer and generate less dangerous waste. Used filters may be a dangerous waste. Overall, they reduce the net amount of waste.

#### **Aerosol Cans**

Aerosol cans are not dangerous waste if they are used until no more product comes out. 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.

There are 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 manage as dangerous waste. This means putting a dangerous waste label and risk label on the container used to hold the contents and keeping it closed when not in use. Recycle empty cans as scrap metal.



Dangerous waste aerosol cans or drained contents must be stored, counted, labeled, and reported according to dangerous waste requirements. These are described later in this guide.

Check labels and Material Safety Data Sheets (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 and Rags**

Shop towels (wipers, rags, or towels) are usually made of cloth or paper. Towels containing solvents, paints, stains, inks, or other chemicals may be ignitable, toxic, or have "listed" solvents that cause them to be dangerous waste. If this is the case, you must manage them as dangerous waste. This means they must be properly contained, labeled, stored, counted, shipped, and reported (see later sections of this guide). Used towels containing oil or solvents can spontaneously start fires even when no flame is present and should be stored in closed, fireproof metal containers.

If you send your soiled towels to a permitted commercial laundry and you handle them properly, they are not dangerous waste. This may 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 by 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 instance, don't mix rags with alcohols amid rags with acids). Also, 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 stored 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 obtain reasonable assurance 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, and metal working fluids without chlorinated compounds, are all considered used oil, and can be mixed without designating the mixture as hazardous waste.

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

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



*Don't* dispose used oil to a dumpster, storm drain, septic tank, dry well, or sewer. *Don't* pour used oil on the ground or use it for dust suppression.

To recycle your used oil, follow 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.
- 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.

To recycle your spent antifreeze, follow these guidelines:

- Do not mix any other material with antifreeze.
- Label containers "Spent Antifreeze—Toxic."
- Avoid spills by keeping containers closed except when adding or removing waste.
- Maintain containers so they do not leak, rupture, or tip over when being opened, handled, or stored.
- Store 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 and Ballasts**

Some spent light bulbs may be dangerous wastes because they contain mercury, which is very toxic. These types of light bulbs include fluorescent, neon, and High Intensity Discharge (for instance, mercury vapor, metal halide, 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, contain lamps in structurally sound containers such as cardboard boxes or fiber drums. Keep containers closed when not adding lamps.
- You can accumulate waste light bulbs for one year from the date they are generated. To document this, the collection container or individual bulb is typically marked with the first date of accumulation.
- An extension to the one-year accumulation limit is allowed if the facility needs more time to collect items to facilitate proper recovery, treatment, or disposal.
- Clearly label or mark individual bulbs or containers with one of the following phrases:
  - Universal Waste –Lamps
  - Waste Lamps
  - Used Lamps
- Immediately clean up broken bulbs and store debris in a closed container with a dangerous waste label and a risk label that says "Toxic."
- You may self-transport waste bulbs, complying with applicable U.S. Department of Transportation (USDOT) regulations.

#### **Batteries**

All batteries are dangerous waste, but can be managed more easily as "Universal Waste" when sent for recycling and managed according to the following guidelines:

- Clearly label or mark individual batteries or containers of UW batteries with one of the following phrases:
  - Universal Waste Batteries
  - Waste Batteries
  - Used Batteries
- You can accumulate batteries for one year from the date they are generated. To document this, the collection container or individual battery is typically marked with the first date of accumulation. An extension to the one-year



accumulation limit is allowed if the facility needs more time to collect items to facilitate proper recovery, treatment, or disposal.

- Store damaged or leaking batteries in closed containers to prevent releasing toxic materials to the environment. Batteries must be compatible with one another and with the container.
- You may self-transport batteries, complying with applicable USDOT regulations.

#### **Paint Wastes**

Solvent-based paint wastes must typically be managed as dangerous wastes. These include thinners, clean-up solvents, waste paints, and some paint booth filters. Containers for these wastes must be kept closed when not in use. They must be stored, counted, labeled, and reported according to dangerous waste requirements (these are described later in this guide).

#### 1. Waste paint

- 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 only what you will use. Mix and use the least amount of coating possible.
- Give left over paint to customers for touch-ups.
- Return unused paint to the manufacturer if it is not past the expiration date. It may be possible to sell it through an industrial materials exchange service (see <a href="http://apps.ecy.wa.gov/hwsd/default.htm">http://apps.ecy.wa.gov/hwsd/default.htm</a>).
- If possible, reduce the number of different coatings and colors you use.

#### 2. Spray Gun Wastes

- If possible, wash spray guns in an enclosed solvent recirculating gun washer. This will be required for most painting operations beginning 2011. This helps you get more "mileage" from your solvent, reduce solvent evaporation loss, save labor, and reduce 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.



Follow this with fresh solvent to clean guns. Save what was fresh solvent to use as the first rinse next time. (Containers of solvent must be labeled.) This will cut your waste in half.

■ Do not clean guns by spraying thinner into the air or onto booth filters.

#### 3. Paint Booth Filters

Paint booth filters may have to be managed as 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 hazardous or if they can be disposed more economically as solid waste.



#### 4. 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.

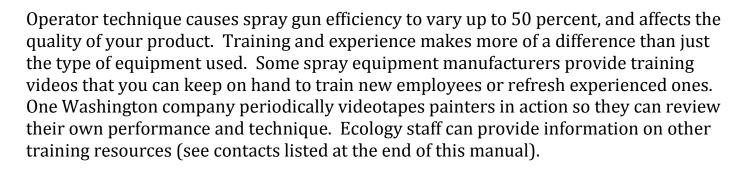
- Don't mix thinner and solvents with other types of waste.
- Don't leave the waste thinner drum uncovered.
- Reduce solvent waste by:
  - Adding spigots or pumps to solvent containers.
  - Using solvent until it loses its cleaning effectiveness, not just because it looks dirty.
  - Reusing flushing and rinsing solvents for thinning, where appropriate.
- Send waste solvents and paint thinners to a recycler. If spent solvent is recycled, claim a reduction in the annual hazardous waste generation fees you pay to Ecology. Call 1-800-874-2022 for more information.
- 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 yet awaiting distillation.
  - Don't throw still bottoms (the sludge or solid cakes left over from distillation) in the dumpster or trash. They need to be handled and disposed as dangerous waste.
  - If solvent is treated and reused over and over, there is a counting exemption. Count the greatest amount of spent material awaiting treatment on any day. That amount is all of the spent material that must be counted and reported for the month. Also, count all residual dangerous waste.

5. Water-based paints and brushes

Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers and pour into a sanitary sewer drain.

#### 6. Other tips

- Use water-borne primers and stay informed about new developments in water-based top coats.
- Use optimum gun settings and spray tips for each job.
- Where possible, thin coatings using heat rather than solvents.
- 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 number of cleanups.



## **Dangerous Waste Accumulation and Storage**

#### 1. Time limits

How long you are allowed to store wastes depends on the amount of dangerous waste you generate each month and store on-site. See Appendix 1 for your time limit.

#### 2. Storage area

You should have a specific area in your shop for storing dangerous wastes. The waste storage area should:

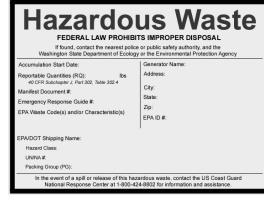
- Be well-marked with hazardous waste/dangerous waste signs, and be access-restricted.
- Have a floor made of impervious material, like concrete. It should be free of cracks.
- Be indoors or under cover outside and protected from storm water.





■ 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 containment system to hold leaks and spills.
  Build or buy a containment system, such as a dike, berm, or commercial spill-containment pallet.



#### 3. Satellite accumulation

Small amounts of dangerous waste may be held near the work stations where they are generated. These "satellite" accumulation areas are places to store waste as you work, before moving waste to the central storage area. Store up to 55 gallons of each dangerous waste with no time limit. When full, label containers including date and move to the main storage area within three days. Containers must be:

- At or near where the waste is created.
- Under control of the operator of the process making the waste.
- Arranged so chemically incompatible wastes cannot come in contact with each other.
- Labeled with the words "Dangerous Waste" or "Hazardous Waste" and the hazard posed by the waste.



#### **Waste Containers**

All dangerous waste containers must be:

- Closed except when adding or removing waste. If you need to add waste frequently, consider using a funnel with latching lid.
- In good condition (no rust, bulging, etc.).
- Handled to prevent rupture or leaks.
- Properly labeled (see Appendix 2). 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. (Small quantity generators do not have to show a date on the label.) Free, printable labels are available from <a href="https://www.ecy.wa.gov/programs/hwtr">www.ecy.wa.gov/programs/hwtr</a>.

■ Made of material compatible with the waste. For solvents, use metal drums; for acids or caustics, use polyethylene.

## **Spills and Drips**

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

Keep spill cleanup supplies handy. Train employees to use them. Know whether clean-up residues and sorbent pads must be handled as dangerous wastes. For small spills, the use of absorbent granules (kitty litter), absorbent pads, or other absorbent materials may create less dangerous waste than washing with water.



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

## **Shipping and Disposal**

#### 1. Transporters

Use a legal transporter with a valid EPA ID number. Find transporters in the Hazardous Waste Services Directory on the Department of Ecology website at <a href="http://apps.ecy.wa.gov/hwsd/default.htm">http://apps.ecy.wa.gov/hwsd/default.htm</a>. It is your responsibility to choose a proper transporter; the Department of Ecology cannot recommend any one company.

#### 2. 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 you have chosen, the facility representative 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 bill of lading, receipt, or other documentation will work. Keep these records for at least five years.

#### 3. Small Quantity Generators

Small quantity generators (SQG) of dangerous waste have additional options for shipping their wastes. See Appendix 1 and the next section for more information. Many household hazardous waste (HHW) facilities accept dangerous waste from small generators. SQGs may transport their own waste to a permitted dangerous waste facility or HHW facility. A Uniform Hazardous Waste Manifest, bill of lading, receipt, or other

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documentation can be used. In addition, 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**

#### 1. Count your waste

Different rules apply depending on how much dangerous waste you generate and accumulate (see Appendix 1). These levels are referred to as "generator status." Generator status is determined by the maximum amount of dangerous waste generated in a month during a calendar year, and by the amount of waste accumulated at any one time:

<b>Generator Status</b>	Generates Monthly	Stores On-Site
Small Quantity	< 220 lbs hazardous waste	<2200 lbs
Generator	< 2.2 lbs acutely hazardous waste or dangerous waste WT01	
Medium Quantity	Between 220-2200 hazardous waste	<2200 lbs
Generator		
Large Quantity	>2200 lbs hazardous waste	No limit
Generator	> 2.2 lbs acutely hazardous waste or dangerous waste WT01	

Document the amount of each dangerous waste generated each month. Don't use shipping manifests for this purpose, since shipment records often lump several months' worth of wastes together. This might artificially inflate your generator status. Waste must be counted and reported in pounds, including liquids.

Convert gallons to pounds by multiplying the gallons by the density of the liquid shown on the MSDS. (If the MSDS shows only the specific gravity, multiply the gallons by the specific gravity and the number 8.34.)

#### 2. Get a RCRA Site Identification Number

Many dangerous waste generators must have a RCRA Identification Number (also known as a Site ID #). SQGs do not need a Site ID # unless their dangerous waste transporter requires 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.

#### 3. Report your waste annually

Dangerous waste generators with an active Site ID # must submit an annual Dangerous Waste Report, even if they 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 a copy for at least five years. To file an annual report, call (800) 874-2022 or go to <a href="https://www.ecy.wa.gov/programs/hwtr/waste-report/index.html">www.ecy.wa.gov/programs/hwtr/waste-report/index.html</a>.



#### 4. Pollution Prevention Plans

Facilities that generate more than 2,640 pounds of dangerous waste a year or file Toxics Release Inventory (TRI) reports must file an annual Pollution Prevention Plan for reducing dangerous wastes and hazardous materials. Many recycled wastes are not counted toward this threshold. Your facility may be able to avoid the planning requirement by reducing or recycling their waste. For more information or free assistance, go to <a href="https://www.ecy.wa.gov/programs/hwtr/P2/index.html">www.ecy.wa.gov/programs/hwtr/P2/index.html</a>.

#### Do You Treat Your Waste?

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

■ Neutralization

Filtration

■ Solidification

Carbon adsorption

■ Evaporation

Separation and distillation

#### 1. Treatment for recycling

Treatment by Generator requirements do not apply if you are recycling your treated waste. Such waste must be managed according to all dangerous waste requirements until it enters the recycling unit.

Any residues from the recycling process that are dangerous wastes must also be managed according to the dangerous waste requirements. You must keep a daily log of the amount of dangerous waste treated and the amount of any residual dangerous wastes that result.

Generally, recycled waste must be counted and reported, along with any dangerous waste residues that result. If the same material is treated and reused over and over, such as a cleaning solvent or thinner distilled for reuse, there is a counting exemption. Count the greatest amount of spent material awaiting recycling on any single day in a month. That is the amount of spent material that is counted for the month. Also, count all residual dangerous waste.

There is another special recycling exemption for dangerous waste that is treated and reused in a "closed loop" system. The treatment equipment is integral ("hard-piped") to the equipment generating the original waste. An example is a parts washer having a built-in still. In that case, the waste to be treated does not have to be counted and reported. All residual dangerous waste from this recycling process (for instance, sludge or filters) must be counted.

#### 2. Treatment for disposal

The following Treatment By Generator requirements apply if you are not recycling your treated waste and you are not a small quantity generator:

- The treatment tank or container must be marked with the date on which waste was first added. It must be emptied every 90 days (or 180 days for generators of 220-2,200 lbs/mo).
- Any residues from the treatment process that are dangerous wastes must be managed as such.
- Generators must maintain a written log of the quantity of each dangerous waste treated, the treatment methods, and dates of treatment.



- When filing your annual waste generator report, do the following:
  - On the Site Identification form, note in the *Comment Section* the process is treatment by generator.
  - For annual reporting and generator status determinations, count the total quantity (as wet weight) of waste generated prior to treatment and the weight of any remaining material that is dangerous waste.
- If you treat wastes in a wastewater treatment unit or elementary neutralization unit and discharge a wastewater, the regulatory provisions in WAC 173-303-802(5) apply instead of the Treatment By Generator rules and guidance.

#### 3. Requirements for specific treatment processes

- Evaporation Only inorganic wastes mixed with water should be treated in an evaporator. Inorganic wastes include spent caustics, rinse waters, and water-based machining coolants. Do not treat organic solutions such as solvents, paints, or oils in an evaporator unless all vapors are captured and there are no releases to the air (except if allowed by state or local authorities). Have secondary containment around the evaporator to catch a spill.
- Solidification Solidified waste must pass the Paint Filter Liquids Test (PFLT). This test, EPA SW-846 Method 9095 Test Methods for Evaluating Solid Waste, Physical /Chemical Methods assesses the amount of free liquid in the waste. The waste must be solidified using a non-biodegradable solidification. Solidified waste must be stable in its ultimate disposal destination.
- *Carbon filtration* Any treated effluent and backwash from the process must be managed according to appropriate 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**

Call the Ecology office nearest you:

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

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

Guide for determining whether a material is a dangerous waste: <a href="https://www.ecy.wa.gov/biblio/96436.html">www.ecy.wa.gov/biblio/96436.html</a>.



Hotline for Annual Hazardous Waste Reporting (Turbowaste) 1-800-874-2022.

Database of hazardous waste management companies: http://apps.ecy.wa.gov/hwsd/default.htm.

Helpful waste management information, tips, and regulatory updates from Ecology's *Shoptalk* newsletter. Subscribe at:

www.ecy.wa.gov/programs/hwtr/shoptalkonline/index.html.

Dangerous waste training modules:

www.ecy.wa.gov/programs/hwtr/workshops/index.html.

# **Appendix 1**

# **Quick Reference Guide for Dangerous Waste Generators**Publication #98-1252



# **Guide for Dangerous Waste** (DW) Generators in Washington State

## **Quick Reference Guide**

Publication #98-1252 - HWTR

Revised July 2008

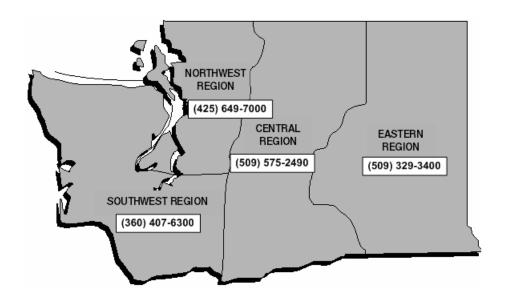
Dangerous Waste Regulations						
	Large Quantity	Medium Quantity	Small Quantity			
	Generator (LQG)	Generator (MQG)	Generator (SQG)			
	Generates > 2,200 lbs/mo DW or	Generates 220-2,200 lbs/mo	Generates <220 lbs/mo DW or			
	2.2 lbs/mo of Acute Hazardous Waste (AHW) or WT01 (EHW)		<2.2 lbs/mo of Acute Hazardous Waste (AHW) or WT01 (EHW)			
Dangerous Waste	Determine if waste is	Determine if waste is	Determine if waste is			
Designation	covered by regulations.	covered by regulations.	covered by regulations.			
	WAC 173-303-070-100,170(1)	WAC 173-303-070-100,170(1)	WAC 173-303-070(8),070100,170(1)			
Identification Number and	File DW Site Identification	File DW Site Identification	Not required.			
Required Notices	Form to notify and obtain	Form to notify and obtain	•			
	ID number.	ID number.				
	WAC 173-303-060,170	WAC 173-303-060,170	WAC 173-303-070(8)			
Labeling, Marking of Waste	DW label with start date,	DW label with start date,	Major risk label required			
During Accumulation	risk label (major risks	risk label (major risks	by L&I/DOSH and some			
	ignitable, corrosive, toxic).	ignitable, corrosive, toxic).	local Health Departments.			
	WAC 173-303-200(1)(c),(1)(d)	WAC 173-303-200(1)(c),(1)(d)	IVA C 472 202 070(0)			
Waste Generation Amount	More than 2,200 lbs/mo	Between 220 lbs/mo and	WAC 173-303-070(8) Less than 220 lbs/mo DW			
Waste Generation Amount	DW or more than 2.2	2,200 lbs/mo.	less than 2.2 lbs/mo AHW			
	lbs/mo Acute Hazardous	2,200 ibs/ iiio.	or WT01 (EHW).			
	Waste (AHW) or WT01		or vvior (Errvv).			
	(EHW).					
Waste Accumulation Amount	No volume limit.	Not to exceed a total of	Not to exceed a total of			
		2,200 lbs.	2,200 lbs.			
	WAC 173-303-200(1)	WAC 173-303-201(1),(2)	WAC 173-303-070(8)(a)			
Accumulation Time Limit	90 days.	180 days.	No limit.			
	WAC 173-303-200	WAC 173-303-201(2)(a)	WAC 173-303-070(8)			
Satellite Accumulation Areas	55 gallons DW or 1 quart	55 gallons DW or 1 quart	Does not apply.			
	AHW.	AHW.				
	WAC 173-303-200(2)	WAC 173-303-200(2)				
Accumulation Area	Must be scheduled,	Must be scheduled,	Not required.			
Inspections	documented, and	documented, and	1			
	deficiencies corrected.	deficiencies corrected.				
	WAC 173-303-	WAC 173-303-	WAC 173-303-070(8)			
	200(1)(b),320(1),(2)(a),(b),(d),(3)	201,320(1),(2)(a),(b),(d),(3)				
Developed Twelving	630(6),640(6)(d).	630(6), 202	Night agent and In- DIAI			
Personnel Training	Required written plan.	Not required by 201(2) (b),	Not required by DW			
		but Hazard	regulation, but Hazard			
		Communications required by L&I/DOSH. Also see	Communications required			
		Cont. Plan & Emergency	by L&I/DOSH.			
	WAC 173-303-200(1)(e),330	Procedures below.				
	771C 173-303-200(1)(E),330	WAC 173-303-201(2)(b)	WAC 173-303-070(8)			
		11210 170-000-201(2)(0)	771C 175-505-070(6)			

	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)
Preparedness and Prevention	<ul> <li>Minimize fire, explosion, release.</li> <li>Communication systems (internal and external), fire control.</li> <li>Test/maintain communication and control equipment.</li> <li>Access to communications or alarm system.</li> <li>Adequate aisle space.</li> <li>Arrangements with local authorities.</li> </ul>	<ul> <li>Minimize fire, explosion, release.</li> <li>Communication systems (internal and external), fire control.</li> <li>Test/maintain communication and control equipment.</li> <li>Access to communications or alarm system.</li> <li>Adequate aisle space.</li> <li>Arrangements with local</li> </ul>	Not required.
	WAC 173-303-200(1)(e),340	authorities. WAC 173-303-200(1)(e),340	WAC 173-303-070(8)
Contingency Plan and Emergency Procedures	<ul> <li>Written plan.</li> <li>Arrangements with local emergency response agencies (ER).</li> <li>Emergency coordinator (EC) (phone, address).</li> <li>Emergency equipment list.</li> <li>Evacuation plan.</li> <li>Plan distribution to police, fire departments, hospitals, and local agencies.</li> <li>Plan must be amended if it fails in an emergency or there are changes in the facility, equipment, or personnel.</li> <li>EC must respond.</li> <li>WAC 173-303-200(1)(e),350,360</li> </ul>	<ul> <li>Emergency coordinator (EC) onsite/on call.</li> <li>Post: location of EC phone.</li> <li>Post: Location of fire extinguishers/spill control/fire alarm.</li> <li>Post: Fire department phone.</li> <li>Familiarize employees with plan and emergency procedures.</li> <li>EC must respond.</li> </ul>	Not required. Check L&I/DOSH.  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.
Waste Containers	<ul> <li>WAC 173-303-145,200(1)(e),360</li> <li>Good condition.</li> <li>Non-leaking.</li> <li>Compatible with waste.</li> <li>Closed/protected.</li> <li>30" aisle space.</li> <li>Response to spills.</li> <li>Leaks, emergencies.</li> <li>Weekly inspections.</li> <li>Ignitable, reactive, incompatible waste.</li> <li>Containment system.</li> <li>WAC 173-303-</li> </ul>	<ul> <li>WAC 173-303-145,201(2)(c)(iv)</li> <li>Good condition.</li> <li>Non-leaking.</li> <li>Compatible with waste.</li> <li>Closed/protected.</li> <li>30" aisle space.</li> <li>Response to spills.</li> <li>Leaks, emergencies.</li> <li>Weekly inspections.</li> <li>Ignitable, reactive, incompatible waste.</li> <li>Containment system.</li> <li>WAC 173-303-</li> </ul>	WAC 173-303-070(8)(b)(ii),145  Manage waste in way that does not pose a threat.  Local regulations may apply.  WAC 173-303-070(8)

	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)
Waste Tanks	<ul> <li>Assessment.</li> <li>Design, installation.</li> <li>Containment, release, direction.</li> <li>Operating requirements.</li> <li>Daily inspections.</li> <li>Response to spills, leaks.</li> <li>Closure, post closure.</li> <li>Ignitable, reactive, incompatible waste.</li> </ul>	<ul> <li>Operating requirements.</li> <li>Daily/weekly inspections.</li> <li>Closure, post closure.</li> <li>Ignitable, reactive, incompatible waste.</li> <li>Freeboard requirement.</li> </ul>	Local regulations may apply.
	WAC 173-303-200(1)(b),640 except (8)(a),(8)(c)	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.
Manifest	WAC 173-303-200(1)(a)	WAC 173-303-200(1)(a)	WAC 173-303-070(8)
wiamiest	Use for shipments off-site.  WAC 173-303-180	Use for shipments off-site.  WAC 173-303-180	Not required – only bill of lading.  WAC 173-303-070(8)
Packaging, Labeling, Marking for Transport	Package, label and mark per USDOT (49 CFR). <i>WAC 173-303-190(1),(2),(3),(5),(6)</i>	Package, label and mark per USDOT (49 CFR). <i>WAC 173-303-190(1),(2),(3),(5),(6)</i>	Refer to DOT Regulations.  WAC 173-303-070(8)
Placarding for Transport	Must offer placard. WAC 173-303-190(4)	Must offer placard. WAC 173-303-190(4)	Refer to DOT Regulations. <i>WAC 173-303-070(8)</i>
Annual Reporting	File every year.  WAC 173-303-220(1), 390(2)	File every year.  WAC 173-303-220(1), 390(2)	File every year, if have ID#. Site Identification form only. WAC 173-303-070(8)(b)(iv), 220(1)
<b>Exception Reporting</b>	45 days: if no signed manifest from TSD returned. <i>WAC 173-303-220(2)</i>	45 days: if no signed manifest from TSD returned. <i>WAC 173-303-220(2)</i>	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> <li>For generators &gt; 2,640         lbs/yr: plan to minimize waste required.     </li> <li>Written plan and program in place to minimize hazardous waste volume, toxicity.</li> <li>Submit executive summary to WDOE.</li> <li>5 year updates.</li> <li>WAC 173-307</li> </ul>	<ul> <li>Good faith effort to minimize waste and selected best waste management method.</li> <li>For generators &gt; 2,640 lbs/yr: Plan to minimize waste required.</li> <li>Submit executive summary to WDOE.</li> <li>5 year updates.</li> </ul> WAC 173-307	Not required.

	Large Quantity Generator	Medium Quantity	Small Quantity
	(LQG)	Generator (MQG)	Generator (SQG)
	Generates > 2,200 lbs/mo DW or 2.2 lbs/mo of Acute Hazardous Waste (AHW) or WT01 (EHW)	Generates 220-2,200 lbs/mo	Generates <220 lbs/mo or <2.2 lbs/mo DW of Acute Hazardous Waste (AHW) or WT01 (EHW)
Recycled, Reclaimed,	Depending on the	Depending on the	Depending on the
Recovered Waste	circumstances, recycled used	circumstances, recycled used	circumstances, recycled used
	oil, recycled car batteries,	oil, recycled car batteries, other	oil, recycled used batteries,
	other recycled wastes	recycled wastes partially or	other recycled wastes
	partially or fully exempt.	fully exempt.	partially or fully exempt.
	WAC 173-303-120,500-525	WAC 173-303-120,500-525	WAC 173-303-120,500-525
Regulating Agency	Ecology	Ecology	Ecology/
			County Health District
Universal Waste	Standards for universal waste	Standards for universal waste	Standards for universal
	management (batteries,	management (batteries,	waste management
	mercury-containing	mercury-containing equipment,	(batteries, mercury-
	equipment, and lamps).	and lamps).	containing equipment, and
	WAC 173-303-573	WAC 173-303-573	lamps).
			WAC 173-303-573

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



If you need this information in an alternate format, please call the Hazardous Waste and Toxics Reduction Program at 360-407-6700. If you are a person with a speech or hearing impairment, call 711, or 800-833-6388 for TTY.

## **Appendix 2**

## **Do Your Drums Pass the Test?**

Publication #08-04-015

# Do Your Drums Pass the Test?

#### A 10-point checklist for hazardous waste containers

