Problem Wastes for Property Managers

Hazardous Waste and Toxics Reduction Program

Washington State Department of Ecology

Olympia, Washington

Revised January 2024, Publication 21-04-044

DEPARTMENT OF ECOLOGY
State of Washington

Publication Information

This document is available on the Department of Ecology's website at: https://apps.ecology.wa.gov/publications/summarypages/2104044.html.

Cover photo credits

- Mehluli Hikwa, unsplash.com
- Matt Reames, unsplash.com
- Sydney Angove, unsplash.com
- Raymond Henry, Stockvault.net

Contact Information

Hazardous Waste and Toxics Reduction Program

P.O. Box 47600
Olympia, WA 98504-7600
Phone: 360-407-6700
Website: Washington State Department of Ecology[1]

ADA Accessibility

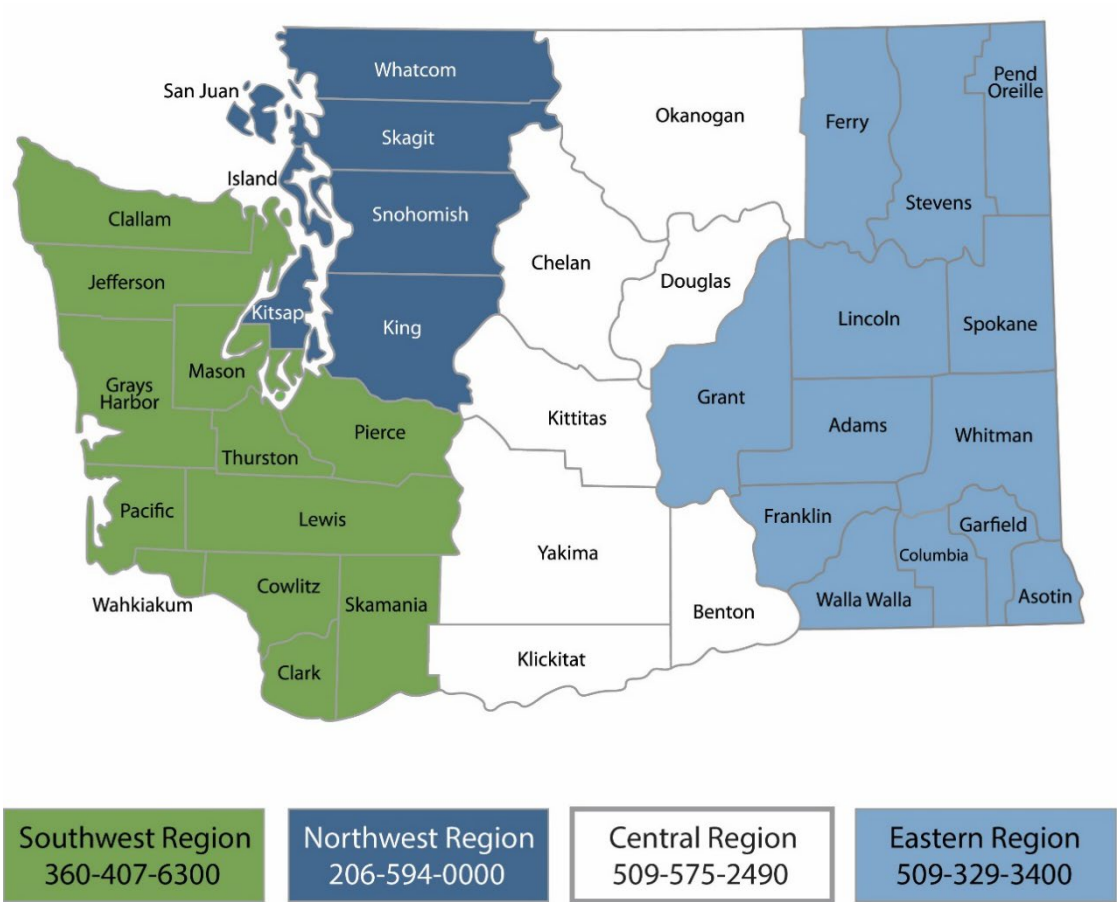
The Department of Ecology is committed to providing people with disabilities access to information and services by meeting or exceeding the requirements of the Americans with Disabilities Act (ADA), Section 504 and 508 of the Rehabilitation Act, and Washington State Policy #188.

To request an ADA accommodation, contact Ecology by phone at 360-407-6700 or email at hwtrpubs@ecy.wa.gov. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's website[2] for more information.

[1] www.ecology.wa.gov/contact
[2] www.ecology.wa.gov/accessibility

Department of Ecology's Regional Offices

Map of Counties Served



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

Problem Wastes for Property Managers

Hazardous Waste and Toxics Reduction Program
Washington State Department of Ecology

Olympia, WA

Revised January 2024 | Publication 21-04-044

DEPARTMENT OF
ECOLOGY
State of Washington

Table of Contents

Introduction

If you manage commercial properties, you're often responsible for a variety of potentially dangerous wastes left behind by tenants or contractors. Office, retail, and industrial tenants often produce wastes that require special handling. Problem wastes may also be generated during remodeling, construction, demolition, and routine property maintenance activities.

It's important you properly manage these dangerous wastes to protect human health and the environment, and that you comply with Washington state's Dangerous Waste Regulations.[3] This may include getting an EPA/State ID Number[4] and completing an annual report.[5]

Managing your properties requires managing the dangerous materials and wastes on the premises to avoid the potential risks to people and the environment. Spills of toxic materials directly increase the risk of contaminated stormwater runoff. Poorly managed toxic materials can contaminate stormwater and find their way into waterways, including streams, rivers, and Puget Sound.

This guide will help you identify and properly manage common problem wastes.

Asbestos

Figure 1: Asbestos is commonly found in furnace insulation. Photo credit: Mark Doliner on Flickr.

Asbestos is commonly found in:

- Sheet rock mud
- Textured walls and ceilings
- "Popcorn" ceilings
- Roofing and shingles
- Thermal insulation
- Siding
- Sheet flooring and adhesives
- Floor tiles and tile mastics

[3] https://app.leg.wa.gov/WAC/default.aspx?cite=173-303
[4] https://ecology.wa.gov/DWNotification
[5] https://ecology.wa.gov/DWReport

When asbestos-containing materials are damaged or disturbed by repair, remodel, or demolition activities, microscopic fibers become airborne. They may be inhaled into the lungs, where they can cause significant health problems. Breathing high levels of asbestos fibers can lead to an increased risk of:

- Lung cancer.
- Mesothelioma (a cancer of the lining of the chest and the abdominal cavity).
- Asbestosis (scarring of the lungs with fibrous tissue).

Remove and dispose of asbestos

You must have your building inspected for asbestos before construction, renovation, or demolition activity. In Washington state, anyone handling or removing asbestos must be certified and notify the Washington State Department of Labor & Industries (L&I)[6] of any asbestos abatement projects ten days prior to starting.

You don't need to remove asbestos that's in good condition. However, if asbestos is damaged or will be disturbed during a remodel or repair, it must be removed by an accredited asbestos contractor. In addition:

- Get a removal and disposal permit from your local air authority or Ecology's Air Quality Program.[7]
- Follow the requirements for removing and properly packaging waste asbestos, including the 2013 requirement to label building material that contains asbestos.[8]
- Remember to file:
    - A notification form from your local air authority.[9]
    - A Notice of Asbestos Abatement Project from L&I.[10]
    - Landfill disposal permits and receipts.
    - Air monitoring results taken during and after removal.

[6] https://lni.wa.gov/licensing-permits/other-licenses-permits/asbestos-certification
[7] https://ecology.wa.gov/airoperatingpermits
[8] https://ecology.wa.gov/AsbestosWaste
[9] https://ecology.wa.gov/cleanairagencies
[10] https://lni.wa.gov/forms-publications/F413-025-000.pdf

Abandoned and Unknown Wastes

Figure 2: You must test unidentified or unclaimed waste.

If tenants leave unidentified or unclaimed waste, you must determine if it's dangerous waste. This may require having the waste properly sampled and tested. Until you know if the waste is dangerous or not:

- Store and manage the unknown waste as a dangerous waste. Store the waste so accidental releases don't reach the environment.
- Label the container with the date of the sampling and the words "Dangerous Waste Pending Analysis" and potential hazards associated with the contents (e.g., ignitable, toxic, reactive, corrosive).
- Keep a log. Record the date of discovery, the date samples were shipped to a testing facility, and testing facility information.
- If the test indicates you have a dangerous waste, manage it according to the regulations.[11]

Different types of waste have different requirements for labeling, treating, storing, disposing, and transporting. For example, you may be able to handle a container of waste solvent differently than a container of waste antifreeze, even though both are dangerous waste.

Under state and federal law, you must identify waste hazards and share this information with employees, transporters, and facilities that treat or dispose of the waste.

Visit our choosing an analytical laboratory webpage[12] to find an accredited lab. The lab you work can provide guidance on:

- How to sample and transport the waste to their facility for testing.
- Determining the type of waste.
- How many of various types of containers you might need.
- Proper storage conditions.

Learn more in our Focus on: Unknown Wastes publication[13] and contact your regional Ecology office[14] or Pollution Prevention Specialist[15] (if you have one) for more details.

[11] https://apps.leg.wa.gov/wac/default.aspx?cite=173-303
[12] https://ecology.wa.gov/ChooseALab
[13] https://apps.ecology.wa.gov/publications/SummaryPages/2004006.html
[14] https://ecology.wa.gov/contact
[15] https://ecology.wa.gov/PPA

Antifreeze

Figure 3: Manage antifreeze in a way that doesn't threaten human health or the environment.

Antifreeze is an ethylene glycol-based coolant used as a heat exchange medium in motor vehicle radiators, motorized equipment, and in other industrial processes. We regulate antifreeze because it's toxic. It may also contain ethylene glycol, lead, and other hazardous contaminants. You must manage it in a way that doesn't pose a threat to human health or the environment.

Manage and recycle spent antifreeze safely

- Keep spent antifreeze in containers that are in good condition, closed, and labeled with the words "Spent Antifreeze."
- Don't mix spent antifreeze with other wastes.
- Don't dispose of spent antifreeze to the ground, sanitary sewer, or storm drain.
- Don't evaporate or burn antifreeze as a means of disposal.

For more information on recycling antifreeze:

- Visit our antifreeze webpage.[16]
- See our Focus on: Spent Antifreeze publication.[17]
- View the regulations.[18]

Find a hazardous waste service provider[19] that recycles used antifreeze.

[16] https://ecology.wa.gov/Antifreeze
[17] https://apps.ecology.wa.gov/publications/summarypages/0304017.html
[18] https://app.leg.wa.gov/WAC/default.aspx?cite=173-303-522
[19] https://ecology.wa.gov/DWContractors

Contaminated Sites and Soils

Figure 4: Improper dangerous waste storage can contaminate your commercial and residential property.

Reduce the likelihood of soil contamination by working with commercial and residential tenants. Properly managing, storing, and disposing hazardous materials and dangerous wastes may also help reduce your potential liability.

You must immediately report spills or other releases of hazardous substances[20] to the environment to Ecology.

Prevent contamination

- Find out if your property is currently contaminated. Our Contaminated Property Considerations: Focus on Real Estate Transactions publication[21] includes suggestions for record review, site inspections, and limiting liability.
- Prevent future contamination by evaluating how tenants handle their hazardous materials and dangerous wastes. Establish a formal written agreement between you and your tenants—perhaps a provision in your lease agreement about compliance with state dangerous waste regulations.
- Keep dangerous wastes out of septic systems, storm drains, and sewer systems.

[20] https://ecology.wa.gov/Report-a-spill
[21] https://apps.ecology.wa.gov/publications/SummaryPages/2209021.html

Cleaners, Detergents, and Disinfectants

Figure 5: If you find unused cleaning bottles, manage them safely.

If you have unused cleaners, detergents, or disinfectants:

- Try to find a legitimate use for them rather than disposing of them.
- Never dispose them down a septic system, storm drain, dry well, or on the ground.
- Do not put them in drains that lead to the sanitary sewer system unless you have discussed it with your local wastewater or sewer utility and the waste products meet local limits for hazardous constituents.
- Consider listing them with an exchange service like King County's Industrial Materials Exchange (IMEX)[22] or another peer-to-peer selling website.

[22] https://kingcountyhazwastewa.gov/business-disposal/imex

Fluorescent Light Ballasts

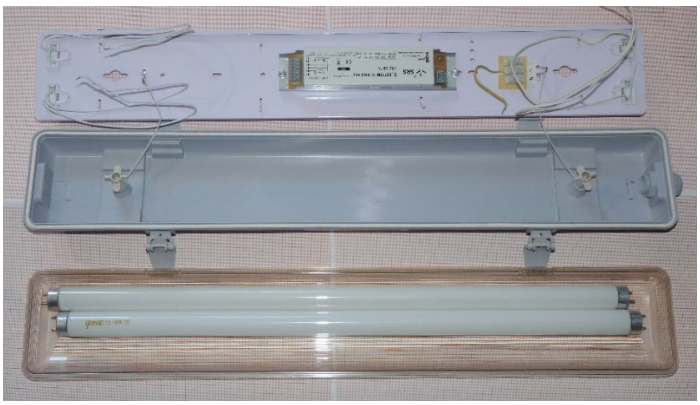


Figure 6: Fluorescent light ballasts are a common source of PCBs.
Photo credit: Dmitry G on Wikimedia Commons.

Polychlorinated biphenyl ballasts

Polychlorinated biphenyls (PCBs) were commonly used in the small capacitor within fluorescent light ballasts (FLBs) until 1980. FLBs manufactured before then are still commonly in use in older buildings.

Ruptured or leaky PCB-containing FLBs[23] may pose health hazards to occupants, and are difficult and costly to clean up. Even intact PCB-containing FLBs may emit small amounts of PCBs into the air during normal use.

We recommend you remove these ballasts to prevent potential inhalation or dermal exposure. Recycle or dispose of the ballasts at a facility that's federally permitted to accept PCB wastes. You can remove the ballasts from light fixtures, but don't disassemble the ballasts.

Non-PCB ballasts

Ballasts marked **non-PCB** may still contain PCBs that aren't regulated by EPA. Ballasts containing PCBs at 2 parts per million or greater designate as state-only WPCB waste and must be disposed of or recycled as dangerous waste, or as an excluded waste that meets the conditions of WAC 173-303-071(3)(k)(ii).

Sometimes non-PCB ballasts contain a replacement called di-2-ethylhexylphthalate (DEHP), which is classified as a probable human carcinogen. Ballasts containing DEHP may designate as a Washington toxic dangerous waste. By 1985, most manufacturers stopped using DEHP in ballasts for 4-foot fixtures, but continued using them in other fixtures until 1991.

Unless you are sure you have a ballast without DEHP, you should dispose or recycle non-PCB ballasts as dangerous waste. Contact your local solid waste office for acceptance criteria before disposing of any ballast as solid waste.

Find a hazardous waste service provider[24] that recycles used fluorescent ballasts.

[23] https://ecology.wa.gov/Waste-Toxics/Reducing-toxic-chemicals/Product-Replacement-Program/PCB-lights
[24] https://ecology.wa.gov/DWContractors

Fluorescent Tubes and Compact Fluorescent Light Bulbs

Figure 7: CFLs contain recyclable and recoverable resources.

Fluorescent tubes and compact fluorescent light bulbs (CFLs) contain recyclable and recoverable resources, including glass, metal, phosphor powder, and mercury.

Mercury is a federally regulated hazardous substance. Mercury released into the environment can accumulate in plants, fish, and humans. Children and fetuses are especially vulnerable to the effects of this toxic metal, which can damage the developing nervous system. You must recycle fluorescent tubes and CFLs.[25] You may recycle up to 10 mercury-containing lights per day for free at certain locations through our LightRecycle program.[26]

Dispose of them properly

Some counties don't allow fluorescent lamp disposal in municipal solid waste landfills. Contact your county or city health department to find out if yours does.

Some fluorescent lighting may be dangerous waste due to mercury content. We don't recommend disposal of these dangerous wastes in a landfill. Instead, we recommend you manage them under the Universal Waste rules.[27] Under the universal waste option, you can accumulate wastes up to a year and self-transport the tubes to a recycler without a hazardous waste manifest.

[25] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.230.150
[26] https://ecology.wa.gov/Waste-Toxics/Reducing-recycling-waste/Our-recycling-programs/Mercury-lights
[27] https://apps.ecology.wa.gov/publications/SummaryPages/2104017.html

Refrigerants and Contaminated Oils

Figure 8: Refrigerators and other appliances contain CFCs, HCFCs, HFCs, and other dangerous chemicals. Photo credit: Jeffrey Bary on Flickr

Refrigeration and cooling systems use a variety of refrigerants that must be handled as dangerous waste once they are removed from their systems. These refrigerants include chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs). Don't vent or evaporate these gases into the air—it's illegal; they damage the ozone layer and are powerful greenhouse gases.

Manage and recycle refrigerants safely

- Only trained industry technicians should service cooling and other larger refrigeration systems. Don't attempt to drain these systems without proper training and equipment.
- Smaller refrigeration systems and appliances should be sent for recycling whole. Don't attempt to remove refrigerants from this equipment before recycling. Contact your county or garbage company for help finding a recycling location.
- When you have an on-site system serviced, make sure the technician doesn't mix different types of refrigerants.
- If you have containers of refrigerants you want to dispose of or send for recycling, you must follow U.S. Department of Transportation requirements.
- If you use solvents that contain CFCs, HCFCs, or HFCs, always handle the spent solvent as dangerous waste (even when recycled).

Contaminated oils in used appliances

Compressors in refrigerators and other coolers may contain oil contaminated with CFCs, HCFCs, or HFCs in suspension. This oil must be reclaimed or handled as dangerous waste, unless the used oil rebuttable presumption[28] can be successfully rebutted through analytical testing or knowledge. Any

[28] WAC 173-303-515(4)

company that takes your appliance should properly handle CFCs, HCFCs, HFCs, and compressor oils, and recycle the metals and insulation.

Refrigerant management system and restrictions

Washington is in the process of developing a refrigerant management program for larger stationary refrigeration and air conditioning systems. Building owners of covered systems will need to comply with registration, leak detection, and reporting requirements. Our Air Quality Program can provide compliance assistance to owners of these systems. The program won't cover small systems and appliances, such as refrigerators or household heat pumps.

Washington also recently adopted new limits on the use of HFCs in new equipment. These restrictions mirror federal and international restrictions. Residents and many small businesses that own or use equipment containing HFCs don't need to do anything to comply with the law, but businesses with larger systems are still subject to the refrigerant management program noted above.

Learn more about refrigerant management on our hydrofluorocarbon transition webpage.[29]

[29] https://ecology.wa.gov/Air-Climate/Climate-change/Reducing-greenhouse-gases/Hydrofluorocarbons

Leftover Paint

Figure 9: Leftover paint can often be recycled or reused.

Each year, millions of gallons of leftover paint are sent to landfills nationally. Sending large quantities of usable product to landfills is a waste of resources when most of it could be recycled or reused.

Reuse

When you find leftover usable paint, try to find a way to use it for its original purpose.

- Use leftover paint for touchups, primers, or undercoats. If you can't use it, give it to someone who can.
- Ask nonprofit organizations such as Habitat for Humanity if they'd like it. They can sometimes use the paint.
- List large quantities with King County's Industrial Materials Exchange.[30]

PaintCare

PaintCare is Washington's statewide recycling program designed by paint manufacturers, with oversight by our Solid Waste Management program. The program makes it easier for Washington residents and some businesses to recycle their unused and unwanted paint.

- The program accepts architectural paints, interior and exterior, sold in five-gallon containers or smaller.
- It doesn't accept industrial coatings, original equipment coatings, or specialty coatings.
- In general, the program includes house paint and primers, stains, sealers, and clear coatings (for example, shellac and varnish).
- It doesn't cover solvents and products intended for industrial use. Aerosols (spray cans) aren't accepted.

[30] https://kingcountyhazwastewa.gov/business-disposal/imex

In addition to restrictions on the types of paint that is accepted, the PaintCare program also has eligibility requirements. The program will accept latex paint from anyone; however, to get rid of unwanted oil-based paint and other hazardous paint products, you must qualify as a small quantity generator.[31] For large volumes of paint, PaintCare offers a large volume pickup service.

See PaintCare's website[32] for additional information about accepted products,[33] a drop-off location near you,[34] and the large volume pickup service.[35]

If you aren't able to manage your paint through PaintCare, see the following sections for guidance on managing your paint waste.

Latex paint

If you can't reuse or recycle unwanted latex paint, mix it with a hardener before disposing of it in the garbage. Check with your county solid waste department or your garbage hauler for specific local guidance.

Be aware that latex-based house paint manufactured before 1992 may also contain mercury. You must test the paint to be sure.

Water-based specialty paints

Evaluate acrylic latexes, sign paints, and other water-based specialty paints for their hazardous properties before disposal.

Oil-based paint

Oil-based paints, stains, and thinners are usually dangerous wastes. Reuse or donate them if possible or use a licensed waste management company for proper disposal. Find a hazardous waste service provider[36] on our website. As mentioned above, if you qualify as small quantity generator[37] you can bring your oil-based paints to a PaintCare collection site.

[31] https://ecology.wa.gov/sqg
[32] https://www.paintcare.org/
[33] https://www.paintcare.org/products/
[34] https://www.paintcare.org/drop-off-sites/
[35] https://www.paintcare.org/large-volume-pickups/
[36] https://ecology.wa.gov/DWContractors
[37] https://ecology.wa.gov/sqg

Lead-based Paint

Figure 10: Lead-based paint can be a problem if it peels and cracks like this.
Photo credit: Ich on Wikimedia Commons.

Paint containing lead is a problem if it peels, cracks, chips, or creates dust. Lead from lead-based paint chips and dusts when scraping and sanding. It can pose serious health hazards and is a primary cause of lead poisoning. Lead exposure can harm young children and babies even before they are born. Don't dry sand, dry scrape, or burn lead-based paint.

Where do you find lead-based paint?

Houses built before 1978 probably contain some lead-based paint. Paint on homes built prior to 1960 may have as high as 50 percent lead by weight. Lead-based paint can also be found on playground equipment, offices, schools, hospitals, bridges, water towers, manufacturing plants, cranes, and boats.

Lead dust can form at friction points on windows (such as window sashes rubbing against the jamb), doors, or stairs, and can accumulate on surfaces that are difficult to clean (such as under baseboards). Remodeling activities can release accumulated lead dust.

Regulations governing removal of lead-based paint

EPA's Lead Renovation, Repair, and Painting Rule[38] provides important protections for you and your facility, and requires you to take certain actions to protect your residents and your business. Read EPA's The Truth about Lead Paint Poisoning brochure[39] for more information.

L&I has more information about removing lead-based paint and following specific requirements[40] to protect workers, residents, children, yourself, and the surrounding environment.

The L&I consultation group[41] can help you with worker safety requirements.

To get more help with lead abatement regulations, health hazards associated with lead abatement, and questions about where to dispose of lead-based paint, call your county or city health department.

[38] https://www.epa.gov/lead/lead-renovation-repair-and-painting-program-rules
[39] https://www.epa.gov/lead/truth-about-lead-paint-poisoning
[40] https://lni.wa.gov/safety-health/safety-rules/rules-by-chapter/?chapter=62#2966207521
[41] https://lni.wa.gov/safety-health/preventing-injuries-illnesses/request-consultation/

Lead-based paint removal

- Don’t use a heat gun with temperatures of 700 degrees or greater or an open flame torch to remove lead-based paint. Heat guns pose a fire hazard and create dangerous lead fumes.
- Plan your lead-based paint removal project carefully and make sure you or your contractor(s) are properly trained for this task.
- Use paint-stripping methods that don’t generate dust and/or use high-efficiency vacuum systems.
- Handle waste from chemical paint stripping as dangerous waste. Use a licensed waste management company.
- Investigate equipment that can remove paint in a totally enclosed system.

Pressure washing and hydroblasting lead-painted surfaces

Ecology doesn’t recommend pressure washing or hydroblasting lead-painted surfaces. Water quality regulations prohibit discharging water from pressure washing or hydroblasting painted surfaces to the ground, the storm drainage system, ditches, into on-site septic systems, or to local creeks, rivers, lakes, or Puget Sound.

If you decide to proceed with pressure washing or hydroblasting lead-painted surfaces, follow these steps:

- Before beginning pressure washing or hydroblasting a lead-painted surface, contact your local sewer or utility district to learn about the discharge limits and obtain a discharge permit (if applicable).
- When starting your pressure washing or hydroblasting job, start with a test portion first. Set up tarps, booms, sump pumps, or other means to collect all the wastewater from the test. Sample the water and have a lab analyze it for total metals. Submit the test results to your local sewer or utility district. If the test results are within local limits, you may receive a discharge authorization to dispose of the wastewater to the sanitary sewer. Collect the wastewater and keep it separated from the paint chips.
- If total metal levels are too high for sanitary sewer discharge, treat the collected wastewater to meet the limits (dispose of sludge as dangerous waste) or you may have a licensed waste management company dispose of it.

Solvents

Figure 11: Manage spent solvents safely to protect human health and the environment.
Photo credit: Hans Splinter on Flickr.

Solvents are often volatile, flammable, and toxic. Exposure to solvents may damage the liver, kidneys, heart, or nervous system. High exposure may even lead to unconsciousness and death. Solvent emissions contribute to ozone depletion and global warming. Solvents also contaminate soil and groundwater when spilled or disposed of improperly.

Automotive-related businesses often use solvents to clean grease and oil from automotive parts. A wide variety of solvents are used for cleaning purposes in many other businesses as well, including mineral spirits, Stoddard solvent, petroleum naphtha, xylene, methylene chloride, and others.

Manage spent solvent in a way that doesn't pose a threat to human health or the environment:

- Assume it's dangerous waste. Don't dispose of it to drains, the air, or the ground.
- Don't mix solvents with other wastes. Keep different types of solvents in separate, labeled, and closed containers.
- Don't evaporate solvents as a means of disposal.
- Prevent spills; clean up those that do occur and immediately report them to Ecology.[42]
- Look for a hazardous waste service provider[43] that recycles spent or waste solvents.

[42] http://ecology.wa.gov/report-a-spill
[43] https://ecology.wa.gov/DWContractors

Stormwater and Grit

Figure 12: Be careful what you put down your drain. Make sure you know where it leads.

Do you know where your drains go? You should. What can and can't go down your drain depends on where it goes. Putting the wrong materials down your drains violates the law and may harm the environment and human health. It could lead to costly cleanup, liability, and bad publicity. It may also cause your drains to back up and flood your property.

Identify where your drains lead

Most outdoor drains, such as those in your parking lot, lead to the storm drainage system. Assume that any outdoor drain is a storm drain unless you can verify that it leads to the sewer or a combined system that carries both sewage and stormwater runoff.

Most indoor drains are connected to the sewer or a septic system. However, some indoor drains lead to a dry well or dead-end sump. Some old buildings may have illegal connections that discharge indoor wastewater to a storm drain as well.

If you're not sure where your drains lead, check your building's "as-built" plans (if available) from your local building department or call your local sewer or storm drainage agency for help.

Manage materials near your drain

- Keep the floor dry.
- Seal drains where hazardous or dangerous wastes could spill. Store hazardous or dangerous wastes away from drains if possible.
- Clean up waste spills with dry absorbent and place in sealed containers for proper disposal.
- Mop water from cleaning can usually go to the sanitary sewer. Check with your sewer authority.

Follow restrictions for different drains

A **storm drainage system** is meant to only carry uncontaminated stormwater runoff since it conveys the water to rivers, groundwater, and Puget Sound without treatment. Never discharge any material to a storm drain.

A **sanitary sewer system** carries wastewater to a sewage treatment plant. However, the treatment process isn't designed for all pollutants. Certain wastes are prohibited. Always check with your local sewer agency before discharging anything down a sanitary sewer other than domestic sewage (wastewater from restroom and kitchen plumbing).

Septic systems provide on-site treatment and disposal for certain liquid wastes. Never put industrial wastewater or hazardous chemicals down a drain leading to a septic system.

Maintain the structures below your drains

Most local drainage agencies have specific maintenance requirements for businesses within their jurisdiction.

Sumps are holding tanks that provide a way to collect liquids, such as wash water or spilled materials. Don't connect sumps to storm drains or septic systems, or discharge them to the ground. Pump out sumps and properly dispose of the contents periodically.

Catch basins are located beneath many, but not all, storm drain grates. They're underground boxes designed to pass water through an outlet pipe while trapping sediment that settles to the bottom. Clean out the sediment in catch basins periodically so they continue to function properly.

Oil/water separators remove oil and sediment from water before it goes into the storm drain or sewer system. Never dump waste material into the separator and check the separator regularly to determine a clean-out schedule. Pump out the unit when the sludge is six inches deep in the first compartment or if floating oil is in the outlet chamber.

Detention facilities are structures that temporarily store stormwater runoff and release it at a controlled rate to reduce the chance of flooding and stream-bank erosion. Clean detention systems periodically.

Underground Storage Tanks

Figure 13: Make sure you're following underground storage tank regulations.
Photo credit: MPCA Photos on Flickr.

If you discover an underground storage tank system[44] on your property, please reach out to one of Ecology's local underground storage tank contacts.[45]

Tank removal

Before removing an underground heating oil or storage tank, check with the local fire marshal. Some cities and fire districts require permits for removal or have other requirements.

To get information about requirements that apply to regulated tanks, contact Ecology and ask for an inspector in the Underground Storage Tank program.[44]

[44] https://ecology.wa.gov/UndergroundTankNew
[45] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Underground-storage-tanks/UST-contact-list

Used Oil

Figure 14: Clearly mark used oil containers. Store them in an area with an impermeable floor.

Used oil[46] is insoluble, persistent, and laced with toxic chemicals and heavy metals. Oil sticks to everything from beach sand to bird feathers. It floats on and pollutes our waterways. It's slow to degrade and evaporate. Even a small amount can seriously contaminate large quantities of drinking water. Recycling it protects the environment **and** saves energy and non-renewable petroleum resources.

Recycle used petroleum-based and synthetic-based oil (motor, hydraulic, gear, and lubricating oils) by following the dangerous waste regulations[47] requirements. You may burn your own used oil in used oil space heaters, provided certain conditions are met. You may burn used oil as fuel in other equipment, but only if you meet very specific requirements. In this case, contact Ecology[48] to discuss the specifics of your situation.

Store used oil in containers that are clearly marked "Used Oil." Don't mix used oil with solvents or other contaminants, including water. Used oil contaminated with solvents, sediments, additives, PCBs, heavy metals, and/or water may be difficult to recycle. You must handle used oil mixed with dangerous waste as dangerous waste.

Storage

Store used oil containers under cover if possible, in an area with an impermeable floor to prevent leaks or spills to the environment.

Keep used oil containers closed.

Oil from households

Clean up and properly dispose any oil discovered on your property. We recommend your rental agreements prohibit tenants from servicing cars in parking lots or driveways, as these types of spills can lead to serious stormwater runoff contamination.

[46] https://ecology.wa.gov/UsedOil
[47] https://app.leg.wa.gov/WAC/default.aspx?cite=173-303-515
[48] https://ecology.wa.gov/contact

Appendix A. Common Problem Wastes

Table 1: Problem wastes often generated by professional and office tenants.

Used by	Waste
Architects	Ammonia, ink, solvent, and glue.
Dentists	Amalgam, lead foil/aprons, spent x-ray fixer, disinfectant, and mercury. Sharps and other biomedical waste also require special handling.
Medical clinics	Solvents, pharmaceuticals, and disinfectant.
General offices	Computers/monitors (e.g., lead in glass, heavy metals in circuit boards, flame retardants in plastic casing), batteries, cleaners, glue, ink, toner, and solvents.
Parking garages	Oily wastewater, detergent, gasoline and oil (e.g., spills), catch basin grit, and maintenance supplies (in storage closets).
Retail/commercial tenants	Varies according to type of business.

Table 2: Problem wastes often generated by retail, commercial, and industrial tenants.

Used by	Waste
Artists	Paint and solvents.
Automotive-related (includes auto body, detailing, machine, transmission, and repair shops, service stations, and tire distributors)	Wide variety of wastes including acetylene gas, aerosol solvents, antifreeze, batteries, blasting waste, brake fluid, carburetor cleaner, carwash water, catch basin sediment, caustic dip tanks, contaminated diesel and gasoline, cutting oil, machine coolant, oil, antifreeze filters, oil filters, fuel filters, paint, paint booth filters, contaminated shop towels, solvents, tank sludge, and other wastes.
Beauty shops and nail salons	Dye, bleach, solvent, nail polish, and glue.
Car washes	Detergent/water solution (cannot go to storm drains) and catch basin grit.
Carpet cleaners	Wastewater (cannot go to storm drains or septic systems) and spot cleaners.
General Contractors	Paint, treated wood, roofing waste, adhesive, solvent, and acid.
Dry cleaners	Dry-cleaning solvents, sludge, and filters.
Electroplaters	Acid, bases, cyanide, solvents, and other wastes.
Equipment rental and repairs	Contaminated fuel, gasoline, used oil, solvents, and aerosols.
Floor strippers	Solvents.
Furniture construction and repair	Glue, solvents, paint, paint booth filters, paint strippers, shop towels, and stains.
Gas stations	Contaminated fuel and absorbents.
Jewelers and watch repair	Solvents, batteries, and metals.
Laboratories	Out-dated or contaminated chemicals, formaldehyde, reactive compounds, potentially explosive compounds, solvents, photo chemicals, oil, acids, caustics, disinfectants, and toxic compounds.
Machine repair	Oil, solvents, and paint.

Used by	Waste
Maintenance	Detergents, ammonia, acids, alkalis or bases, and solvents.
Manufacturing	Wide variety of possible wastes.
Marinas	Blasting wastes, paint, batteries, and solvents.
Metal working and machine shops	Machine coolants, cutting oils, solvents, acid, metals, and detergent.
Mortuary and cemeteries	Formaldehyde and pacemakers that contain mercury.
Painters	Paint, thinner, and shop towels.
Parking garages	Contaminated absorbents, oily water, and wash water (cannot go to storm sewers).
Pest control	Unused products and empty containers.
Photo processors	Unused developer and spent fixer.
Printers	Inks, dyes, solvents, and unused developer.
Recyclers	Varies according to what's being recycled.
Roofers	Asbestos felt, liquid tar, solvents, and adhesive.
Screen printers	Inks, solvents, and contaminated shop towels.
Shoe repair	Solvents and glues.
Swimming pool suppliers	Bleach (liquid and dry) and disinfectants.
Transportation	See automotive-related.
Veterinarians	Outdated pharmaceuticals, disinfectants, biomedical waste, aerosol solvents, and x-ray fixer.
Warehouses and suppliers	Discarded and damaged hazardous products.
Welders	Flammable and oxidizing compressed gas containers, metals.

Appendix B. Acronyms and Abbreviations

Term	Meaning
CFCs	Chlorofluorocarbons
CFLs	Compact fluorescent light bulbs
DEHP	Di-2-ethylhexylphthalate
FLBs	Fluorescent light ballasts
HCFCs	Hydrochlorofluorocarbons
HFCs	Hydrofluorocarbons
IMEX	Industrial Materials Exchange
L&I	Washington State Department of Labor & Industries
PCBs	Polychlorinated biphenyls

Appendix C. Related Information and Resources

Publications

- Chemical Test Methods for Designating Dangerous Waste[49]
- Contaminated Property Considerations: Focus on Real Estate Transactions[50]
- Focus on: Spent Antifreeze[51]
- Focus on: Unknown Wastes[52]
- Guide to Universal Waste[53]
- The Truth about Lead Paint Poisoning[54]

Webpages

- Choosing an analytical laboratory[55]
- Dangerous waste annual report[56]
- Designate your waste—is it dangerous?[57]
- E-Cycle Washington[58]
- Find a hazardous waste service provider[59]
- Find a household hazardous waste disposal site[60]
- IMEX[61]
- Lead Renovation, Repair and Painting Program Rules[62]
- LightRecycle Washington[63]
- Notification of dangerous waste activity[64]
- PaintCare[65]
- PCB-containing light fixtures[66]
- Small quantity generators[67]
- Report a spill of oil or hazardous materials[68]
- Washington clean air agencies[69]
- Washington's Dangerous Waste Regulations[70]

[49] https://apps.ecology.wa.gov/publications/SummaryPages/97407.html
[50] https://apps.ecology.wa.gov/publications/SummaryPages/2209021.html
[51] https://apps.ecology.wa.gov/publications/summarypages/0304017.html
[52] https://apps.ecology.wa.gov/publications/SummaryPages/2004006.html
[53] https://apps.ecology.wa.gov/publications/SummaryPages/2104017.html
[54] https://www.epa.gov/lead/truth-about-lead-paint-poisoning
[55] https://ecology.wa.gov/ChooseALab
[56] https://ecology.wa.gov/DWReport
[57] https://ecology.wa.gov/Designation
[58] https://ecology.wa.gov/Waste-Toxics/Reducing-recycling-waste/Electronics
[59] https://ecology.wa.gov/DWContractors
[60] https://ecology.wa.gov/FindSiteHHW
[61] https://kingcountyhazwastewa.gov/business-disposal/imex
[62] https://www.epa.gov/lead/lead-renovation-repair-and-painting-program-rules
[63] https://www.lightrecycle.org
[64] https://ecology.wa.gov/DWNotification
[65] https://www.paintcare.org/products
[66] https://ecology.wa.gov/Waste-Toxics/Reducing-toxic-chemicals/Product-Replacement-Program/PCB-lights
[67] https://ecology.wa.gov/sqg
[68] https://ecology.wa.gov/Report-a-spill
[69] https://ecology.wa.gov/cleanairagencies
[70] https://app.leg.wa.gov/WAC/default.aspx?cite=173-303