

Automotive Repair & Maintenance Tips for Drinking Water Protection



State of Oregon
Department of
Environmental
Quality

The Oregon Department of Environmental Quality (DEQ) and Department of Human Services (DHS) completed “source water assessments” for each public water system in Oregon under the requirements of the federal Safe Drinking Water Act. One of the components of the assessments was to identify potential risks within the watershed or recharge area that supplies wells, springs or intakes for public water supplies. Automotive repair shops were identified as one of the most common “potential contaminant sources” within Oregon’s drinking water source areas.

This fact sheet provides a listing of basic pollution prevention opportunities that automotive repair and maintenance businesses, and others, can incorporate to protect drinking water supplies.

Many products used by the automotive repair industry contain a variety of chemicals (such as solvents or petroleum products) that are considered toxic and dangerous to human health and the environment when not used properly. If rain sinks through surface soils and encounters a contaminant at or below the surface, the water may dissolve some of the contaminant and carry it to groundwater that the public uses for drinking water. Contaminants can also enter surface water sources of drinking water through runoff.

Common sources of contaminants in an automotive repair and maintenance shop include: dip tanks, parts washers, spray solvents/cleaners, paints, paint thinner, petroleum products (gas, diesel, oil), antifreeze and batteries.

Preventing pollution is much easier and more economical than cleaning it up after it has occurred. This fact sheet lists actions that can be incorporated into day-to-day operations to reduce your risk of releasing contaminants to groundwater or surface water.

Many of these recommendations also have the added benefit of:

- helping reduce operating, disposal and regulatory compliance costs
- reducing risks to workers
- reducing overall environmental liability.

There are 10 actions your automotive repair and maintenance business can take to help promote drinking water protection.

1. **Minimize all chlorinated cleaners/solvents.** There are effective non-chlorinated cleaners available for all jobs. Ask your vendor or refer to the vendor’s Material Safety Data Sheet to find out if your cleaner contains chlorinated compounds. For example, if the ingredients list “trichloroethane” or “methylene chloride,” the cleaner is a chlorinated solvent. See if one or two general, less toxic cleaning materials can replace single-purpose cleaners. Do not dispose of solvents by pouring them into containers of used shop towels. Contact DEQ for proper procedures.
2. **Never pour wastes into a storm drain, septic tank, dry well, or on the ground.** Do not allow floor cleaning wastewater to flow into a storm drain (inside or outside) or dry well (also known as a waste disposal well or cesspool). Close off all drains that lead to storm sewers, dry wells or septic systems if possible. If sealing drains is not possible, check with your sewerage agency to assure that your work area drains are connected to sanitary sewer.
3. **If your facility has a motor vehicle waste disposal well/dry well/cesspool, contact DEQ** to find out about proper abandonment procedures that will help protect drinking water and reduce your future liability.
4. **Run a dry shop.** Install drop pans and trays throughout the shop. Use rags and dry absorbent materials for spills. Sweep, vacuum or mop the shop floor rather than hose it down.
5. **Be prepared to handle spills.** Clean small spills immediately with dry absorbent or sweep liquid spills with a squeegee and dustpan and add to the

Water Quality Division

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Alternative formats

Alternative formats of this document (Braille, large type) can be made available. Contact DEQ’s Office of Communications & Outreach, Portland, at (503) 229-5317 or call toll-free in Oregon at 1-800-452-4011, x5317, for more information.

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appropriate waste container. Have a spill kit readily available so spills can be cleaned up quickly and properly. Train employees on proper spill response and post emergency numbers in a visible location.

6. ***Keep all containers, including parts washers, closed when not in use.*** Keep liquid containers on impermeable surfaces (preferably concrete) and store within a berm or other secondary containment to prevent spills from running off into your drains or yard. Keep the parts washer turned off unless actually cleaning parts.
7. ***Ensure proper installation and maintenance of equipment and structures that store and transport chemicals and wastewater through your shop.*** Examples include underground storage tanks (USTs) and associated piping, above-ground storage tanks, hydraulic lifts, trench drains, oil/water separators, floor drains and storm/sanitary sewer lines and drains.
8. ***Properly maintain equipment to reduce waste from leaks or equipment breakdowns during production runs.*** Good maintenance programs may include regular equipment inspection, changing worn-out parts, regularly replacing seals and gaskets, repairing leaks as they occur, and following manufacturers' suggested maintenance schedules.
9. ***Participate in existing pollution prevention and waste reduction activities.*** Conduct an assessment of current operations to identify opportunities to implement alternatives including changing processes, modifying equipment, substituting raw materials, or reformulating products.
10. ***Learn more from the experts.*** Get help from the outside sources listed below. Learn more about where your drinking water supply comes from, potential sources of contamination, and community drinking water protection efforts. One business making positive changes can make a difference.

Additional resources/publications

*Pacific Northwest Pollution Prevention (P2) Resource Center (PPRC) is an excellent resource for more information. Contact PPRC at **(206) 352-2050** or online at <http://www.pprc.org>.

"Guide to Pollution Prevention: Automotive Repair Industry,"* U.S. Environmental Protection Agency (EPA); EPA publication number EPA/625/7-91/013, October 1991. Provides waste minimization options for the automotive repair industry. Call EPA at **1-800-490-9198 or order online at <http://www.epa.gov>.

*For Portland metro area businesses, a publication on best management practices for the automotive industries entitled *"Keep Your Shop in Tune,"* is available from the Portland Pollution Prevention Outreach Team at **(503) 823-5320** or <http://www.ecobiz.org>. If your auto shop meets local environmental requirements and takes extra, voluntary steps to help protect the environment, this group can also certify you as an Eco-Logical Business.

*EPA's Green Link program provides compliance assistance and information to the automotive service industry. Contact this program at <http://www.ccar-greenlink.org>.

*For local assistance, check your monthly bill or phone directory for **your waste disposal and recycling facility** (garbage hauler) and **sewerage facility** (wastewater disposal or treatment plant).

Information from DEQ

DEQ can provide information about state and federal requirements for proper waste management and disposal, safe alternatives to chemicals used in the industry, air quality and hazardous waste technical and compliance assistance, pollution prevention and planning, underground injection control and shallow disposal wells, soil and groundwater assessment, water quality assistance, permits, septic tanks, and underground storage tanks. DEQ also manages the Toxics Use and Hazardous Waste Reduction Program. Contact DEQ toll-free in Oregon at 1-800-452-4011 or (503) 229-5630. You may also access DEQ's Web site at <http://www.deq.state.or.us>.

Drinking water information

For more information on drinking water protection, please contact your local public water supply provider (listed on your water bill). You may also contact DEQ's Drinking Water Protection Program: Sheree Stewart, Portland, (503) 229-5413, toll-free 1-800-452-4011, x5413; or Julie Harvey, Portland, (503) 229-5664, toll-free 1-800-452-4011, x5664.