

Auto Repair



Regulation and Inspection

Auto repair, fleet services and auto wrecking yards are visited regularly by environmental compliance inspectors. Shop owners and operators are responsible for taking several precautions to ensure that technicians, the public, and the environment are protected. Auto shops must be equipped with safety and spill prevention and control plans to protect against exposure to different health risks. Precautions must also be taken to prevent any harmful chemicals or materials from polluting the environment.

Complying with environmental laws and reducing health and environmental risks at the source through pollution prevention, can help ensure worker safety, reduce costs associated with the generation of waste, prevent the risk of future liability, and protect our air, water and land.

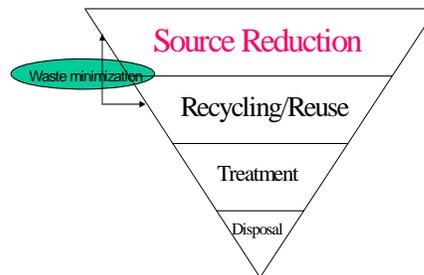
Typical Wastes

Auto shop wastes and management:

- Used oil, brake fluid, and transmission oil (recycle—check with hauler)
- Auto batteries (recycle)
- Antifreeze (recycle)
- Petroleum based solvents (recycle)
- Chlorinated solvents (hazardous waste)
- Freon (recover and recycle)
- Tires, scrap metal, drained used oil filters (recycle)
- Mercury switches (recycle)
- Sludge—sump, parts washers, brake dust (test and manage appropriately)
- Office waste—electronics, toner cartridges, fluorescent lamps, batteries, paper, cardboard, beverage bottles & cans (recycle)

It is important to keep wastes separated so that recycling can work. Get a receipt of final destination from the hauler to be sure item is recycled.

Waste Management Hierarchy (US EPA Policy, 1976)



Pollution prevention (P2) is reducing waste at the source = Source Reduction. P2 is using less toxic materials and using resources efficiently (including water and energy) to reduce the generation of waste. P2 can save businesses money while protecting our environment.

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Energy and water are precious resources for our community. Do your part to save by having an audit done; check for water leaks and fix immediately; install the latest technologies; and replace incandescent lights with low-mercury fluorescent or LED lighting. Visit: HECO www.heco.com BWS www.hbws.org (Oahu)



LINDA LINGLE
Governor

DR. CHIYOME FUKINO
Director of Health

Pollution Prevention (P2) Action

Switch to Water-based Parts and Brake Washing. Numerous businesses are already seeing the rewards of switching from solvents to aqueous washers. They are improving worker safety, reducing liability, and generating less waste. In most cases, businesses are saving money especially on brake wash systems where aerosol cleaners are no longer needed, and saving on labor costs when using a spray cabinet for parts washing. Detailed information (Aqueous Parts Cleaning for Auto Repair Shops) and case studies can be found on-line at:



www.dtsc.ca.gov/PollutionPrevention/VSR/VSR_Fact_Sheets.cfm

Stop using Chlorinated solvents and keep Used Oil recyclable. As you may know, chlorinated solvents can inadvertently contaminate used oil making for expensive disposal costs. Chlorinated solvents have ingredients that may cause cancer. Some states have even banned their use. Many safer alternatives are available to replace chlorinated solvents for use in auto repair shops. Ask your vendor to find an alternative and obtain the Material Safety Data Sheet (MSDS) to check its safety level.

Switch out Mercury switches when requested by customers or if the car is going to be crushed for scrap. These switches can typically be found in hood and door light mechanisms and ABS brakes in pre-2002 vehicles. Mercury is very toxic to both the environment and to people. It also never goes away. When mercury breaks down it becomes more toxic as methylmercury. Recycle all mercury containing parts.

Recycle Antifreeze. There are many reasons to recycle antifreeze. Antifreeze is made from natural gas, a non-renewable resource. Recycled antifreeze can meet ASTM requirements and can cost less than virgin product. Find out more on-line at:

www.dtsc.ca.gov/PollutionPrevention/VSR/upload/Antifreeze-recycling02.pdf

Keep a clean shop and yard. Customers as well as your technicians will appreciate a clean shop. A clean shop means reduced spills, reduced slipping hazards and reduced pollution risk. Train employees to clean spills quickly to avoid tracking them around.

- * For oil spills use an oil absorbent mop or pad, squeeze the oil back out and recycle it with your used oil.
- * For antifreeze spills use a designated cloth mop and recycle the spilled antifreeze.
- * Use rags and only mild detergents for a final cleaning. Regular mop bucket wash water should always be emptied to a sewer or oil water separator/clarifier and never to the street or storm drain. This is to protect our streams and ocean. Use drip pans under vehicles to prevent spills and ground contamination. If power washing, use equipment that recycles water and obtain Wastewater Program approval for disposal to the sewer. Keep on-site chemical, vehicle and parts storage to a minimum.

Chlorinated solvents include harmful ingredients such as Perchloroethylene (Tetrachloroethylene), Trichloroethylene, and Methylene Chloride. Other harmful ingredients include n-Hexane, Toluene and Xylene. These can be replaced by comparable cleaners made of water-based (aqueous), citrus or less toxic acetone. Ask your vendor and take time to read the product's MSDS.

Mercury Switches: Find out how to remove and replace vehicle mercury switches by visiting:

www.epa.gov/region5/air/mercury/autoswitch.htm

More information can also be found at:

www.ccar-greenlink.org/mercury/index.html

Vendors of Aqueous Based Products and Pollution Prevention Equipment can be found on-line at:

www.dtsc.ca.gov/PollutionPrevention/VSR/VSR_Directory.cfm

Mahalo to the California Department of Toxic Substances Control for sharing their information.

Disclaimer: The listing of products or companies are not complete and do not constitute an endorsement by the State of Hawai'i.

Note: Final determinations of the proper handling and disposal of waste are the sole responsibility of the waste generator. For more information, contact the DOH Solid and Hazardous Waste Branch, phone: (808) 586-4226 or visit: www.hawaii.gov/health/environmental/waste/index.html

"P2 is a choice; being "green" is making that choice."