PREVENTING GROUNDWATER POLLUTION: AUTO REPAIR SHOPS
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PREVENTING GROUNDWATER POLLUTION IS EVERYONE'S JOB!

Even if our drinking water comes from rivers, lakes, or reservoirs, we need to be mindful of the things we do that may pollute groundwater. That is because the groundwater beneath us may travel great distances to eventually feed springs or wells being used for someone's water supply.

How does the Groundwater Protection Plan Regulation protect groundwater?

Once polluted, groundwater is very difficult and expensive to clean up. It is always best to **prevent** groundwater pollution in the first place. That is the purpose of 401 KAR 5:037, the Groundwater Protection Plan Regulation. Section 2 of this regulation lists the activities that require a Groundwater Protection Plan (GPP). Should any of those activities occur at your shop, you must develop a GPP. A GPP identifies the activities you are conducting that have the potential to pollute groundwater and states the protective practices (BMPs) you will use to prevent groundwater pollution.

Where can I find information about Groundwater Protection Plans (GPPs) ?

Go to https://eec.ky.gov/Environmental-Protection/Water/Protection/GW/GWProtect

What are some activities that auto repair shops should pay special attention to?

There are some activities you do as you repair vehicles that have serious potential to pollute groundwater. Those activities are discussed below. If those activities occur at your shop, they definitely should be dealt with in your GPP. This fact sheet doesn't include all the activities that occur at automotive repair shops that may be covered under 401 KAR 5:037. Please read Section 2 carefully to be sure that you included all the activities conducted at your shop that are subject to this regulation.

Floor drains, where do they lead?

Most exterior and some interior drains are not connected to a sanitary sewer system, but instead are storm drains that lead directly to a ditch, dry well or even a sinkhole. Discharging contaminated wash water into any of these may contaminate groundwater.

Check with the local sewer utility or city engineering department to verify where your drains lead. In Kentucky, floor drains **must** connect to an onsite sewage disposal system, a closed-loop collection/recovery system, or a wastewater treatment system permitted by the Kentucky Pollutant Discharge Elimination System (KPDES) (401 KAR 5:037, Section 3(5)(c)). If floor drains don't connect to one of the aforementioned, or you don't know if they do, the Groundwater Section's GPP Program recommends that **the drains must be plugged immediately**, even if they are not being used.

Can drains lead to septic systems?

Only if they are carrying sanitary wastewater—water from the bathroom or kitchen. Under **NO** circumstances should any hazardous fluids such as antifreeze, oils, or solvents, or wash water carrying these pollutants be allowed to enter a floor drain that leads to a septic system. If hazardous fluids or wash water carrying the previously mentioned contaminants are currently being disposed through an onsite sewage disposal system, **the activity must stop immediately and the drain plugged permanently** as soon as possible

What about Above Ground Storage Tanks (ASTs)?

Unless it is inside a building with an impervious floor, an AST holding 55 gallons or more must have secondary containment. Poured concrete, metal, or compacted clay with a liner compatible with the material in the AST may be used in the construction of the floor and berm of the containment. Exposed gravel, dirt, or clay surfaces without a liner are not acceptable. Petroleum products such as gasoline, diesel fuel, or recycled oil will seep through them.

If an AST is outside and has no cover to prevent precipitation from entering the containment structure, the water in the containment will need to be drained periodically to prevent the tank from rusting. Be sure the water has no sheen on it from spilled petroleum product. If a sheen present, **do not** drain the water onto the ground. The water must be disposed of as hazardous material.

What about Underground Storage Tanks (USTs)?

USTs, especially old tanks can pose a serious risk to groundwater. Use of USTs is now being discouraged. If fuel or waste oil must be stored, use an AST with secondary containment or double walls. If you already have a UST, periodic pressure testing is a must to assure the tank is not leaking.

In Kentucky, USTs are regulated by 401 KAR 42. These regulations contain elements that are protective of groundwater and may be incorporated by reference into your GPP.

What are some BMPs for storing potential contaminants?

- Store potential pollutants in sealed, leak-proof containers.
- Store potential pollutants inside, or in a structure protected from the weather and against vandalism.
- Drums containing potential pollutants should be stored in a designated, curbed location where they will not be accidently tipped over, or punctured, and are protected from the weather.
- Spill containment and cleanup material must be available in locations where leaks or spills of potential pollutants could reach the ground.

What are some useful websites for pollution prevention information?

- http://www.ccar-greenlink.org provides a Consolidated Screening Checklist for Automotive Repair Facilities.
- http://www.epa.gov/region09/p2/autofleet A package of fact sheets entitled “The Pollution Prevention tool Kit, Best Environmental Practices for Auto Repair” or “The Pollution Prevention Tool Kit, Best Environmental Practices for Fleet Maintenance” can be downloaded from this site.
- http://www.autobodypro.com This website for the auto collision repair industry has a safety and environment site with information on human and environmental safety tips.