

SECTION 6 - Used Oil Management

Although used oil is exempt from regulation as hazardous waste under **Section 7-203(n)**, it is subject to and regulated under the Used Oil Management Standards of VHWMR **Subchapter 8**, which is available online at:

http://dec.vermont.gov/sites/dec/files/wmp/HazWaste/Documents/Regulations/VHWMR_Sub8.pdf

VHWMR subchapter 8 identifies those materials that can be managed as used oil and establishes standards for the handling, storage, transportation, aggregation, collection, and burning used oil as fuel. Since used oil that meets fuel burning specifications has value as a commodity, “used oil fuel” is distinguished in subchapter 8 from “used oil” by allowing used oil fuel to be managed according to abbreviated standards.

Used oil is defined as any petroleum product refined from crude oil or any synthetic oil that has been used and has been contaminated as a result of that use. Used oil is a free-flowing liquid at standard temperature and pressure and has a flash point greater than 100 degrees (F). Examples of used oil include:

- Vehicle crankcase oils, transmission fluids and power steering fluids;
- Hydraulic, compressor and straight cutting oils;
- Machine gearbox oil, tramp oil and oil drained from evaporators.

See the *Used Oil* fact sheet (link below) for more information about used oil:

http://dec.vermont.gov/sites/dec/files/ead/documents/FactSheets/fs_usedoil_wm.pdf

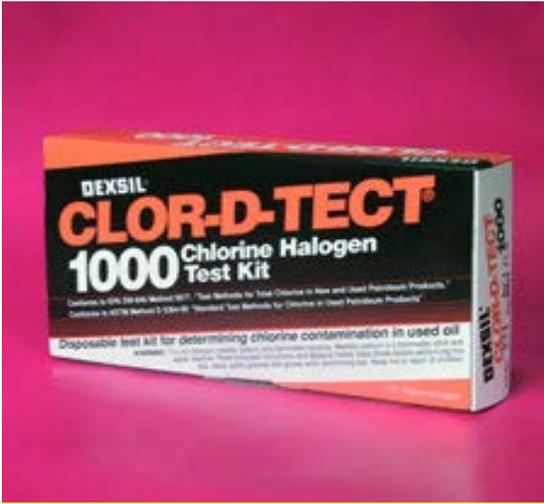
Q1: If used oil is burned as fuel at your facility, have you tested the used oil for chlorine contamination? *See VHWMR § 7-812(c)(1).*

In Vermont, used oil may be burned as fuel provided that certain minimal requirements are met. If you burn your own used oil on-site, or receive off-site generated used oil in shipments of 55-gallons or less, you must test the used oil from each source for total halogens prior to burning it as fuel. If you receive off-site generated used oil in shipments of more than 55 gallons, either you or the used oil generator must test the used oil to verify that all used oil fuel specifications are met.

Only used oil that passes the total halogens test or meets all of the used oil fuel specifications may be managed as Used Oil Fuel. If the used oil fails the test for total halogens or fails to meet the used oil fuel specifications, it **cannot** be burned in small fuel-burning equipment (e.g. space heaters).

Contact the Agency for information about screening test kits for total halogens. Used oil from a specific source only needs to be tested one time. However, if an oil-generating process changes or if you have reason to believe that the quality of the used oil has changed, you must retest the used oil.

You must retain records documenting that your used oil fuel has been evaluated for used halogens and/or used oil fuel specification for a period of three years.



Used oil test kit for evaluation of total halogens in used oil fuel prior to burning. You may use this type of kit for evaluating oil that your facility generates or that you receive from off-site facilities in shipments of 55 gallons or less.

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	1000 ppm maximum
PCBs	< 2 ppm maximum
Net Heat of Combustion	8000 BTU/lb minimum

Used oil fuel specifications – if you receive off-site used oil in shipments of greater than 55-gallons, you must ensure that all of these specifications are met prior to burning the used oil as fuel.

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; or
- Other businesses and municipalities.

See the *Burning Used Oil Fuel* fact sheet below:

http://dec.vermont.gov/sites/dec/files/ead/documents/FactSheets/fs_usedoilburning_wm.pdf

Q2: Are containers of used oil/used oil fuel closed when not adding or removing used oil/used oil fuel? See VHWMR § 7- 806(b)(1).

All containers holding used oil must be kept closed, except when actively adding or removing the used oil. A container equipped with a funnel does not meet the closed container requirement unless the funnel is fitted with a lid and fastened securely to the drum. Flip-top funnels that are screwed into the bung may be used, provided the lid is securely closed when the funnel is not in use.



Q3: Are containers holding used oil/used oil fuel managed in a manner to prevent the container from rupturing or causing a release? See VHWMR § 7-806(b)(2).

If a container holding used oil ruptures or leaks, the used oil must be immediately transferred from the leaking container to a container that is in good condition.



Improper storage of used oil containers

- Q4: Are containers holding used oil/used oil fuel compatible with oil?** See VHWMR § 7-806(b)(3).
Q5: Are containers holding used oil/used oil fuel in good condition? See VHWMR § 7-806(b)(4).
Q6: Are containers holding used oil/used oil fuel marked with the words "Used Oil"? See VHWMR § 7-806(b)(5).
Q7: Are containers holding used oil/used oil fuel stored on an impervious surface? See VHWMR § 7-806(b)(6).
Q8: Are containers of used oil/used oil protected from rain and snow? See VHWMR § 7-806(b)(7).

Used oil must be stored in containers that are made of, or lined with compatible material. These containers must be in good condition, with no severe rusting, apparent structural defects or deterioration. Used oil containers must be marked or labeled with the words "Used Oil", which must be clearly visible. Containers must be stored on an impervious surface that is sufficiently resistant to prevent the oil from migrating to the soil, groundwater, or surface water. Porous surfaces (such as wood) are not appropriate for storing containers of used oil. Containers holding used oil may be stored outdoors only if the containers are placed in a structure that sheds both rain and snow.

Q9: Are containers holding used oil/used oil fuel and water mixtures protected from freezing? See VHWMR § 7-806(b)(8).

Any container holding a mixture of used oil and water must be placed in a structure that protects the container from freezing.



Improper outdoor storage of used oil containers – they are not on an impervious surface or protected from precipitation.



Proper outdoor storage of used oil containers – containers are protected from precipitation and are stored on an impervious surface.

Q10: If you store used oil in an above-ground storage tank, is the tank marked with the words "Used Oil" or "Used Oil Fuel"? See VHWMR § 7-806(d)(2).

Q11: If you store used oil in an aboveground storage tank located outdoors, is the tank equipped with secondary containment? See VHWMR § 7-806(d)(4).

All aboveground tanks storing used oil/used oil fuel must be marked or labeled as "Used Oil" or "Used Oil Fuel". If located outdoors, tanks must be equipped with a secondary containment. This containment system must consist of dikes, berms, or retaining walls, as well as a floor, covering the entire area. The whole containment area must be impervious to oil to prevent any spilled oil from migrating to soil, groundwater, or surface water. Porous surfaces (such as wood) are not appropriate for storage of used oil. Alternatively, a double-walled storage tank may be used; double walled tanks do not require separate secondary containment.



Proper secondary containment for an aboveground storage tank holding used oil outdoors



Improper secondary containment for aboveground storage of used oil outdoors - single-walled, unlabeled tank trailer