

HAZARDOUS WASTE ISSUES ASSOCIATED WITH MUNICIPAL OPERATIONS

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What We Will Cover

- ★ **Used Oil Management**
- ★ **Solvent, Paint & Rag Management**
- ★ **Vehicle Maintenance Concerns**
- ★ **Bulbs, Batteries and E-waste**

What is Used Oil?

- ★ Petroleum based or synthetic oils that have been used and are contaminated with physical or chemical impurities
- ★ Used oil is not defined as a hazardous waste on its own (unless mixed with materials such as solvents or other chemicals)
- ★ Used oil is subject to its own set of regulations

Examples of Used Oil

- ★ Engine oils from vehicles and equipment
- ★ Lubricating oil
- ★ Brake/transmission fluid
- ★ Hydraulic fluid
- ★ Insulating oil
- ★ Metal cutting fluid
- ★ Compressor oil



Used Oil Does NOT Include

- ★ Oil Products (unused/new)
- ★ Contaminated oil products
- ★ Clean up material from oil product spills
- ★ Sludge from virgin oil storage tanks
- ★ Animal/vegetable oil
- ★ Kerosene, petroleum based solvents

Used Oil Generator

- ★ Label containers/tanks with “Used Oil”
- ★ Respond to leaks & spills
- ★ Use transporters with EPA ID number
- ★ May burn your own used oil in your space heater (< 0.5 MMBTU/HR)



This company was not being careful in how they stored used oil.

Make sure your containers are in good condition and managed to prevent spills or leaks.

**Respond promptly to oil spills.
Don't let them become a problem!**



Make sure you don't pour used oil or any other chemical wastes into your floor drains or septic system!



**DON'T pour your
used oil into a
sewer or down a
storm drain!**

**Not only does this
cause
environmental
damage, it can
also lead to
violations or
penalties.**





**Used Oil CANNOT
be used as a dust
suppressant!**

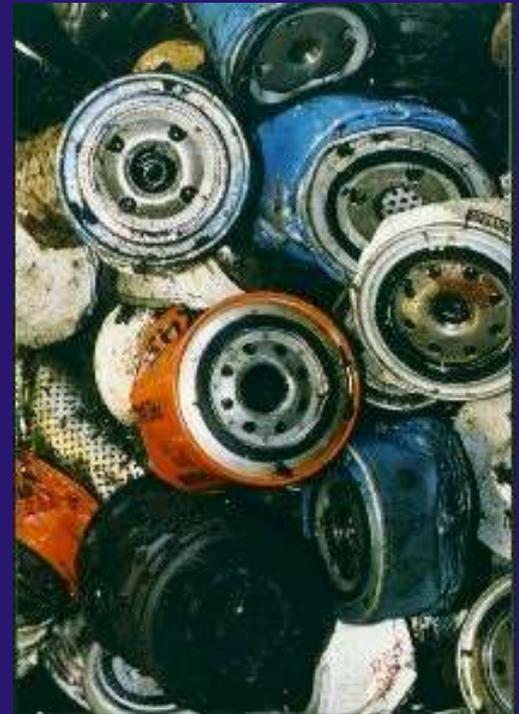
**Ohio EPA, DAPC
has a list of dust
suppression
alternatives.**

What About Used Oil Filters?

Used oil filters need to be properly drained.

There are EPA guidelines on how to properly “hot drain” filters.

Once filters are properly hot drained, you should send them to a scrap metal recycling company or disposal company.



Handling Used Oil Filters

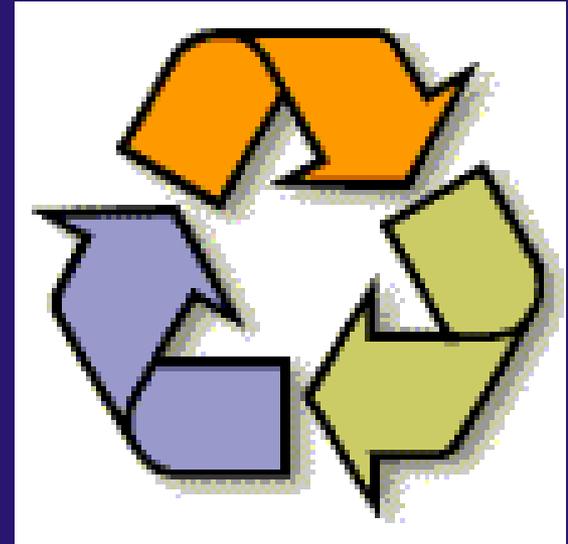
Acceptable “hot draining” methods include:

- Puncture back valve or dome end and hot drain,
- Hot drain and crush, or
- Dismantle and hot drain.

Hot draining means that oil is removed at close to engine temperature, when oil flows freely. Filters need to drain for 12 (minimum) to 24 hrs.

Used Oil Filters

Once hot drained, filters can be thrown in the dumpster with your other solid waste, provided they are not terne-plated filters.



It's recommended, though, that you consider sending the filters to a scrap metal company for recycling.

Can I burn used oil in my space heater?

Many small businesses burn used oil in space heaters to heat their shops. This is acceptable, if the following three conditions are met:

- You only burn oil that you've generated or received from a household oil changer (“do-it-yourselfer”)

Burning Used Oil in Space Heaters

- The space heater has a burning capacity of no more than .5 million BTUs per hour, and
- The combustion gases from the space heater are vented outside.



Burning Used Oil

You should also check with Ohio EPA's Division of Air Pollution Control on any air regulations that might apply to burning used oil.

If you are burning used oil in a unit other than a space heater, such as a boiler or industrial furnace, you should discuss this with DHWM. You may be subject to additional regulations.

Burning Used Oil

You should not take used oil from other businesses to burn. You would be subject to additional rules, including possible lab analysis of the oil. You may also need to register with Ohio EPA as a used oil burner.

Also, open burning of used oil, shop rags or any other waste from your facility is strictly prohibited under Ohio's air rules.



SPENT SOLVENT, PAINT AND RAGS

**May be hazardous depending on
materials used**

**Encouraged to use non hazardous
options or minimize waste generation**

SPENT SOLVENTS

- ★ May be hazardous waste upon disposal if
 - ★ Solvent used contains “F”-listed solvents (e.g. acetone (F003), toluene (F005) or MEK (F005))
 - ★ Cleaning solvent has a flashpoint less than 140°F
 - ★ Spent solvent contains characteristic hazardous constituents above regulatory levels (e.g. lead (D008), chromium (D006), MEK (D035))

A list of F-solvents and characteristic constituents is in your folder

PAINTS

- ★ May contain heavy metals (e.g. lead, chromium)
- ★ May have low Flashpoints
- ★ If paint alone – IT WILL NOT BE A LISTED WASTE

RAGS

Cloth rags sent off for laundering are EXEMPT from the hazardous waste rules

Rags will only be considered a LISTED hazardous waste (F-waste) if you clean up a spill of LISTED hazardous waste.

Note – generally speaking, any clean up material from a spill of listed waste is itself a listed waste

Where is hazardous waste generated?

MARKING ROADS

Spent solvents and old paint

PARTS WASHERS

Spent Solvents

MAKE SURE MANAGEMENT
IS AWAY FROM DRAINS OR
TAKE PRECAUTIONS



NON HAZARDOUS PAINTS

- ★ Federal Specification for Waterborne Paint
 - ★ High Solids Paint – no heavy metals
 - ★ Use non hazardous materials for clean-up

See packet for additional information

Vehicle maintenance concerns

- ★ Waste that may be generated that need to be evaluated:
 - ★ Scrap metal
 - ★ Lead weights from tires
 - ★ Printed circuit boards
 - ★ Fuel filters
 - ★ Antifreeze
 - ★ Tar truck clean-out
 - ★ Aerosol cans

Remember This!



Don't throw any waste into the dumpster unless you have confirmed **and** demonstrated that it is **NOT** a hazardous waste.

Universal Waste (UW)

★ What are Universal Wastes?

- Subset of hazardous waste
- Intended to promote recycling
- Eases regulatory requirements



Types of Universal Waste

- ★ **Hazardous waste pesticides**

- ★ Unused and recalled or suspended under FIFRA

- ★ **Mercury-containing thermostats**

- ★ Includes all mercury-containing devices

- ★ **Discarded batteries**

- ★ Alternative option for lead acid batteries

- ★ **Lamps**

- ★ Includes incandescent, fluorescent, compact fluorescent, LED, high intensity discharge, neon, high pressure sodium, etc.

What are the packaging requirements for UW?

Batteries

- only required if leaking

Mercury Thermostats, Lamps and Pesticides

- place in closed container
- must be designed to contain potential releases
- check with the destination facility to see if they can manage accidentally broken lamps



Can I use a lamp crusher to crush my lamps?



- ★ UW Regulations prohibit handlers from crushing lamps
- ★ If you crush your lamps, you must manage them under the hazardous waste requirements

Labeling requirements for UW

- ★ Each category of UW must be clearly marked with the appropriate wording
 - ★ “Universal Waste Lamps;” “Waste Lamps;” or “Used Lamps”
 - ★ “Universal Waste Battery (ies);” “Waste Battery (ies);” or Used Battery (ies)
- ★ Be able to demonstrate accumulation time



How long can I accumulate UW?

- ★ Up to one year on-site regardless of your handler category
- ★ If greater than one year is required, you must be able to prove why it is necessary



Electronic Waste Management

★ Computers

★ Circuit Boards

- ★ If you recycle these, then they are exempt from the hazardous waste rules
- ★ If not recycled, may be hazardous waste
- ★ New rules in the works to make all e-waste universal waste



Preventing Hazardous Waste Violations

To avoid expensive sampling & lab analysis, make sure you don't have any "mystery drums" around your facility.

Make sure employees know where HW goes. Keep waste streams segregated.

**THIS INCLUDES
HOUSEHOLD HAZARDOUS
WASTE DROPPED OFF AT
YOUR SITE**





Where do I go for help?

HW Compliance Support

- ★ Free guidance
- ★ Regulatory interpretations
- ★ Presentations
- ★ Lists of recyclers
- ★ www.epa.ohio.gov/dhwm
- ★ 614-644-2621
- ★ Answer questions posed via web



Office of Compliance Assistance and Pollution Prevention (OCAPP)

★ Provide services:

- ★ Small businesses (<100 employees)
- ★ Confidential
- ★ On-site assessments
- ★ Free publications
- ★ Workshops



Ohio EPA's OCAPP

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