

Used Oil Processors and Re-Refiners

THIS POLICY DOES NOT HAVE THE FORCE OF LAW

Hazardous Waste Program

This guidance document contains information for owners and operators of facilities that process or re-refine used oil. It summarizes Ohio EPA's used oil processor/re-refiner management requirements.

Am I a used oil processor/re-refiner?

Anyone who uses chemical or physical operations to produce fuel oils, lubricants or other products derived from used oil must follow the used oil processing rules. You are also subject to the processing rules if you use chemical or physical operations to make used oil more amenable for production of fuel, lubricants or other products derived from used oil. Processing includes, but is not limited to:

- blending used oil with virgin petroleum products;
- blending used oil to meet the *fuel specifications*;
- filtration;
- simple distillation;
- chemical or physical separation; and
- re-refining.

Note: If you are a *used oil transfer facility* and you store used oil for more than 35 days then you must comply with the used oil processor/re-refiner requirements.

Even if your used oil management activities meet the definition of used oil processing, you do not have to follow the processor rules if:

- you are a *used oil transporter* who conducts incidental processing operations during the normal course of transportation (for example, settling and water separation);
- you are a *used oil burner* who mixes off-specification used oil with either virgin oil or on specification used oil solely for the purpose of burning; or
- you are a *used oil generator* that conducts the following activities:
 - filtering, cleaning or otherwise reconditioning used oil before reusing it on site;
 - separating used oil from on-site generated wastewater to make the wastewater more acceptable for discharge or reuse;
 - using oil mist collectors to remove small droplets from in-plant air to make the air suitable for continued recirculation;
 - draining or otherwise removing used oil from materials in order to remove excessive oil to the extent possible (as long as you are not sending the used oil directly to a burner);
 - filtering, separating or otherwise reconditioning used oil before burning it in a space heater you own

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The requirements for processors/re-refiners are detailed in Ohio Administrative Code (OAC) rules 3745-279-50 through 3745-279-59 and include:

- an explanation of who has to comply with the rules;
- notification requirements;
- general safety and emergency standards;
- rebuttable presumption requirements;
- used oil specifications;
- general facility standards;
- used oil analysis plan for the rebuttable presumption and specification analysis;
- tracking requirements;
- records and reporting requirements;
- off-site shipment requirements; and
- process residue management requirements.

For more information, contact the Hazardous Waste Compliance Assurance Section of the *Division of Environmental Response and Revitalization* at 614-644-2924. You may also contact a DERR-Hazardous Waste Program inspector for your area in one of Ohio EPA's *District Offices*.

Are there any prohibited activities concerning used oil?

There are some prohibitions you should keep in mind concerning the management of used oil. *OAC rule 3745-279-12* lists these prohibitions.

- Used oil cannot be managed in surface impoundments or waste piles unless those units are subject to the hazardous waste rules.
- Used oil cannot be used as a dust suppressant (road oiling).
- Used oil that does not meet the used oil specifications in *OAC rule 3745-279-11* must only be burned in the following devices:
 - industrial furnaces that are listed in the definition of "industrial furnace" in *OAC rule 3745-50-10*;
 - "boilers" as defined in *OAC rule 3745-50-10* that are either:
 - industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or
 - utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;
 - space heaters that are used to burn used oil that the owner of the space heater generated, provided the heater's maximum design capacity is 0.5 million BTU/hr and the combustion gases are vented to the atmosphere; and
 - permitted hazardous waste incinerators.



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When do the hazardous waste regulations apply to used oil?

In most cases, used oil that is mixed with hazardous waste must be managed as hazardous waste and not used oil. You cannot receive and store hazardous waste at your facility without having a hazardous waste permit. It is very important to first determine if the used oil you want to manage has been mixed with hazardous waste.

Used oil that has been mixed with either *listed* or *characteristic* hazardous waste generated by a person who generates less than 220 pounds of hazardous waste in a calendar month (VSQG) can be managed as used oil. Used oil that has been mixed with listed hazardous waste that was generated by a facility that is not a VSQG must be managed as a hazardous waste.

Mixtures of a waste that exhibits one or more characteristics of hazardous waste (except hazardous waste that is only *ignitable*) and used oil, can be managed as used oil if the resulting mixture does not exhibit **any** characteristic of hazardous waste; otherwise the mixture must be managed as a hazardous waste. Mixtures of a waste that is only hazardous for ignitability and used oil may be managed as used oil if the resulting mixture is not ignitable.

Used oil that has more than 1,000 parts per million (ppm) of total halogen content is presumed to have been mixed with a halogenated listed hazardous waste. You can rebut this presumption if you can demonstrate that the halogens are not from a listed hazardous waste or that they are from a VSQG. U.S. EPA has suggested that used oil that has less than 100 ppm halogenated hazardous constituents could be considered not to have been mixed with hazardous waste. This may be true for used oil that is newly generated; however, 100 ppm of hazardous constituents may indicate that a large volume of used oil was used to dilute the hazardous waste. For example, 100 ppm of hazardous constituents in a 250-gallon tank of used oil would not necessarily indicate that the generator had intentionally mixed his chlorinated solvent with his used oil in order to avoid managing the chlorinated solvent as hazardous waste. On the other hand, if the 100 ppm is in a 500,000 gallon tank of used oil it represents a much larger volume than the previous example. For more information, see U.S. EPA's *guidance on rebutting the presumption*.

What is the relationship between the used oil specification and the rebuttable presumption?

There is **no** connection between the *used oil specification* and the rebuttable presumption. The used oil specification concentration limits determine the devices in which the used oil can be burned. If the used oil you manage will be refined to make lubricating oils, the used oil specifications do not apply. The rebuttable presumption places the burden of proof on handlers to demonstrate that the used oil they manage has not been mixed with hazardous waste. The rebuttable presumption applies to all used oil regardless of whether it is being used as a fuel or is re-refined to make a lubricant.

Do I have to comply with any other used oil requirements?

Besides the processor regulations, you also may be subject to other used oil requirements if you generate, transport, burn or market used oil. If you generate or transport used oil, you must comply with all applicable used oil generator or used oil transporter requirements. If you burn off specification used oil for energy recovery, you must comply with the used oil burner rules unless:

- you burn your own used oil in your space heater that meets the requirements of *OAC rule 3745-279-23*, or
- you are burning your own used oil strictly to run your processing operation.

Note: Used oil containing PCBs at concentrations of 2 to 49 ppm, or known to be diluted from or contain PCBs of 2 to 49 ppm, or of unknown PCB concentration are subject both to Ohio's used oil requirements and to U.S. EPA's *TSCA requirements*.

For example: You have a waste that is hazardous for corrosivity. You mix it with used oil that contains 10ppm chromium. The resulting mixture no longer displays the corrosivity characteristic but is hazardous for chromium. This mixture must be managed as a hazardous waste.

Note: If you store used oil in underground storage tanks you must comply with the Bureau of Underground Storage Tank Regulations in OAC *1301:7-9*.

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If you direct shipments of off-specification used oil from your facility directly to a used oil burner or you are the first person to make the claim that the used oil sent off-site to be burned is on specification, you are also considered to be a used oil fuel marketer and you must comply with *marketer requirements OAC 3745-273-70 to 75*. For example, if you send your used oil to a person **prohibited from burning** off-specification used oil, you would be considered the first person making the claim that it is on specification.

How do I store used oil?

You must only store used oil in containers or tanks that are in good condition (no severe rusting or apparent structural defects or deterioration) and not leaking. Containers and aboveground tanks must be labeled with the words, "Used Oil" and have secondary containment. While you are not required to label underground storage tanks, you must label their fill pipes with the words, "Used Oil."

At a minimum, secondary containment systems must be equipped with:

- dikes, berms or retaining walls and a floor (the floor must cover the entire area within the dike, berm or retaining wall); or
- an equivalent secondary containment system.

The entire containment system, including the walls and floor, must be sufficiently impervious to used oil to prevent any releases from migrating out of the system to the soil, ground water or surface water.

Do I have to notify Ohio EPA of my used oil activities?

Processors and re-refiners are encouraged to **notify** Ohio EPA of their used oil management activities even if they already have a **U.S. EPA identification number**. If you do not have a U.S. EPA identification number, you **must** notify Ohio EPA and obtain one. To obtain a U.S. EPA identification number or notify Ohio EPA of your used oil activities, complete and submit a notification form (**EPA 9029**) or send a letter to Ohio EPA. The letter must include your company name, address, name and phone number of the owner and the type of used oil activity being conducted (for example, process only, process and re-refine). However, Ohio EPA prefers submittal of the form to ensure all required information is collected or updated. To get a copy of the **form** and **instructions**, go to our **Webpage** or call (614) 644-2924.

How do I prove that the used oil I manage has not been mixed with hazardous waste or that it meets the fuel specifications?

You must develop and follow a written analysis plan which describes how you will determine if the used oil you collect has been mixed with a hazardous waste.

Analysis Plan

Your analysis plan must specify whether you will use analytical data or process knowledge to verify that the used oil has not been mixed with hazardous waste.

If you will be using analytical data, your analysis plan must include all of the following:

Note: If your facility has an aggregate storage capacity of >1,320 gallons or an underground storage capacity of >42,000 gallons, you may need to develop a spill prevention plan (called an **SPCC plan**).

Note: Examples of sufficiently impervious containment may include, but are not limited to, commonly used construction liner materials such as concrete, clay, asphalt, plastic, and steel.

Note: To apply knowledge, you should contact the generator(s) to determine the materials or processes used.

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- The sampling method used to obtain the representative samples. A representative sample may be obtained by using either one of the sampling methods in Appendix 1 of [OAC rule 3745-51-20](#) or an equivalent method approved by U.S. EPA.
- The frequency of testing.
- Whether the analysis will be performed on-site or off-site.
- The methods used to analyze specified parameters such as percent oil or percent solids.

Acceptable analytical test protocols include [SW-846 Test Methods](#) 9075, 9076 and 9077. The latter of these methods is a field test method such as Chlor-D-Tect 1000® and Chlor-D-Tect 4000®.

Note: For used oil to be considered “on specification,” its constituent levels must be at or below (except for flash point) the following levels:

- 5 ppm or less of arsenic
- 2 ppm or less of cadmium
- 10 ppm or less of chromium
- 100 ppm or less of lead
- 100< F minimum flash point
- 4,000 ppm or less of total halogens
- less than 2 ppm PCBs

Rebuttable Presumption

To rebut the presumption that the used oil you are burning has not been mixed with a listed hazardous waste you must demonstrate that the used oil does not contain significant concentrations of halogenated hazardous constituents (HHCs).

I am a used oil burner and received used oil which had greater than 1000 ppm total halogens, what information is acceptable to successfully rebut the presumption of mixing hazardous waste with the used oil?

Under [OAC rule 3745-279-63\(C\)](#), the used oil burner must be able to demonstrate that the used oil has not been mixed with a listed hazardous waste. Essentially, the burner has two methods to make this demonstration– by providing process information which demonstrates that the used oil was contaminated by HHCs that would not be listed hazardous waste or by demonstrating that the used oil does not contain significant concentrations of HHCs by providing representative analytical data.

What are significant concentrations of HHCs?

If you (the used oil burner) can provide analytical results that the used oil does not contain greater than 100 ppm of any individual HHC found in the F001 and F002 listings per [OAC rule 3745-51-31](#), then the presumption has been successfully rebutted. However, if there is information that suggests that other HHCs (e.g., chlorinated pesticides) are contained in the used oil, then you (the used oil burner) would be required to provide further information documenting that these HHCs are not from listed hazardous waste sources. You will not be expected to have analytical results for these other HHCs. For more information on the rebuttable presumption and significant concentrations, see U.S. EPA's "[Guidance and Summary Information Regarding the RCRA Used Oil Rebuttable Presumption](#)."

What is the importance of used oil meeting the fuel specifications?

Used oil that does not meet the specification (off specification) in [OAC rule 3745-279-11](#) may only be burned in industrial furnaces and boilers that are defined in [OAC rule 3745-50-10](#), hazardous waste incinerators, or in space heaters owned by the generator of the used oil. The space heater must meet the requirements in [OAC rule 3745-279-23](#). This means that off-specification used oil cannot be marketed for other purposes such as heating of homes, apartment buildings and hospitals.

Note: Used oil fuel specifications only apply to used oil that will be burned for energy recovery. Used oil fuel specifications do not apply to used oil that will be recycled in a manner other than burning for energy recovery.

To prove that the used oil meets the fuel specifications, you must develop a used oil analysis plan that describes how you will make this determination. If you are the first to make the claim that the used oil meets the fuel specifications, your analysis plan must include a description of the procedures you will use to make that claim. You must also specify whether you will use analytical data or other information such as generator knowledge to make this determination.

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If using analytical data, you must include all of the same information as required under the rebuttable presumption. Off-specification used oil that will be burned for energy recovery must be sent to a boiler or industrial furnace that is described in [OAC rule 3745-279-61](#).

What are my record-keeping requirements?

You must keep an operating record and a record of all shipments to and from your facility. The operating record must contain all records and results of used oil analyses performed and the details of any incidents that required implementation of your contingency plan. You also must keep a record of each incoming and outgoing shipment. Shipment records can take the form of a log, invoice, manifest, bill of lading or similar document. Records for each shipment must include all of the following information.

- Transporter's name, address and U.S. EPA identification number (if applicable).
- Generator or receiving facility's name, address and U.S. EPA identification number (if applicable).
- Shipment quantity and date accepted or leaving facility.

Shipment records must remain on-site for a minimum of three years.

What are my reporting requirements?

By March 1st of each even-numbered year, you must send Ohio EPA a letter that contains all of the following information about your used oil activities for the previous year.

- Your company's U.S. EPA identification number, name, and address.
- Calendar year covered by the report.
- The quantities of used oil accepted for processing/re-refining and the manner in which the used oil is processed/re-refined, including the specific processes used.

The letter should be sent to:

Ohio EPA, DERR
Hazardous Waste Compliance Assurance Section
PO Box 1049
Columbus, Ohio 43216-1049

What general operating standards must I follow?

Contingency Plan

You must have a written [contingency plan](#) that describes planned emergency-response actions. Your contingency plan must include all of the following:

- Details of emergency-response arrangements made with local authorities.
- A list of names, addresses and phone numbers (office and home) of everyone qualified as emergency coordinator. If more than one person is listed, you must name a primary emergency coordinator and then list the remaining coordinators in the order they will assume responsibility.
- An up-to-date list of all required emergency equipment including the location, physical description and brief capability outline.
- An evacuation plan for personnel.

You must keep copies of the contingency plan and all revisions or updates (for example, changes in facility design/layout, equipment, or emergency coordinators) at your facility. Copies must also be submitted to local police, fire department, hospitals and state/local emergency response teams who may be called upon to provide emergency services.

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Any time you implement your contingency plan, you must record the time, date, and details of the incident in your operating record. Within fifteen days of the incident, you must submit a written report to the director of Ohio EPA. The report must include all of the following:

- Name, address, and telephone number of the facility owner/operator.
- Facility name, address, and telephone number.
- Date, time, and type of incident (for example, fire, explosion).
- Name and quantity of material(s) involved.
- The extent of any injuries.
- If applicable, an assessment of actual or potential hazards to human health or the environment.
- The estimated quantity and disposition of recovered material.

Emergency Coordinator

At least one employee must always be available to coordinate emergency measures. The employee must be located on-site or be able to reach the facility within a short period of time. The responsible emergency coordinator must be thoroughly familiar with all aspects of the contingency plan including all operations and activities, the location and characteristic of used oil handled, the location of all records within your facility, and facility layout.

If there is an emergency situation at your facility, the emergency coordinator must, as appropriate, immediately activate internal alarms or communication systems and notify appropriate state or local authorities with designated response roles. If the emergency coordinator determines that the release, fire, or explosion could threaten human health or the environment outside the facility, the findings must immediately be reported to the appropriate local authorities; Ohio EPA's [*Spill Hotline*](tel:800-282-9378) at 800-282-9378; and either the government official designated as the geographical area's on-scene coordinator or to the [*national response center*](tel:800-424-8802) at 800-424-8802.

The coordinator's report must include the following:

- emergency coordinator's name and telephone number;
- facility name and address;
- time and type of incident (for example, release, fire);
- name and quantity of material(s) involved, to the extent known;
- extent of injuries, if any; and
- possible hazards to human health or the environment outside the facility.

During an emergency, the emergency coordinator should take all reasonable measures to ensure that additional fires, explosions and releases do not occur, recur or spread to other areas of the facility. If your facility stops operation in response to an emergency, the coordinator must, as appropriate, monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment.

Immediately after an emergency, the coordinator must provide for recycling, storing and disposing of recovered used oil, contaminated soil or surface water, or any other resulting material. Before resuming operations, the coordinator also must ensure that no incompatible waste or used oil is recycled, treated, stored or disposed of until cleanup procedures are complete and all emergency equipment is cleaned and fit for use. In addition, the emergency coordinator must notify Ohio EPA and appropriate state or local authorities that the facility is in compliance prior to resuming operations in the affected area(s).

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Local Authority Arrangements

Based on the type of used oil handled or associated activities, you must make prior arrangements with local authorities who may respond during an emergency. These could include the following:

- Arrangements to familiarize emergency responders with the facility layout; properties and associated hazards of the used oil handled; places where facility personnel would normally be working; entrances to roads inside the facility; and possible evacuation routes.
- Agreements providing primary emergency authority to a specific police or fire department in the event that more than one responds to an emergency.
- Arrangements to familiarize local hospitals with the properties of used oil handled, including the types of injuries or illnesses which could result from fires, explosions or releases.

Note: If state or local authorities will not enter into such an agreement, you must document their refusal in your operating record.

Emergency Equipment

You must maintain and operate your facility to minimize the possibility of fire, explosion or any unplanned release of used oil which could threaten human health or the environment. Depending on the possible hazards posed by the used oil, you must have the following equipment at your facility:

- an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to personnel;
- a device, such as a telephone or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments or state/local emergency response teams;
- portable fire extinguishers, fire-control equipment (including foam, inert gas, or dry chemical extinguishers as appropriate); and
- water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers or water spray systems.

All emergency equipment must be tested and maintained as necessary to ensure its proper operation in the event of an emergency. For example, if the fire extinguisher manufacturer suggests testing once every six months, then this testing would meet the requirement. Though not required, it may be helpful to have a copy of the manufacturer's suggested maintenance schedule available at all times.



Depending on your activities, all personnel involved with pouring, mixing, spreading or otherwise handling used oil must have immediate access to an internal alarm or emergency communication device. If your facility operates with only one employee and requires an emergency communication device, the employee must have access to a telephone or hand-held twoway radio capable of summoning external emergency assistance.

Aisle Space

Ohio's used oil regulations do not specify a required aisle space distance. However, you must maintain adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of the facility in the event of an emergency.

What if there is a release or spill?

In the event of an aboveground release or spill, you must:

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- stop and contain the release;
- clean up and properly manage the released oil and other materials; and
- repair and replace any leaking storage containers or tanks prior to returning them to service.

If the spill or release causes environmental contamination, you may need to comply with the *Comprehensive Environmental Response, Compensation and Liability Act* (also known as CERCLA) reporting requirements. If there is a release or spill of used oil that leaves your property line, you may also be required to report the incident to *the State Emergency Response Commission* (SERC). If your facility has an aggregate storage capacity of >1,320 gallons or an underground storage capacity of >42,000 gallons, you may need to develop an SPCC plan. Contact Ohio EPA's *Division of Environmental Response and Revitalization* at (614) 644-2924 for more information.

What if I close my facility?

If you stored used oil in underground storage tanks, you must comply with the standards in *OAC Chapter 1301: 7-9*. For containers or aboveground tanks, you must complete all of the following steps required by *OAC rule 3745-279-54(H)*.

- Remove containers used to store used oil or associated residues.
- Remove or decontaminate used oil tank residues.
- Remove or decontaminate containment system components.
- Remove or decontaminate structures and equipment.
- Remove or decontaminate soils.

If all contaminated soil cannot be practically removed or decontaminated, then you must perform post-closure care for up to 30 years after the facility's closure is complete (see *OAC rule 3745-66-17* for details).

How do I manage residues I generate from my processing operations?

Residues removed must be managed according to all applicable hazardous waste rules unless they meet the definition of used oil found in *OAC rule 3745-279-01(A)(12)*. If the residues do not meet the used oil definition and are not hazardous waste as defined in OAC Chapter 3745-51, they must be managed according to the solid waste rules found in *OAC Chapters 3745-27, 3745-28, 3745-29, and 3745-30*.

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Common Used Oil Management Standards (Ohio Administrative Code 3745-279)						
Mgmt. Standards	Handler Types	Generator/ Collection Center	Transporter/ Transfer Facility	Off-Spec Burner	Processor/ Re-refiner	Marketer *
Storage		Yes <i>OAC rule 3745-279-22(A)</i>	Yes <i>OAC rule 3745-279-45(A)</i>	Yes <i>OAC rule 3745-279-64(A)</i>	Yes <i>OAC rule 3745-279-54(A)</i>	N/A
Secondary Containment		No	Yes <i>OAC rule 3745-279-45(D)</i>	Yes <i>OAC rule 3745-279-64(C)</i>	Yes <i>OAC rule 3745-279-54(C)</i>	N/A
Response to Releases		Yes <i>OAC rule 3745-279-22(D)</i>	Yes <i>OAC rule 3745-279-45(H)</i>	Yes <i>OAC rule 3745-279-64(G)</i>	Yes <i>OAC rule 3745-279-54(G)</i>	N/A
Notification/ EPA ID Number		No	Yes <i>OAC rule 3745-279-42(A)</i>	Yes <i>OAC rule 3745-279-62(A)</i>	Yes <i>OAC rule 3745-279-51(A)</i>	Yes <i>OAC rule 3745-279-73(A)</i>
Tracking		No	Yes <i>OAC rule 3745-279-46</i>	Yes <i>OAC rule 3745-279-65</i>	Yes <i>OAC rule 3745-279-56</i>	Yes <i>OAC rule 3745-279-74</i>

* Storage, secondary containment, and release response issues are not applicable to marketers. However, marketers are also classified as handlers.

Contact

For more information, contact the Hazardous Waste Program Compliance Assurance Section of the *Division of Environmental Response and Revitalization* at 614-644-2924.