
ENVIRONMENTAL Fact Sheet



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Environmental Concerns at Motor Vehicle Recycling Facilities

The primary environmental concern at motor vehicle recycling facilities (MVRF) is the potential for groundwater and surface water contamination due to mishandling of vehicular fluids, including gasoline, diesel fuel, oil, transmission fluid, power steering and brake fluids, gear oil, and mineral spirits. MVRFs also generate a number of other wastes, including: mercury from light switch assemblies, HID head lamps, display screen back lighting, and ABS brake sensors; lead from lead-acid batteries, wheel weights and battery cable ends; chlorofluorocarbons (CFCs) and other refrigerants from air-conditioning units; sodium azide from air bags; asbestos from brake shoes and clutches; and waste tires.



Serious adverse impacts on environmental quality can result from mishandling any of these wastes. The impacts are summarized below.

- ✓ **Petroleum Hydrocarbons:** Gasoline, diesel fuels, and motor oil contain petroleum hydrocarbons. Petroleum hydrocarbons are toxic to aquatic life and some are suspected or known carcinogens. Those with a high affinity for sediments can persist over time in bottom sediments, where they can be toxic to benthic communities. They have the potential to move off site via stormwater and sediment runoff, either directly into surface waters or more commonly through storm sewers. In heavily impacted areas, vertical migration of contaminants in groundwater can occur.
- ✓ **Heavy metals (lead, cadmium, chromium, zinc, copper, nickel, aluminum, arsenic and mercury):** Heavy metals can be toxic to aquatic life and can bio-accumulate in fish and shellfish. At a MVRF, heavy metals can migrate to surface waters through stormwater runoff and into nearby soils through corrosion of the body and parts, leakage of motor fluids, dismantling operations, and improper handling and storage of vehicle components that contain heavy metals.
- ✓ **Acids:** At a MVRF, sources of acids include batteries, solvents, and degreasers. Acids can affect soil chemistry, which in turn can adversely affect plants and human health, and can create conditions toxic to soil organisms, and result in soil contamination.
- ✓ **Suspended solids:** In high concentrations, suspended solids, such as heavy metals, can affect surface waters by reducing clarity and light penetration through the water column. This, in turn, can affect water temperature, plant growth and dissolved oxygen concentrations. Solids that settle to the riverbed or lakebed can smother plants and invertebrates and alter these benthic habitats that play important roles for fish and wildlife.

In addition to the above listed contaminants, a significant number of New Hampshire water supplies are contaminated with the gasoline additive, MtBE. Although MtBE is no longer used in our gasoline supplies, older vehicles at MVRFs may still contain gasoline with MtBE.

When operations are well-controlled and best management practices are implemented at a MVRF, the risk of releasing contaminants is significantly reduced. The N.H. Green Yards Program works with MVRFs statewide to accomplish this. For additional information, visit www.des.nh.gov and search “Green Yards” or call (603) 271-2938.

For more information, contact:

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