

O PERATING AND CARING FOR YOUR VEHICLE WITH WATER QUALITY IN MIND

BMP 22 Prevention Of Fluid Leaks

Vehicles that leak oil, coolant, or other fluids onto roadways, parking lots, and driveways contribute to polluted runoff. Such runoff is very toxic and has a high potential of reaching local streams and severely impacting water quality. Have a positive impact on water quality by making sure that your vehicle does not leak any fluids!

Evaluate your vehicle for yourself and “map” your problem areas. After the vehicle has run for 20 minutes or more, place a light-colored sheet or paper drop cloth on a dry surface under the engine and leave it overnight. Before pulling the sheet out or moving the vehicle, mark the location of the tires on the cloth for easier identification of leaking areas. Don’t be ashamed to take your “map” to the repair shop with you!

Replace gaskets, seals, caps, and plugs that are allowing fluids to leak. Even the simplest of your vehicle’s engine parts wear over time and need to be replaced. Seek help from a professional or do it yourself. If you change your own oil and fluids, consider the tips listed in BMP 24: *Changing Oil And Other Fluids*.

Carry a portable drip pan for leaks that can’t be fixed. A drip pan with a lid that seals well can be transported in the trunk and placed under the engine when the vehicle is parked. Properly dispose of waste collected from leaks: see BMP 27: *Waste Disposal* and BMP 31: *Household Hazardous Wastes*.



BMP 23 Vehicle Fueling

Gas and diesel spills are common when vehicles are fueled. Whether you are fueling at a gas station or on your own property, care should always be taken to prevent spills.

Be aware of the approximate amount of fuel needed. Anticipating the amount of fuel needed during the fill-up is the first step in avoiding spills.

Never leave the fueling nozzle unattended. Don’t leave the nozzle running fuel into the vehicle unattended while trying to squeeze in washing windows or checking the oil and tire pressure. Let a passenger assist you or wait to conduct these activities until after the fueling is completed.

Don’t purposely overfill the fuel tank. Consider the environment when trying to top off the tank or rounding off the purchase to an even dollar. NOTIFY THE ATTENDANT IF A GASOLINE SPILL OCCURS. Service stations are usually prepared to deal with such incidents and dispose of cleanup materials.

BMP 24 Changing Oil and Other Fluids

Sometimes in the process of changing or adding to a vehicle's oil, antifreeze, transmission fluid, brake fluid, or other vital fluids, haste and carelessness result in spills. Other times, despite our best efforts, accidents do happen. In both cases, spills must be handled promptly and properly. The fluids that keep our vehicles functioning are extremely toxic to water resources and the life they support. Disposed of improperly, vehicle fluids can pollute ground, surface, and drinking water supplies. Extreme care should be taken when changing or adding fluids to a vehicle.

Prepare for the task by giving it adequate time and consideration. A hurried approach is far more likely to result in an accident.

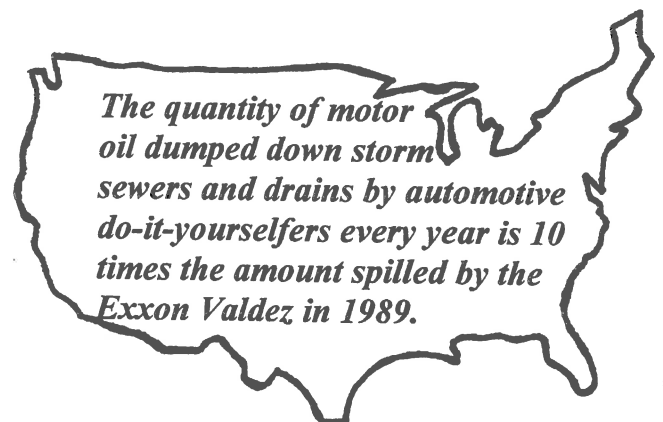
Cover any nearby drains until the task is completed. Drains in the garage floor, storm drains at the street, and nearby catch basins should be temporarily covered with a heavy rubber mat or anything else that would prevent spilled material from entering.

Conduct the activity on an impervious, level area; preferably on concrete. A surface like concrete will provide a better opportunity to retrieve any spilled substances. Soil will readily absorb these toxic substances and assist in their transport to surface water or groundwater resources. Asphalt or other paved surfaces generally deteriorate from the presence of these fluids. A level area allows a spill to be contained and managed better than a sloped area.

Place a drip pan or heavy drop cloth underneath the work area for collection and containment of any spilled material. Be certain that the pan size matches the job. If you are flushing a 12-quart cooling system, the collection pan should hold *at least* 13 quarts. Drop cloths should be heavy, free of holes and tears, and large enough to cover the entire vehicle area.

Keep absorbent materials on hand for spills and cleanups. There are a variety of reasonably priced absorbent products available for quick and effective response to spills. Absorbent materials including tubes, granules, socks, pillows, and pads can be purchased at automotive supply stores. Cat litter is another absorbent material to consider using for spills and cleanups.

Properly recycle or dispose of waste fluids and absorbent materials used during the cleanup process. Never pour used oil down any drain. Used oil can be successfully recycled and reused. Absorbent cleanup materials should be disposed of as household hazardous waste. See BMP 27: *Waste Disposal* and BMP 31: *Household Hazardous Wastes*.



Use the services of a professional car care shop. Eliminate the need to handle and dispose of your vehicle's fluids yourself by using the services of a professional car care shop. To be certain that they are disposing of the fluids properly, ask them for written information on how they handle the waste.



Use cat litter to absorb spills.

BMP 25 Vehicle Washing

When washing vehicles, consideration should be given to where the soapy water and sediments drain. Commercial vehicle wash facilities recycle waste water or route it to a sanitary sewer. People commonly choose to wash vehicles on a paved drive and, without thinking, allow the waste water and any associated pollutants to flow to the street and down the storm drain, which goes untreated into the nearest waterway.

Wash vehicles on the lawn. Use the green space of your yard to filter runoff. Plants and soil will aid in the breakdown of soaps, chemicals, and sediments rinsed from your car. Cleaners and other chemical products should be used sparingly to reduce the environmental impact.

Don't overuse soaps and cleaners. Product use should follow the manufacturer's label recommendations. Take care not to mix more of the soapy wash mixture than is needed. If possible use biodegradable soap.

Use a nozzle that lets you stop the flow of water between rinses. The use of a bucket also reduces the amount of water used. Conserve water whenever you can! (Refer to BMP 3: *Water Conservation*.)

Drain waste water to a sanitary sewer. Take time to find out where the drains on your property outlet: to a sanitary sewer, to an on-site septic system, or directly to a ditch or stream.

Use a commercial vehicle wash facility.



Wash your car on the lawn.