

Burning Used Oil in a Space Heater - For Businesses

THIS POLICY DOES NOT HAVE THE FORCE OF LAW

Hazardous Waste

In this guidance we will explain *Ohio's used oil rules* as they apply to businesses that collect used oil and burn it in a space heater. This guidance does not apply to heating oil that you buy from a heating oil vendor that may be derived from used oil. It only applies to used oil that you generate yourself, collect directly from household do-it-yourselfers or collect directly from other businesses that generate used oil. You should be aware that you may be subject to other environmental regulations concerning the *Division of Air Pollution Control* (contact them at 614-644-2270) and *spill prevention control and counter measure requirements*.

Space Heaters

A space heater is small units that have a heat output capacity of not more than 500,000 British thermal units per hour (BTU/hr). Typically they will burn from 0.1 to 4 gallons of used oil per hour. They are usually used to heat the air in spaces for comfort in shops or warehouses. They can also be used to heat spaces such as greenhouses.

As a business owner, you can burn any used oil (that has not been mixed with hazardous waste) that you generate at any of your places of business or any used oil that you collect from household do-it-yourself used oil changers in your space heater as long as:

- ◆ The space heater has a heating capacity of 500,000 BTU/hr or less;
- ◆ The space heater is legitimately used for heating purposes such as for comfort in homes, workspaces or garages or for other heating purposes such as in a greenhouse;
- ◆ The space heater is vented to the outside;
- ◆ You comply with the *used oil management standards for generators* of used oil found in Ohio EPA's used oil rules (Ohio Administrative Code rules 3745-279-20 to 24, and
- ◆ You can show that the used oil from your businesses contains 1000 parts per million (ppm) total halogens or less. If it contains more than 1000 ppm total halogens, you must successfully rebut the presumption that the used oil was mixed with listed hazardous waste. (How to rebut the presumption is discussed in our guidance document entitled **Used oil Burners-New Guidance for Rebuttable Presumption**).



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Can I burn used oil from other businesses?

You cannot burn used oil from other businesses in your space heater, unless you or the other business has information that shows that the used oil meets the specification levels found in [Ohio Administrative Code \(OAC\) rule 3745-279-11](#). Usually the demonstration that the used oil meets the specification levels in OAC rule 3745-279-11 is made by analysis of a representative sample of the used oil for the constituents listed in the rule. The demonstration can also be made by obtaining copies of analyses or other information documenting that the used oil fuel meets the specification. The person who first makes the claim that the used oil meets the specification (either you or the other business owner) is considered to be a used oil fuel marketer under the used oil rules ([Ohio Administrative Code rules 3745-279-70 to 75](#)). Until someone makes the demonstration that the used oil meets the specification it is subject **to** the used oil regulations including: prohibitions from burning used oil in space heaters not owned by the generator of the used oil; transportation requirements; storage, transportation and notification requirements.

All used oil is presumed to be off-specification until otherwise demonstrated. Therefore you cannot mix multiple shipments and then test the used oil.

In addition to meeting the specification, the used oil you collect from other businesses must contain less than or equal to 1000 ppm total halogens. If it contains more than 1000 ppm total halogens, you must be able to show that the used oil was not mixed with listed halogenated hazardous waste ([rebut the presumption](#)).

What is the used oil specification?

Used oil that someone has shown to have constituent concentration levels below (above for flashpoint) those listed in Table 1 of OAC rule [3745-279-11](#) (see Table 1 below) meets the used oil specification. This used oil is often referred to as “on specification” used oil. Used oil that exceeds any of the levels in the specification rule or that has not been proven to meet the concentration levels is “off specification” used oil. When used oil is shown to meet this specification and the person making that showing complies with rules [3745-279-72](#), [3745-279-73](#), and paragraphs (B) and (C) of rule [3745-279-74](#) of the Administrative Code the used oil is no longer subject to Ohio’s used oil rules. Until somebody shows that the used oil meets the specification we presume that it is off specification.

This means in order for you to burn used oil from another business, you or the business that generated the used oil must do all of the following:

- ◆ Determine that the used oil meets the specification through analysis of a representative sample of the used oil, obtaining copies of analysis of a representative sample of the used oil or using other information about the used oil that demonstrates that it meets the specification and keep copies of the analysis or other information for three years;

The standards for used oil that contains quantifiable amounts (>2 ppm) of polychlorinated biphenyls (PCB’s) are found in 40 CFR 761.20(e).

Contact U. S. EPA for regulations concerning burning PCB-contaminated oil in your space heater.



If you accept used oil from a business to burn in your space heater, you must make sure that these conditions are met BEFORE you take it.

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- ◆ Notify Ohio EPA of your used oil marketing activity and get a **US EPA identification number** if you don't already have one, and;
- ◆ Keep records of used oil shipments for three years that include:
 - the name of the receiving facility;
 - the quantity of used oil delivered;
 - the date of shipment or delivery; and,
 - a cross-reference to the analysis or information that demonstrates that it meets the specification.
- ◆ Determine if the used oil contains greater than 1000 ppm total halogens, and be able to rebut the presumption if it does.

Table 1: Used Oil Specification

Constituent / Property	Maximum Allowable Level (total concentration)
Arsenic	5 ppm
Cadmium	2 ppm
Chromium	10 ppm
Lead	100 ppm
Flash Point	100° F minimum
Total Halogens	4,000 ppm*

*Although the used oil specification's total halogen regulatory limit is 4,000 ppm, if the total halogens exceed 1,000 ppm Ohio EPA presumes the used oil has been mixed with a hazardous waste, unless you can prove that it hasn't.

Can I burn used oil that has been mixed with other wastes?

You cannot burn hazardous waste or used oil that has been mixed with hazardous waste (from a business) in your space heater. However, if the used oil meets any of the exceptions listed below you can burn it in your space heater if it meets all of the other conditions that have been explained in this guidance. These exceptions are:

- ◆ used oil that has been mixed with **household hazardous waste** or **conditionally exempt small quantity generator** hazardous wastes;
- ◆ used oil that contains greater than 1000 PPM of total halogens if you can demonstrate that it does not **contain significant concentrations of halogenated hazardous constituents**;
- ◆ used oil that has been mixed with hazardous waste that exhibits the characteristic of **corrosivity**, **reactivity** or **TCLP toxicity** and the mixture does not exhibit any of the **four characteristics of hazardous waste**, including ignitability found in **OAC rules 3745-51-20 through 3745-51-24**; or
- ◆ used oil that has been mixed with a hazardous waste that only exhibits the characteristic of ignitability (such as low flash point mineral spirits) and the mixture does not exhibit the characteristic of ignitability. If the mixture exhibits the characteristic of corrosivity, reactivity or TCLP toxicity it can be burned in a space heater.

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What other rules apply if I collect used oil from other businesses I own but I don't want to have it tested for the specification or if I collect used oil from household do-it-yourselfers?

If you collect used oil from other businesses that you own and it has not been shown that it meets the specification or it is off specification you are operating a used oil **aggregation point**. If you collect and store used oil from household do-it-yourselfers you are operating a **do-it-yourselfer used oil collection facility**. In either case you must comply with the used oil generator standards in OAC rules **3745-279-20 through 3745-279-24**. You must also transport off specification used oil or used oil that has not been proven to meet the specification that you generate at your other businesses to the aggregation point in quantities less than 55 gallons at a time. It must be transported in a vehicle you own or that is owned by one of your employees. If you transport off specification used oil from your other places of business in quantities greater than 55 gallons you must comply with the used oil transporter requirements in **OAC rules 3745-279-40 through 3745-279-47**. There are no transportation requirements for household do-it-yourselfer used oil.

Where do I get used oil tested for the specification and the rebuttable presumption and how much will it cost?

You can get used oil tested at most environmental laboratories. Just call one on **our list** or one you find in your phone book and ask if they analyze used oil for the specification and rebuttable presumption. The lab should be using **EPA testing methods** or equivalent methods.

We suggest that you test for total halogens (rebuttable presumption) each time you pick up a load of used oil from businesses. You can test for total halogens by using the Quanti-Chlor kit from Chemetrics, Inc. (may not be available) or the Chlor-D-Tect 1000 or Chlor-D-Tect Q 4000 test kits from **Dexsil Corporation**. The test kits cost around \$20.00 each.

Contact

For more information, contact the Hazardous Waste Compliance and Inspection Support Unit of the **Division of Materials and Waste Management** at 614-644-2621.