

US EPA ARCHIVE DOCUMENT



Evaluating Motor Vehicle Waste: A Self-Audit Checklist

Used or spilled fuel, solvents, waste oil, paints, and other maintenance fluids pose a risk to the environment but may be especially harmful if they enter someone's drinking water supply. Floor drains at facilities which use these substances should be evaluated. Facility managers should know if floor drains lead to a municipal sewer line, to a surface discharge, or to a shallow injection well.



A **shallow injection well** includes any subsurface excavation, such as a drywell, seepage pit, septic system, leach field, or unlined sump, through which waste water is disposed below ground.

A **shallow injection well** is any subsurface excavation, such as a drywell, seepage pit, septic system, leachfield, or unlined sump, through which waste water is disposed below ground. Shallow injection wells allow waste to percolate into soil. Because of their potential to contaminate underground sources of drinking water, they are regulated through the U.S. Safe Drinking Water Act, Underground Injection Control (**UIC**) regulations. New regulations for shallow injection wells at vehicle repair facilities, called motor vehicle waste disposal wells, were published December 7, 1999:

1. The construction of new motor vehicle waste disposal wells is **prohibited** as of April 5, 2000.
2. Motor vehicle waste disposal wells constructed prior to that date should not be used for the discharge of fluids containing wastes that may endanger an underground source of drinking water. Additional requirements may be imposed on injection wells located in Source Water areas (see page 3.)

Potential Drinking Water
Contaminants in
Motor Vehicle Waste:
benzene
1,2 dichlorethane
trichloroethylene
methyl tert-butyl ether
(MTBE)

Many floor drains leading to shallow injection wells were constructed for disposal of stormwater runoff, snow melt, or wash water. According to the new UIC regulations, storm water drainage wells located at motor vehicle facilities that are intended for storm water management but that also may receive insignificant amounts of fuel due to unintentional small volume leaks, drips, or spills at the pump are not considered motor vehicle waste disposal wells and are not subject to the prohibition. However, these wells are considered stormwater disposal wells, and may still pose a risk to water quality if they are not managed.

No disposal wells can be used for the disposal of wastes which may degrade underground sources of drinking water. All well owners are required to submit inventory information to their state or federal Underground Injection Program.

This self-audit checklist is intended to help facility owners and operators determine if they have a stormwater well or a motor vehicle waste disposal well, and provide them with information on how to comply and reduce environmental liability.

This self-audit checklist is for compliance assistance. It is **not required** that you provide this information to EPA unless specifically requested by a regulatory agency.

(continued)



EPA Motor Vehicle Waste Disposal: Self-Audit Checklist

1. WASTE GENERATION: Does your facility:

Repair engines or engine parts?	Yes	No
Change oil and other fluids (antifreeze, brake fluid)?	Yes	No
Dispense fuel?	Yes	No
Clean and/or finish, paint, repaint motor vehicles, including boats/aircraft?	Yes	No
Offer self-service car wash to customers without supervision?	Yes	No
Use any of the following: fuel, motor oil/engine lubricants, degreasers, engine batteries, paint and paint thinners/removers, anti-freeze?	Yes	No
If you answered yes to ANY of the above questions, select "yes" here and go to Section 2.	YES	NO
If you answered "no" to ALL of the questions, see box 1A.		

1A: If your facility does not generate motor vehicle waste, the motor vehicle waste regulations do not apply to your facility. If you use floor drains, it may help you assess your environmental liability if you use or store other chemicals.

2. WASTE CONTAINMENT / Best Management Practices (BMPs)

Is your facility regulated through a hazardous materials permit?	Yes	No
Is your facility routinely inspected by a regulator or by an environmental consultant?	Yes	No
Does your facility use equipment to limit spills, and reduce or eliminate wet floor cleaning?	Yes	No
Are waste fluids stored in separate labeled containers?	Yes	No
Are all wastes stored above ground in covered, bermed containers until they are removed?	Yes	No
Can you document the legal disposal of all waste fluids to a licensed waste hauler?	Yes	No
If you use recycling equipment, can you or your recycling service document that the equipment (especially filters) are maintained?	Yes	No
Are all employees and other users of maintenance areas trained in the proper use and disposal of motor vehicle fluids, cleaners and wastes?	Yes	No
If you answered no to any of the above questions, select "no" here.	YES	NO
If you answered yes to ALL of the questions, select "yes" here.		
Go to Section 3.		

3. WASTE DISPOSAL

Does your facility have any floor drains, sumps, sewer grates, or other constructed outlets?

YES

Answer this question individually for each drain at your facility.

Is each drain or outlet plumbed to a municipal sewer line?

NO, or I DON'T KNOW

Is this drain or constructed outlet exposed, so that it can receive rain runoff and/or snowmelt?

NO

3A. OUT THE BACK.

If motor vehicle waste fluids are draining onto the ground, you may be contaminating soil and ground water. You should contact an environmental consultant (geologist, engineer or soil scientist) or regulator to help you assess if any clean-up is required, and how to manage wastes to prevent additional problems.

YES

3C. INTO THE GROUND.

If you answered YES to Section 2, this drain may be a **stormwater injection well**. You should inventory your injection well, and continue to use Best Management Practices to prevent the accidental disposal of fluids other than storm water and car wash water (from exteriors.) Future regulations may apply.

If you answered NO to Section 2, go to 3D.

NO

3D. If you answered YES to Section 1 and NO to Section 2, this drain could be a **motor vehicle waste injection well**, and you are required to comply with Underground Injection Control regulations, as detailed in this brochure.

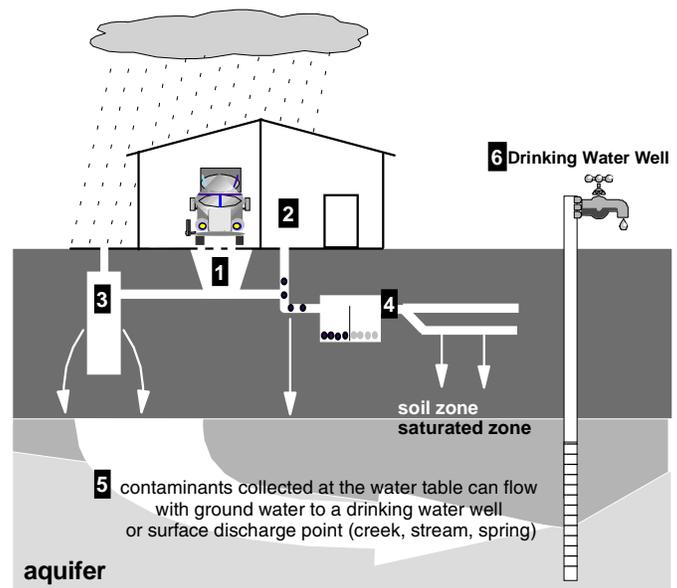
WHY KEEP DRY DRAINS?

If you answered YES to Section 1 and YES to Section 2, you need to investigate whether or not to close your drain(s), which could cause pollution and unnecessary liability if there is a spill.

3B. TO THE WASTEWATER TREATMENT PLANT. Facility should retain copies of blueprints of sewer hookup and sewer bill for verification. Facility is probably not subject to UIC requirements, but note that your facility may be subject to **pretreatment** requirements by the local sewer and/or stormwater agency.

How Motor Vehicle Repair Facilities Can affect Underground Sources of Drinking Water

1. Waste from maintenance activities is discharged directly to floor drain that opens to a sump.
2. Waste from restroom facilities is discharged to septic system or other subsurface disposal unit. Sewage from toilets and other domestic wastewater from sinks, showers and washing machines depends on bacteriological treatment in a septic tank to remove disease causing organisms. Mixing chemical wastewaters with sewage may destroy that bacterial action, causing backups or contamination.
3. Stormwater from roof (and/or maintenance areas, if there is no roof) catches drips and leaks of waste from pavement and disposes of them into subsurface disposal unit.
4. As shown in this drawing, some facilities combine waste streams into one subsurface disposal unit. It may be a vertical excavation, or it may be through leachfields, as shown. Pipe and concrete joints may weaken over time, allowing fluids to seep out.
5. The amount of water used at the facility, the amount of rainfall in the area, the condition of the disposal unit, and the hydrogeology all affect the potential of wastes to contaminate ground water.



6. If a drinking water well draws water from a contaminated aquifer, water must be treated for safety, or the well shut down. Groundwater remediation can cost millions of dollars. Drilling new wells or buying surface water is also expensive.

Private drinking water well users might not be protected by any state or local monitoring program and could unknowingly drink contaminated water.

IF YOU HAVE A SHALLOW INJECTION WELL:

- Comply with the Inventory Requirement: report your injection well to your state or federal UIC program.
- Protect the drain from spills, leaks, or disposal of all fluids except for storm water, and water from exterior vehicle washing.
- Contents of any subsurface units should be sampled to determine if fluids or sludges contain hazardous substances.
- Consult an environmental professional, or one of the free services listed, to get more information about Best Management Practices:

www.epa.gov/region09/p2/autofleet
or www.ccar-greenlink.org, (888) GRN-LINK.

Drinking Water Source Protection

Public Water Suppliers are now required to insert information in the bill, called the "Consumer Confidence Report," that alerts their customers to the quality of the drinking water, the areas where water comes from (also called Source Water Areas or Watersheds) and potentially contaminating activities in those areas.



Complying with environmental protection regulations will reduce your risk of becoming a pollution problem for your community. If you operate an injection well in a watershed, you may be subject to more protective regulations.

EPA's Audit Policy and self-disclosure policy encourages businesses who discover violations to promptly disclose, correct and prevent violations. If appropriate criteria are met, EPA will not seek gravity-based penalties. For more information, please call the Small Business Office at (800) 368-5888 EST, or see their website at www.epa.gov/sbo.

Definition of motor vehicle waste disposal well:

144.81(16) Motor vehicle waste disposal wells (*are defined as wells*) that receive or have received fluids from vehicular repair or maintenance activities, such as an auto body repair shop, new and used car dealership, specialty repair shop (e.g. transmission and muffler shop) or any facility that does any vehicular repair work.

Fluids disposed in these wells may contain organic and inorganic chemicals in concentrations that exceed the maximum contaminant levels (MCLs) established by the primary drinking water regulations (see 40 CFR Part 142). These fluids also may include waste petroleum products and may contain contaminants, such as heavy metals and volatile organic compounds, which pose risks to human health.

DISCLAIMER: The statements in this document are intended solely as guidance. This document is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States. EPA or the program Primacy Agency may decide to follow the guidance provided in this document, or to act at variance with the guidance based on its analysis of the specific facts presented. This guidance may be revised without public notice to reflect changes in EPA's approach to implementing the authorities discussed in the document or to clarify and update text.

Ground Water Protection/UIC Programs in EPA Region 9

CALIFORNIA
Call EPA
(415) 972-3537,
or the California
Regional Water
Quality Control
Board near you
www.swrcb.ca.gov



HAWAII
Call the Safe
Drinking Water
Branch, Hawaii
Department of Health
(808) 586-4258
www.hawaii.gov/health/eh/sdwb/index.html

INDIAN COUNTRY
Call (415) 972-3544,
or
http://www.epa.gov/region09/cross_pr/indian/index.html

NEVADA
Call the Nevada
Division of
Environmental Protection
Water Permit Program
(775) 687-4670
www.state.nv.us/ndep/bwpc/bwpc01.htm

ARIZONA
Call the Arizona
Department of
Environmental
Quality, Aquifer
Protection Permit
Program, at (602)
207-4573
www.adeq.state.az.us/environ/water

To report your injection well, or request compliance assistance

NATIONWIDE - CALL (800) 426-4791, the SAFE DRINKING WATER HOTLINE (E.S.T.)
EPA REGION 9 UIC PROGRAM: (415) 972-3542

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9 GROUND WATER OFFICE (WTR-9)
75 HAWTHORNE STREET, SAN FRANCISCO, CA 94105

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