

A Guide for Auto Body Shops



Hazardous Waste and Toxics Reduction Program Washington State Department of Ecology Olympia, Washington

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Additional Resources

Find helpful resources at the <u>Washington State Department of Ecology website</u>.¹ Common useful resources include:

- Dangerous Waste Regulations, Chapter 173-303 Washington Administrative Code.²
- <u>Shoptalk newsletter</u>:³ helpful waste management information, tips, and regulatory updates.
- Dangerous waste designation webpage.⁴

Contact Information

Hazardous Waste and Toxics Reduction Program

P.O. Box 47600 Olympia, WA 98504-7600 Phone: 360-407-6700 **Website:** <u>Washington State Department of Ecology</u>⁵

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¹ https://ecology.wa.gov/Waste-Toxics

² http://bit.ly/173-303

³ https://ecology.wa.gov/Shoptalk

⁴ https://ecology.wa.gov/Designation

⁵ https://ecology.wa.gov/contact

⁶ https://ecology.wa.gov/accessibility

Department of Ecology's Regional Offices

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



Map of Counties Served

Southwest Region	Northwest Region	Central Region	Eastern Region
360-407-6300	206-594-0000	509-575-2490	509-329-3400

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	PO Box 330316 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

Table of Contents

Introduction			
Reduce and Recycle Your Wastes5			
Your Generator Requirements			
Identify your waste and determine your generator category7			
Manage your dangerous waste properly7			
Maintain equipment and plan for emergencies7			
Arrange for proper transportation and disposal8			
Keep records and report annually8			
Auto Body Dangerous Wastes by Waste Category9			
Common Auto Body Shop Waste Management Guidance10			
Antifreeze10			
Batteries11			
Car prep and body work wastes11			
Floor cleaning waste water			
Paint booth filters			
Paint waste			
Solvent-contaminated wipes15			
Spray cans			
Spray gun wastes			
Solvent tanks or parts washers17			
Sump sludges			
Thinners and solvents			
Used oil19			
Additional Air Quality Requirements 20			
Related Publications and Webpages 21			

Introduction

Auto body shops regularly generate dangerous wastes that are harmful to human health and the environment. Common examples include spent solvents, thinners, still bottoms,⁷ waste paint, and waste antifreeze.

You must manage these wastes properly to:

- Protect yourself, your employees, and your community.
- Ensure you're in compliance with state regulations and avoid costly penalties.
- Save money by finding possible ways to reduce or recycle your wastes.

Washington uses the term **dangerous waste** while federal law uses the term **hazardous waste**. Our regulations are more protective than federal rules, so the term **dangerous waste** includes more wastes than the federal definition.

While this guide summarizes some requirements for auto body shops, it doesn't replace them. Always refer to the <u>Dangerous Waste Regulations</u>⁸ for more details or <u>contact your regional</u> <u>Ecology office</u>.⁹

Reduce and Recycle Your Wastes

By reducing your auto body shop's waste before you generate it, you can:

- Avoid long-term liability concerns associated with generating dangerous wastes.
- Save on dangerous waste management costs.
- Create a healthier, safer work environment for you and your employees.

Consider each process in which your shop generates dangerous waste and evaluate if there's a way you change the process to produce less or no dangerous waste.

For example:

- Substitute a less toxic raw material.
 - Switch to less hazardous waterborne primers and paints.

⁸ https://bit.ly/173-303

⁷ Still bottoms are the sludge or solid cakes left over from the still process, or left in the bottom of the waste paint or thinner drum.

⁹ https://ecology.wa.gov/contact

- Ask for the safety data sheet (SDS) before ordering a new product.
 Biodegradable or water-based doesn't necessarily mean environmentally safe, or that the product is exempt from regulations. Safe products that are mixed with dangerous substances may need to be handled as dangerous waste.
- Update to more efficient operating practices.
 - Make sure employees follow procedures like keeping lids on all dip tanks that use solvents and using dirty solvent first when cleaning parts. Evaporation, equipment leaks, spills, or inappropriate solvent use can lead to losses of 25–40 percent.
 - Control your inventory by tracking purchases, shelf life, expiration dates, and surplus waste generated. A centralized inventory system can significantly reduce waste and costs.
 - Explore available <u>on-site distillation stills</u>.¹⁰ It may be more efficient for your shop depending on the amount of solvent you use, space available, shop management practices, and other regulatory requirements.
 - Contact a waste exchange service that helps companies with waste products (like wash thinners) find other companies that can use these products.
- Recycle wastes and wastewater you can't reduce.
 - Contract a recycling service to pick up used solvent.
 - Seal floor drains. Don't allow any cleaning solutions to enter the sewer.

¹⁰ https://apps.ecology.wa.gov/publications/SummaryPages/2004030.html

Your Generator Requirements

This is a highly abridged list of requirements. Please review our <u>Guide to Dangerous Waste by</u> <u>Generator Category</u>¹¹ for a more detailed explanation of the requirements listed below.

Identify your waste and determine your generator category

First you need to determine if the waste you manage is dangerous. Follow the <u>designation</u> <u>procedures</u>¹² to identify which waste codes apply.

You must <u>count your dangerous waste</u>¹³ each month to determine your <u>generator category</u>:¹⁴ small, medium, or large quantity generator. Your category may change from one month to the next, so you need to understand how to accurately identify and count your dangerous waste.

Manage your dangerous waste properly

You must manage your dangerous waste properly. This includes:

- Accumulating wastes in compatible, sturdy, leak-proof, closed containers.¹⁵
- <u>Clearly labeling¹⁶ the waste's hazards</u>.
- Regularly inspecting the waste containers and accumulation areas. See our <u>Weekly</u> <u>Inspection Checklist</u>,¹⁷ a helpful tool to inspect your central accumulation area.
- Disposing of or transporting accumulated waste before reaching accumulation time limits.

Maintain equipment and plan for emergencies

Proper dangerous waste management includes being prepared for emergencies. You must perform preventative maintenance regularly and have plans in place in the case of a spill, fire, or other emergency.

¹¹ https://apps.ecology.wa.gov/publications/SummaryPages/2004018.html

¹² https://ecology.wa.gov/Designation

¹³ https://ecology.wa.gov/CountingDW

¹⁴ https://ecology.wa.gov/GeneratorCategory

¹⁵ https://ecology.wa.gov/dwcontainers

¹⁶ https://ecology.wa.gov/LabelDW

¹⁷ https://apps.ecology.wa.gov/publications/SummaryPages/1204019.html

Arrange for proper transportation and disposal

You're responsible for ensuring your dangerous waste is <u>disposed of properly</u>.¹⁸ This means you must:

- Properly manage your waste as soon as you generate it.
- Dispose of your waste correctly under the dangerous waste regulations.
- Accept responsibility for the waste as long as it exists—even after proper disposal.

Most dangerous waste generators hire a waste service provider to haul and dispose of their wastes. You may also be able to recycle or treat waste at your facility.

Keep records and report annually

Medium and large quantity generators must <u>keep their records</u>,¹⁹ typically for five years. Small quantity generators have fewer requirements, but are encouraged to keep some records for five years as well.

 ¹⁸ https://ecology.wa.gov/DWdisposal
 ¹⁹ https://ecology.wa.gov/DWRecords



Figure 1: Used masking tape, overspray paper, paint filters, and more may be dangerous waste.

Auto Body Dangerous Wastes by Waste Category

Refer to Table 1 to find out how common auto body shop wastes fall in the state's dangerous waste categories. Your wastes may be different, depending on the chemicals and processes you use. You may need to test to determine if certain wastes are dangerous.

Auto Body Shop Example Waste	Dangerous Waste Categories	Dangerous Waste Hazards
Chlorinated solvents	Listed, criteria waste, characteristic waste	Ignitable
Contaminated oil	Listed, criteria waste, characteristic waste	Ignitable, toxicity
Spent thinners and solvents	Listed, characteristic waste	Ignitable
Conversion coatings	Characteristic waste	Corrosive
Masking tape and overspray paper	Characteristic waste	Toxicity characteristic
Paint booth filters	Characteristic waste	Toxicity characteristic
Paint wastes	Characteristic waste	Toxicity characteristic
Waste antifreeze	Criteria waste	Тохіс

Table 1: Typical auto body dangerous wastes.

Sometimes the only way to determine if your waste is dangerous is to send it to a laboratory for analysis. Auto body shop analysis typically includes pH, volatile organics, petroleum hydrocarbons, and heavy metal tests.

If you test a waste once and continue to use the same industrial process, you may apply those test results when designating future batches of the same waste.

For example, if you test your spent paint booth filters once and find them to be non-hazardous, you may use this knowledge for future disposal of the same spent filters as long as the process and materials haven't changed.

If you need testing done, use Ecology's <u>Lab Search webpage</u>²⁰ or ask your association for help in locating a reputable lab.

Common Auto Body Shop Waste Management Guidance

This section includes common auto body shop waste categories and explains how to manage them safely and in compliance with the regulations.



Figure 2: Manage your spent antifreeze safely.

Antifreeze

Spent antifreeze is dangerous waste, however if you recycle it, you don't need to count or manifest it. If you dispose of it in another way, it's subject to full regulation unless you can document it's not hazardous.

²⁰ https://apps.ecology.wa.gov/laboratorysearch/

Follow these practices to manage your antifreeze:

- Recycle your own antifreeze or use a recycling service. Keep records of your recycling activities.
- Keep a separate container for antifreeze you can reuse without further treatment. Label this container differently than your waste antifreeze.
- Use secondary containment for containers of liquid waste.
- Write the words "spent antifreeze" on your waste antifreeze container.
- Keep volumes of used antifreeze low by properly and routinely recycling it.
- Don't ever dispose of antifreeze to the sewer, storm drain, septic tank, dry well, or on the ground.
- Don't mix waste antifreeze with any other waste. Keep it separate.

Batteries

Spent lead acid batteries are dangerous wastes, however if you recycle them or return them to a battery manufacturer for regeneration, you don't need to count or manifest them. Follow these practices to manage your batteries:

- Avoid long-term storage by sending them to a reclaimer.
- Store them upright in a secure, covered place and check them often for leaks.
- Don't store them outside.
- Don't put them in the garbage.
- Don't drain them into a drain or on the ground.

Car prep and body work wastes

Masking tape, overspray paper, and body filler dust from sanding are not typically hazardous once the paint has cured on these wastes. Follow these practices to manage your car prep and body work wastes:

- Use the least amount of masking tape and paper possible.
- Sweep up filler dust separately and dispose of it in the dumpster.
- Don't mix filler dust with wash waters, paint waste, or sludge—this increases the amount of waste you must pay to dispose of.



Figure 3: Depending on how you clean your floors, your waste water may not be dangerous.

Floor cleaning waste water

It's best to keep your floors clean to begin with and use a non-toxic floor cleaner.

Wash water may contain heavy metals or grease from other auto body shop activities. In this case you may need to treat it before you discharge it to the sewer in order to meet water quality discharge limits. Contact your local publicly owned treatment works (POTW) to find out if they're able to treat your wash water.

Follow these practices to manage your floor cleaning waste water:

- Keep your floors clean to begin with. Catch leaks before they hit the floor and place the waste in the appropriate waste container.
- Clean small, non-chlorinated spills immediately with absorbent. Sweep and save it for reuse until the absorbing ability is gone. If you have local landfill approval, then you can dispose of it in the dumpster.
- Don't use absorbents to clean up chlorinated solvents and then dispose of them in the dumpster. Any material contaminated with dangerous waste must be handled like dangerous waste.
- Use absorbent pads and wring them out in the appropriate waste container when saturated.
- Get permission from your local sewer utility before any floor cleaning wastes enter the sewer.

- Don't let floor cleaning waste water go to an outside or inside storm drain, dry well, or septic system.
- Don't let paint residues build up on the floor and then hose them down a drain or outside. These wastes may be dangerous.

Check with your sewer utility or city engineering department to find out where your drains lead. Most outside drains and some inside drains don't go to a sewage treatment plant, but instead lead directly to a stream, lake, ditch, or drywells. If you dispose of waste down these drains, you may contaminate groundwater.

Paint booth filters

Paint booth filters may or may not be dangerous, mostly depending on if they are changed on a regular basis, dry, and contain paint with heavy metals such as chromium, nickel, or lead. Many paint booth filters contain halogenated compounds that make them dangerous waste even if disposed before use.

Follow these practices to manage your paint booth filters:

- Test them for metals and halogenated compounds to determine if your filters are dangerous.
- Check with your waste hauler before melting styrofoam filters in your solvent barrel.
- Don't dispose of paint filters containing chromium, lead, or other heavy metals in the garbage.



Figure 4: Paint waste is typically hazardous.

Paint waste

Off-spec or waste paint is typically hazardous because it is listed, ignitable, toxic, or contains heavy metals. You may reduce volatile organic compound (VOC) emissions by using low VOC solvent-based or water-based paints.

Follow these practices to manage your paint waste:

- Use a computerized paint mixing system to reduce the amount of off-spec paint and its disposal cost.
- Use waterborne primers and water-based top coats, which may rival solvent-based top coats in quality and durability.
- Have paint cups of various sizes and use smaller paint cups when possible. This helps you avoid overmixing paint and reduces the amount of solvent needed to clean up.
- Don't dispose of waste paint down any storm drain, septic system, dry well, or sewer. This can lead to water contamination and liability problems for you.
- Don't mix a standard amount of paint for every job (e.g., one quart, one pint, etc.). Mix only what you will use.
- Don't buy more paint products than you need—the less paint on the shelf, the less potential waste.
- Don't evaporate paint wastes. This is a form of illegal disposal.

Solvent-contaminated wipes

Facilities may follow the regulations related to solvent-contaminated wipes.

If you send wipes for laundering (reusable wipes), they're excluded from the definition of solid waste, which means they aren't considered dangerous waste.

Certain wipes sent for disposal are still considered solid waste, but many are excluded from the definition of dangerous waste. This means you may be able to dispose of them with normal trash.

If your business generates a rag or wipe that designates as dangerous waste for reasons other than the solvent's properties or listing, these rags and wipes are no longer exempt.

If you follow the optional exclusion for solvent-contaminated wipes:²¹

- The wipes don't count towards your generator category.
- You don't report them on your dangerous waste annual report.

For more information on the exclusions, please see our publication: <u>Focus on Conditional</u> <u>Exclusions for Solvent Contaminated Wipes</u>.²²

Spray cans

Partially empty spray cans of degreasers are usually dangerous waste because they contain ignitable or chlorinated solvents. Follow these practices to manage your spray cans:

- Use an entire spray can before opening another.
- If a spray can malfunctions (for example, if the tip breaks off), handle it as dangerous waste or consider returning it to your supplier.
- Don't throw partially empty spray cans into the dumpster. **Empty** means the contents are completely sprayed out and no product remains in the can.²³
- Don't use spray cans over solvent tanks, parts washers, or anything that could cause the solvents from the spray can to cross-contaminate the other wastes.

²¹ https://ecology.wa.gov/DW-solvent-wipes

²² https://apps.ecology.wa.gov/publications/SummaryPages/1904016.html

²³ You must not deliberately spray out contents just to empty the can—use the aerosol product for its intended purpose. You may add empty aerosol cans to your solid waste stream, however we recommend you recycle them as scrap metal if you can find a scrap metal company that will take them. If you choose to manage your empty aerosol cans as dangerous waste, you must do so in accordance with the Dangerous Waste Regulations.



Figure 5: Spray gun wastes are typically hazardous.

Spray gun wastes

The solvents and thinners used in spray guns are typically hazardous because they are listed, ignitable, or toxic. Follow these practices to manage your spray gun wastes:

- Clean equipment immediately—before waste builds up and hardens.
- Wash spray guns in an enclosed solvent-recycling gun washer or parts cleaner to reduce solvent evaporation. They retain 90% of the solvents and vapors and reduce labor and exposure to solvents.
- As the spray gun solution gets dirty, add makeup thinner or solvent.
- Don't clean spray guns by spraying wash thinner in the open air. This is also a requirement for compliance with Air Quality rules.
- Don't dispose of spray gun wastes on the ground or down any storm drain, septic system, dry well, or sewer.
- Don't use fresh solvent to clean guns. Use recycled waste thinners and reuse gun wash solvents.
- If possible, don't use lacquer thinner. Use other paint thinners with lower VOC emissions.

Solvent tanks or parts washers

Waste haulers often provide parts washer solvent tanks for cleaning smaller parts and tools. Solvents (such as mineral spirits, Stoddard solvent, petroleum naptha, etc.) become hazardous wastes the moment the waste service company exchanges the waste tank with a fresh tank.

These spent solvents are hazardous because they are ignitable or toxic. Other solvents, such as those used for spot cleaning, are typically hazardous too.

Follow these practices to manage your solvent tanks or part washers:

- Use less hazardous, non-chlorinated solvents or switch to a parts washer that uses a water-based cleaner.
- Purchase your own solvent still and recycle solvent on site yourself.
- Only have your waste hauler exchange your tank when it's too dirty for further use.
- Keep a log of dates and recycled amounts if you recycle on site.
- Top off the tank's solvent from time to time to extend the solvent's life.
- Use a filter on aqueous tanks and solvent tanks with high suspended solids (such as diesel carbon).
- Don't dispose of spent solvents to drains, the air, or the ground.
- Don't mix solvents with any other waste and keep different types of solvents in separate, labeled, closed containers.
- Don't evaporate solvents as a means of disposal.
- Don't dry just-cleaned parts with an air hose. This wastes solvent, creates unnecessary VOCs, and is against Air Quality regulations.
- Don't use spray cans over solvent tanks. This contaminates the solvent in the solvent tank.
- Don't add spent solvents to used oil.

Sump sludges

Sludges from your sump or oil/water separator may be dangerous waste. Test the sludge at a professional laboratory to determine if it's dangerous.

Follow these practices to manage your sump sludges:

- Test the sludge when it's pumped out. Keep all records.
- If the sludge is a dangerous waste, send it to a dangerous waste management facility.
- Use a pumping service with an EPA/Site ID Number to pump and transport your sludge.
- Don't put dangerous sump sludge in the dumpster or on the ground.
- Don't use a septic tank pumping service to remove the sludge. There is no legal, environmentally safe way for these services to dispose of the waste if it's dangerous.



Figure 6: Paint thinners and solvents are often hazardous. Store and label them properly.

Thinners and solvents

Thinners and solvents used in paint preparation, painting, and clean-up include additives (such as acetone, toluene, xylene, etc.) and are typically dangerous because they are listed, ignitable, or toxic.

Follow these practices to manage your thinners and solvents:

- Treat thinner and solvent as something with value—more like gold and less like water. Be conservative when using these products. Add spigots or pumps to solvent containers.
- Use solvent until it loses its cleaning effectiveness (don't change it out just because it looks dirty).

- Recycle solvents and waste paint thinners. Investigate which option is best for you. Check with your trade association, other shops, and your paint jobber for ideas.
- Create a covered storage area for waste drums stored outside. Water and other contamination in your waste adds to the disposal cost.
- If you recycle on site, keep a log of dates, recycled amounts, and batch makeup amounts.
- Don't mix thinner and solvents with different types of waste. Save costs by keeping each type in a separate, marked container.
- Don't throw still bottoms in the dumpster or trash—they need to be disposed of as dangerous waste.
- Don't leave the waste thinner drum uncovered and make sure it's picked up by your waste hauler before it overflows. Label the drum as dangerous waste and add the date waste first enters the drum.

Used oil

Used oil is dangerous waste, however if you recycle it,²⁴ you don't need to count or manifest it. If it's mixed or contaminated with dangerous wastes such as solvents, you must manage it under the Dangerous Waste Regulations.²⁵

Follow these practices to manage your used oil:

- Keep used oil in a separate container marked "used oil only."
- Place your container in a secure area and train your technicians to keep it secure.
- Keep records of used oil testing and shipments.
- Contact your nearest <u>regional Ecology office</u>²⁶ for used oil burner guidance.
- Don't ever dispose of used oil to a storm drain, septic tank, dry well, sewer, or dumpster.
- Don't contaminate used oil with any other waste. This could turn the whole load into dangerous waste.

²⁴ Recycling includes burning for energy recovery.

²⁵ WAC 173-303-515: https://app.leg.wa.gov/WAC/default.aspx?cite=173-303-515

²⁶ https://ecology.wa.gov/contact

- Don't pour used oil on the ground, even for dust suppression.
- Don't mix used oil with any other waste, such as brake cleaner or antifreeze.

For more details about the proper management of used oil, please see our used oil webpage.²⁷

Additional Air Quality Requirements

There may be additional air quality requirements that apply to your auto body shop's operations, such as:

- Obtain a Notice of Construction (NOC) Air Quality Permit (if applicable).
- Use exhaust filters that capture 98% of paint overspray.
- Use a high volume, low pressure (HVLP) spray gun, electrostatic spray gun, airless spray gun, air-assisted airless spray gun, or a gun demonstrated to be equal in transfer efficiency to an HVLP spray gun.
- Clean paint guns in an enclosed parts cleaner or by hand. Don't spray thinner through paint guns to clean.

For more information, please contact your local clean air agency. Visit our <u>Clean Air Agencies</u> <u>webpage</u>²⁸ for a list of Washington state air agencies.

²⁷ https://ecology.wa.gov/UsedOil

²⁸ https://ecology.wa.gov/cleanairagencies

Related Publications and Webpages

Learn more in these related publications:

- Focus on Conditional Exclusions for Solvent Contaminated Wipes²⁹
- Guide to Dangerous Waste by Generator Category³⁰
- <u>Guide to On-site Distillation</u>³¹
- Weekly Inspection Checklist³²

Learn more on these related webpages:

- Dangerous Waste Regulations³³
- <u>Counting dangerous waste³⁴</u>
- Dangerous waste containers³⁵
- Designate your waste—is it dangerous?³⁶
- <u>Disposing, recycling, or treating</u> <u>dangerous waste</u>³⁷
- <u>Generator category</u>³⁸
- Keeping records³⁹

- <u>Label dangerous waste</u>⁴⁰
- Laboratory search⁴¹
- <u>Solvent-contaminated wipes</u>⁴²
- Used oil⁴³
- Washington clean air agencies⁴⁴

²⁹ https://apps.ecology.wa.gov/publications/SummaryPages/1904016.html

³⁰ https://apps.ecology.wa.gov/publications/SummaryPages/2004018.html

³¹ https://apps.ecology.wa.gov/publications/SummaryPages/2004030.html

³² https://apps.ecology.wa.gov/publications/SummaryPages/1204019.html

³³ https://bit.ly/173-303

³⁴ https://ecology.wa.gov/CountingDW

³⁵ https://ecology.wa.gov/dwcontainers

³⁶ https://ecology.wa.gov/Designation

³⁷ https://ecology.wa.gov/DWdisposal

³⁸ https://ecology.wa.gov/GeneratorCategory

³⁹ https://ecology.wa.gov/DWRecords

⁴⁰ https://ecology.wa.gov/LabelDW

⁴¹ https://apps.ecology.wa.gov/laboratorysearch/

⁴² https://ecology.wa.gov/DW-solvent-wipes

⁴³ https://ecology.wa.gov/UsedOil

⁴⁴ https://ecology.wa.gov/cleanairagencies