

## HAZARDOUS MATERIALS PROGRAM ENVIRONMENTAL FACT SHEET

### Used Oil Burning

Used oil may be burned as fuel in Vermont, provided certain requirements are met. These requirements include labelling containers of the used oil to be burned with the words “Used Oil Fuel”, basic testing requirements to determine if the oil is appropriate for burning, and other container management standards summarized in the “Used Oil” fact sheet and found in Section 7-806 of the Vermont Hazardous Waste Management Regulations (VHWMR).

This fact sheet summarizes the requirements applicable to burning “*specification*” used oil fuel in “*small fuel burning equipment*” (i.e., equipment that has been designed specifically for burning used oil fuel), an activity that is regulated by Vermont’s Air Pollution Control Regulations (APCR) but does not require an Air Pollution Control Permit. Burning used oil fuel in larger equipment, or burning off-specification used oil, requires an Air Pollution Control Permit and is subject to more stringent VHWMR requirements.

#### What is specification used oil fuel?

Used oil that has met the specifications identified by Table 1 may be burned in small fuel burning equipment, such as space heaters. Off-specification used oil (oil that exceeds one or more of the Table 1 specifications) may only be burned for energy recovery in industrial furnaces, boilers, or hazardous waste incinerators and would require an Air Pollution Control Permit. Off-specification oil may also be managed as a hazardous waste or sent off site for recycling (e.g., re-refining).

**Table 1 – Used Oil Fuel Specifications**

Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash Point	100°F minimum
Total Halogens	1,000 ppm maximum
PCBs	< 2 ppm maximum
Net Heat of Combustion	8,000 BTU/lb. minimum

#### What is small fuel burning equipment and how is it regulated?

It is space-heating equipment defined as having a maximum operating heat input equal to or less than 500,000 BTU/hour (e.g., space heaters).

Burning used oil fuel in this type of space heating equipment is allowed provided:

- Combustion gases are vented to ambient (outdoor) air.
- Stacks are not equipped with devices that would impede the upward discharge of the exhaust gases (i.e., no vent pipe rain caps).

#### Can any type of used oil be burned in small fuel burning equipment?

No. The types of used oil that may be burned in small fuel burning equipment are limited to vehicle crankcase, transmission fluid, hydraulic oil, and machine gearbox oil that meet the Table 1 specifications. Other types of used oil (e.g., compressor oil, power steering fluid, metal working fluids)

may be burned as fuel with approval from the Waste Management & Prevention Division. Approval is based on the product information provided on the safety data sheet (SDS), as well as a description of the process generating the used oil.

### **Does used oil fuel need to be tested for all the Table 1 constituents?**

Facilities that either burn their own used oil on site or burn used oil received from off site in shipments of less than or equal to 55-gallons:

- Must initially test the used oil (from each source) for total halogens, prior to accepting it. A field screening test kit may be used to determine if the 1,000-ppm specification limit is met for total halogens. Contact the Waste Management & Prevention Division for information about field screening test kits and how to obtain them.
- If there is reason to believe that any of the remaining Table 1 specifications (i.e., those other than total halogens) would not be met by a volume of used oil, then that oil must be tested for the suspected constituents or properties.

Facilities that receive used oil fuel in shipments greater than 55-gallons:

- Must initially test the used oil fuel to establish that all the Table 1 specifications have been met; this testing may be conducted by either the used oil generator or used oil burner.

### **How often do I have to test used oil fuel?**

Used oil fuel from a specific source must be tested one time, prior to burning. The oil must be retested only if there is reason to believe that the quality of the oil, or the process generating the oil, has changed, such that the Table 1 specifications would not be met. A burner does not need to test used oil fuel received from offsite if the oil has already been tested by the generator (or transporter) and found to meet Table 1 specifications.

### **Do I need a permit (or to provide notification) to burn used oil fuel in small fuel burning equipment?**

No permit is required to burn specification used oil fuel. Moreover, those facilities that burn specification used oil fuel and do not generate any hazardous waste (e.g., oily absorbents or oily debris) are not required to notify as a hazardous waste generator with the Waste Management & Prevention Division.

### **Can I burn used oil fuel that I did not generate?**

Yes. In addition to burning used oil fuel that is generated on site, burners may accept used oil fuel from:

- Do-it-yourselfers (households that generate used oil).
- Off-site facilities that are owned and operated by the burner.
- Other businesses and municipalities.

**Can used oil fuel be transported by either the burner or the generator?**

Yes. A permit or certification is not required under the VHWMR to transport used oil fuel by a generator or a burner, provided that no more than 55-gallons is transported at any one time. However, in all cases, the transportation of used oil fuel must be in accordance with applicable DOT (Department of Transportation) requirements, including those for placarding.

**What records must be maintained?**

When used oil fuel is received from other businesses or municipalities, the burner must retain records for three years which document the:

- Quantity of used oil fuel accepted.
- Specification testing results.
- Name, address, and telephone number of the facility from which used oil fuel is accepted.

Note: When used oil fuel is only generated on site (or received from do-it-yourselfers), the burner need only retain specification testing results.

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***For more information regarding used oil burning, or if you have other hazardous waste management questions, please contact:***

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