



Best Management Practices

for Auto Recyclers

The auto recycling industry can play a positive role in protecting the environment by reusing and recycling automobile liquids and parts. Due to the nature of your business, though, releases of hazardous materials, such as, oils, lubricants, fuel, and antifreeze into the environment are a common risk at auto salvage yards. Other hazardous materials are refrigerants, which are air contaminants; mercury from switches; lead from lead acid batteries; and asbestos from brakes.

The following is a list of the common **hazardous materials** that may be processed at your business and the **best management practices** that may be used to reduce your business costs and potential for regulatory enforcement, as well as, maintaining a clean working environment for your employees.

Absorbents and Floor Dry:

Accidental spills and leaks of toxic chemicals, gases, petroleum and other hazardous materials can pollute the air you breathe and contaminate water bodies and soils.

- ◆ Clean up all spills right away.
- ◆ Use the smallest amount of absorbent possible or drain into a sump or oil/water separator.
- ◆ Try reusable sorbent pads or socks.
- ◆ Test and manage absorbents either as a solid or hazardous waste.
- ◆ Use closed and covered leakproof containers.

Air Bags:

Sodium azide, the chemical that triggers air bags to deploy, is dangerous if inhaled and may burn exposed skin. Sodium azide is water-soluble, therefore, it can migrate into sewers, surface waters and groundwater systems if exposed to water.

- ◆ Remove all unused air bags. Leave deployed air bags in the vehicle.
- ◆ Store unused air bag units indoors, protected from the weather for resale or disposal.

Antifreeze:

During use, antifreeze may become contaminated with metal particles, oil, and grit, therefore, must be managed as hazardous waste. However, antifreeze is exempt from hazardous waste regulations if it is recycled.

- ◆ Drain antifreeze from radiators/heater cores before crushing or parts pulling.
- ◆ Determine if the antifreeze will be recycled on-site/off-site or disposed as hazardous waste.
- ◆ Label storage containers "**Antifreeze for Recycling**" or "**Waste Antifreeze**".
- ◆ Draining waste antifreeze onto the ground or discharging it into waterways is prohibited.

Asbestos:

Asbestos may be found in some automobile brake shoes and clutches. Asbestos consists of microscopic fibers that are hazardous if they become airborne.

- ◆ Review OSHA rules (29 CFR 1910.1001) for protection of workers removing asbestos-containing material.
- ◆ Store asbestos separate from other waste.
- ◆ Place asbestos waste in plastic bags, then into a sealed, labeled container.

Auto "Fluff"/Auto Shredder Residue:

Auto "fluff" may contain toxic materials. Toxic materials may leach into surrounding soil and groundwater if not stored and disposed of properly.

- ◆ Make sure that all fluids are drained from vehicles before crushing or parts pulling.
- ◆ Auto fluff may be used as landfill cover.

Filters (Fuel, Transmission, and Used Oil):

Fuel, transmission oil, and used oil from filters can contaminate soil and water if not disposed of properly.

- ◆ Puncture filter dome and drain (for at least 12 hours). Store filters in a separate, fireproof container marked "**Used Filters**".
- ◆ Recycle through scrap metal recycler or landfill.

Fuel and Fuel Tanks:

Fuel is obviously flammable. Fuel can contaminate soil and groundwater if not stored and disposed of properly.

- ◆ Remove fuel tanks as soon as possible after the vehicle enters the facility and determine if fuel is reusable or waste fuel.
- ◆ Label containers of reusable fuel clearly: "**Reusable Gasoline**" or "**Reusable Diesel**".
- ◆ Dispose waste oil as hazardous waste.

Gear Oil/Power Steering, Transmission, or Brake Fluid:

Gear oil, power steering fluid, transmission fluid, and brake fluid can be managed like or with your used oil **ONLY IF** they have not been mixed/contaminated with hazardous wastes such as solvents, brake cleaner or carburetor cleaner. If fluid cannot be mixed with your used oil, manage as hazardous waste.

- ◆ **Do not** spray brake cleaner around containers of brake fluid.
- ◆ **Do not** dispose of oils/fluids in a storm drain, septic/sewer system, dumpster, or on ground.
- ◆ Collect uncontaminated fluids in "**Used Oil**" container that is located on a sheltered and curbed, impermeable concrete area away from any drains.

Lead Acid Batteries:

Lead acid batteries contain both lead and acid that are considered hazardous wastes. Lead is a persistent bio-accumulative toxic substance (PBT). PBTs degrade slowly in the environment or not at all, and eventually build up in body tissue. If batteries are improperly stored, they may release lead and lead-contaminated acid into the environment that can pollute ground and surface waters.

- ◆ Test batteries to determine if reusable.
- ◆ Place cracked or leaking batteries in a closed, watertight, acid resistant storage container.
- ◆ Store batteries for recycling on upright wooden pallets on a bermed, covered impermeable surface.
- ◆ Make sure that batteries are sent to a battery recycler, scrap metal recycler, or the landfill.

Mercury Switches:

Like lead (see "Lead Acid Batteries"), mercury is a PBT. Unless a salvage facility removes the mercury light switches from the vehicles prior to crushing and recycling, the mercury can be released into the environment.

- ◆ Remove all mercury light switches (in hood and trunk) from the vehicle as soon as possible.
- ◆ Store mercury switches in a leak-proof, closed, labeled container.
- ◆ Recycle mercury switches with a licensed metals recycler that reclaims mercury.
- ◆ Be careful not to break mercury capsule.

Refrigerants:

Refrigerants (chlorofluorocarbons, or CFCs, and R-134a) can destroy the ozone layer that protects Earth from harmful ultraviolet radiation from the sun, if improperly handled. Vehicles built before 1995 may still use refrigerants.

- ◆ Recover refrigerants from air conditioning units prior to crushing vehicles.
- ◆ Have certified technicians remove refrigerants from all vehicles using EPA-approved recycling and recovery equipment.
- ◆ Refrigerants can only be sold to certified technicians or to certified reclamation facilities that will reclaim it to its original purity specifications.

Shop Towels:

Used shop towels, rags, or soiled clothing that are contaminated with toxic chemicals may be hazardous wastes. If disposed, these items must be managed as hazardous waste regulations.

- ◆ Try to use less hazardous cleaning compounds.
- ◆ Use cloth towels that can be sent to a laundry service to be cleaned and reused.
- ◆ Waste shop towels, rags, and soiled clothing must be stored in a closed, labeled, metal container that is protected from the weather. Do not throw dirty towels or rags into the dumpster.

Sump and Oil/Water Separator Sludge:

Sludges from your sump or oil/water separator may be hazardous waste. Have the sludge tested professionally to determine whether or not it is hazardous.

- ◆ If sludge tests as hazardous, it must be sent to a hazardous waste management facility.
- ◆ Put the sludge in containers and label properly. Do not dispose of in dumpster/ground.

Tires:

The most significant problem of tire stockpiles are from the potential fires that emit toxic fumes and melt rubber that can pollute the ground and surface water.

- ◆ Have waste tires transported regularly to a waste-tire processor.
- ◆ Do not burn or bury waste tires. Tires must be shredded before transported to landfill.

Used Oil:

Used oil is not regulated as a hazardous waste if it has not been mixed or contaminated with hazardous waste, or it is sent for recycling or burned onsite to heat buildings in an approved oil burning heater.

- ◆ Drain and collect all oil on a sheltered and curbed, impermeable concrete area away from any drains.
- ◆ Store oil in a leak-proof and closed container and label as "**Used Oil Only**". Use secondary containment.