



Oil Cleanup

For regulatory purposes the Minnesota Pollution Control Agency (MPCA) defines used oil as used petroleum or synthetic oil that is no longer usable. It includes: vehicle crankcase, lubricating, hydraulic, certain types of cutting, and other oils. Disposal of used oil is prohibited in solid waste, in or on land and in septic, stormwater or sanitary sewer systems. The MPCA regulates the management of used oil and used oil sorbent under the Minnesota hazardous waste rules. Used oil and used oil sorbents that are recycled using approved methods are exempt from most of Minnesota's hazardous waste regulations.

Minimizing oil use and spills can simplify used oil waste management and help you comply with MPCA regulations. The following sections highlight strategies for cutting oil use and reducing spills.

Minimize Oil Use

Efficiency

Cost-effective oil management should include getting the most from the oil you use. Physical testing and wear measurements are now commonly used to evaluate lubricant performance, rather than hours of operation or miles driven. Oil evaluation testing will help avoid unnecessary labor and supply expenses and conserve resources. Check with your lubricant supplier about sampling and testing services they provide to help evaluate your oil performance over time. Not only can you chart your lubricant performance, you will better understand the condition of your equipment as well.

Leaks

Chronic leaks can effectively rob you of inventory and can be a source of unwanted and unproductive labor overhead. Preventive maintenance such as tightening fittings or replacing leaky seals and gaskets can minimize cleanup labor and oil replacement costs. Leaks may indicate maintenance backlogs that could lead to equipment failure or worker injury.

Handling

Use proper tools, such as spigots, elevated collection pans, funnels, and customized hose and fitting assemblies or vacuum transfer equipment when filling and draining equipment. Make sure all employees know and follow proper procedures.

Curbs

Sometimes oils are used in less controlled settings, like open machining. Oil escaping from equipment sumps can be trapped on the floor inside curbs designed to capture and contain runoff. Consider workplace safety before installing curbs that could cause tripping or falling.

Oil Spills

Using the above ideas will help prevent routine oil waste. But spills, overfills and leaks will still happen. Even in emergencies, reducing the overall waste generated will benefit your facility.

Liquid Recovery

Never add absorbent to a simple liquid spill without using a liquid recovery tool to first recover as much oil as possible. On most surfaces, the majority of the spilled oil can be collected using tools that do not generate additional, costly absorbent wastes. Try the following liquid recovery tools.

- Squeegee and dustpan
- Pans, trays or mats with collection corners
- Oil-attracting floor mop and wringer bucket
- Properly equipped air-operated shop vacuum

The collected used oil can be emptied into a collection container and a mesh screen can be used to filter out dirt and debris. Recovering spilled oil will minimize the cost of cleanup supplies and disposal.

Sorbents

After using liquid recovery tools, clean up the remaining residue with absorbent supplies. Reusable pads and fabrics collect oils, then can be wrung out or pressed dry to recover much of the oil as liquid. These supplies can be used repeatedly. Eventually they will wear out and need proper disposal under the used oil rules. Waste sorbents can be burned for energy recovery at permitted facilities or cleaned by approved laundering for reuse.

Disposable sorbents are made from cork, corn cobs, paper, peat, polypropylene, wood fiber and other materials. They are lightweight, highly absorbent and combustible. Disposable sorbents can have significant purchase costs, even with repeated use. And, using any kind of absorbent without recovering spilled liquids first will increase labor and disposal costs.

Granular sorbents made from the same materials are also available and can be rejuvenated through washing or extraction processes.

The table below provides a basic description of available products and typical applications. Consult with your suppliers to determine which product is best suited to your needs.

For More Information

Information on sources of sorbents or sorbent services is available in maintenance and trade journals, or through housekeeping supply vendors. Or, contact MnTAP at 612/624-1300 or 800/247-0015 for vendor information or if you have questions about oil cleanup.

MnTAP has a variety of technical assistance services available to help Minnesota businesses implement industry-tailored solutions that prevent pollution at the source, maximize efficient use of resources, and reduce energy use and cost. Our information resources are available online at <mntap.umn.edu>. Or, call MnTAP at 612/624-1300 or 800/247-0015 from greater Minnesota for personal assistance.

Sorbent Type	Description
Pads	Thin squares that are easy to handle and wring out.
Pillows	Compact, high-capacity sorbents for small areas, including sewers and floor sumps.
Sheets, rolls and blankets	Large or continuous forms of pads.
Socks, tubes, snakes and booms	Cylinders with high absorbing capacity. These can be linked together to increase length. Outdoors these sorbents can be used on active surface water spills.
Sweeps	Long, thin rolls with rope cord threaded through the entire length for positioning and securing in place to contain a spill. Outdoors sweeps are used on calm surface water—often along shorelines.