Used Oil Recycling

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Occupational Licensing & Registration Division

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Introduction to This Guide

This guide provides an overview of laws and regulations for handling and recycling used oil and will help minimize potential risks. The guide does not replace those laws and regulations, which take precedence over any information in this publication.

Who Should Use This Guide?

This guide applies to anyone who generates, transports, transfers, collects, processes, re-refines, markets, or burns used oil. Used oil transporters, transfer facilities, processors, re-refiners, off-specification burners, and marketers are referred to as used oil handlers [Title 30 Texas Administrative Code 324.2(8)]. Refer to the Used Oil Filter Handlers page1 on TCEQ's website for information about handling used oil filters.

Examples of Used Oil

Used oil is any oil contaminated by physical or chemical impurities as a result of use and no longer able to be used for its original purpose. (40 Code of Federal Regulations 260.10) Used oil can come from either synthetic oil or refined crude oil.

Materials That Are Considered Used Oil

Spent Engine and Vehicle Lubricants:

- automotive crankcase oil, including car, truck, marine, and aircraft engine oils not used for engine fuel
- diesel engine crankcase oil, including car, truck, bus, marine, heavy equipment, and railroad engine oils not used for fuel
- natural-gas-fired engine oils
- alternative fuel engine oils
- transmission fluids
- brake fluids
- power steering fluids

1 https://www.tceq.texas.gov/permitting/registration/used_oil/handlers_uof.html
**Spent Industrial Oils:**
- compressor, turbine, and bearing oils
- hydraulic oils or fluids
- metalworking oils or oil emulsions, including cutting, grinding, machining, rolling, stamping, quenching, and coating oils
- electrical insulating oils
- refrigerator/air conditioning unit oils
- rubber-making oils
- cable oils
- greases
- oil-like heat transfer fluid

**Other:**
- used oil recovered from wastewater
- used oil discarded due to abnormal manufacturing operations resulting in substantial leaks, spills, or other releases
- absorbent materials with signs of free-flowing oil

**Materials That Are Not Considered Used Oil**
- used animal or vegetable oils (they are considered food wastes rather than used oil)
- unused contaminated or uncontaminated oils going for reclamation
- solid wastes contaminated with used oil (such as absorbents and scrap metal) that are not burned for energy recovery and that do not have free-flowing oil (free-flowing oil means a visible sign of exiting oil)
- solvents (such as petroleum spirits, mineral spirits, petroleum ether, acetone, fuel additives, alcohols, paint thinners, brush cleaners, and other cleaners)
- substances that cannot readily be recycled in the same processes as used oil
- used antifreeze
- discharge of wastewater contaminated with de minimis quantities of used oil

**Managing Used Oil**
Recycling used oil involves reusing or re-refining used oil as a petroleum product or burning used oil for energy recovery. Through re-refining or processing, used oil can retain its lubricating ability. Re-refining oil takes 70% less energy than refining crude oil. One gallon of used oil can produce 2.5 quarts of lubricating oil, while it takes 42 gallons of crude oil to produce the same amount. However, improper management of used oil can cause great harm to the environment and threaten public health. Just one quart of oil can contaminate approximately 250,000 gallons of water.
The following list includes the options for managing used oil in order from most to least desirable:

- Reuse/recycle
- Burning for energy recovery
- Bioremediation, the use of either naturally occurring or deliberately introduced microorganisms to pollutants, in order to reduce or eliminate its level of contaminants
- Incineration
- Disposal at a landfill

**Do:**

- Determine whether your used oil is recyclable. (See “Determining if Oil Is Considered Used Oil or a Hazardous Waste”)
- Store used oil in containers or tanks that are in good condition, not leaking or rusting, and clearly labeled with the words “Used Oil.”
- Keep used oil storage containers covered and out of the weather.
- Contain and clean up spills of used oil.
- Reuse your used oil containers, if possible.
- Obtain all necessary federal, state, and local approvals and registrations.
- Keep complete records on all used oil recycling activities.
- Require transporters, marketers, processors/re-refiners, and burners to provide you with their proof of insurance, EPA identification number, and TCEQ used oil registration number when you send used oil for recycling.

**Do Not:**

- Dump your used oil in the trash, on the ground, or down a drain.
- Pour used oil onto roads or driveways to control dust. Doing so is illegal since used oil may contain heavy metals and additives that can lead to soil and water contamination and have harmful effects on human health. (40 CFR 279.82)
- Mix used oil with any other liquids such as antifreeze, brake cleaner, carburetor cleaner, gasoline, paint thinner, pesticides, chemicals, or solvents. Mixing used oil with any of these liquids may make the used oil unfit for recycling.
- Use containers that held hazardous chemicals that could contaminate the used oil (for example, bleach or a hazardous solvent used as a cleanser).
Determining if Oil Is Considered Used Oil or a Hazardous Waste

Recycled oil that is nonhazardous or characteristically hazardous as a result of use is subject to 30 TAC 324. Oil that is disposed, listed hazardous waste, or mixed with characteristically hazardous waste is subject to 30 TAC 335. Use the questions below to help determine if an oil is used oil subject to 30 TAC 324 or hazardous waste subject to 30 TAC 335.

1. Is the oil derived from crude oil or synthetic oil?
   - **Yes**: Go to question 2.
   - **No**: Not regulated under used oil management standards.

2. Was the oil used for its intended purposes and contaminated as a result?
   - **Yes**: Go to question 3.
   - **No**: Not regulated under used oil management standards.

3. Was the oil mixed with listed hazardous waste?
   - **Yes**: Handled as a listed hazardous waste. (Regulated under Chapter 335)
   - **No**: Go to question 4.

4. Was the oil rendered characteristically hazardous by mixing?
   - **Yes**: Handled as hazardous waste. (Regulated under Chapter 335)
   - **No**: Handled as used oil if recycled. If not recycled, the oil may be a Class 1 industrial waste regulated by Chapter 335.
Types of Used Oil Activities

Burner of Off-Specification Used Oil- any facility where off-specification used oil is burned for energy recovery in an industrial furnace, a boiler, or a hazardous waste incinerator. (40 CFR 279 Subpart G)

Collection Center- any facility that accepts, stores, and manages used oil collected from used oil generators who bring used oil in shipments less than 55 gallons. (40 CFR 279.1 and 40 CFR 279 Subpart D) Service stations, governments, and businesses may serve as collection centers. Collection centers may accept used oil from household do-it-yourselfers.

Generator- any person whose activity or process produces used oil or whose activity first causes the used oil to become subject to regulation (for example, automotive service center that performs oil changes for the public). (40 CFR 279.1 and 40 CFR Subpart C)

Marketer- any person who:
- sends a shipment of off-specification used oil from its facility to a used oil burner; or
- first claims that used oil that will be burned for energy recovery meets the used oil fuel specification set forth in 40 CFR 279.11. (40 CFR 279.1 and 40 CFR Subpart H)

Processor or Re-refiner- any person or facility that makes used oil more amenable for production of fuel oils, lubricants, or other products derived from used oil; or any person or facility that stores used oil for more than 35 days. (40 CFR 279.1 and 40 CFR Subpart F)

Transfer Facilities- any facility (including loading docks and parking and storage areas) where shipments of used oil are held for more than 24 hours and not longer than 35 days during the normal course of transportation. (40 CFR 279.1 and 40 CFR Subpart E)

Transporter- any person who transports more than 55 gallons of used oil off-site or transports used oil collected from other generators. Generators who transport 55 gallons or less of used oil in their own or an employee’s vehicle to a used oil collection center or to their own used oil aggregation point do not need to register as a transporter. A used oil aggregation point is any facility that accepts or stores used oil generated at other sites belonging to the same owner or operator. (40 CFR 279.1 and 40 CFR Subpart E)
Management Standards for Used Oil

The federal and state laws and regulations for used oil management are referred to as used oil management standards and include 40 CFR Part 279\(^2\) and 30 TAC Chapter 324\(^3\). The requirements that apply depend on your used oil activities. Use Table 1 to help you determine which requirements apply to you.

Table 1: Which Requirements of the Used Oil Management Standards Apply to You?

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Generator</th>
<th>Collection Center</th>
<th>Transporter/Transfer Facility</th>
<th>Processor/Re-refiner</th>
<th>Marketer/Off-spec Burner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Management</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Spill Reporting and Release Response</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Secondary Containment</td>
<td>Recommended</td>
<td>Recommended</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes(^4)</td>
</tr>
<tr>
<td>Shipment Requirements</td>
<td>Yes, if transporting 55 gallons or more</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Tracking</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Financial Assurance</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes(^5)</td>
</tr>
<tr>
<td>Rebuttable Presumption (Mixtures of Used Oil and Halogens)</td>
<td>Yes, if mixed with hazardous waste</td>
<td>Yes, if mixed with hazardous waste</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes(^6)</td>
</tr>
<tr>
<td>Register with TCEQ</td>
<td>No</td>
<td>Yes, Form 00533(^2)</td>
<td>Yes, Form 10062(^3)</td>
<td>Yes, Form 10062</td>
<td>Yes, Form 10062</td>
</tr>
<tr>
<td>Report to TCEQ</td>
<td>No</td>
<td>Due January 25 each year; Form 00567(^2)</td>
<td>No</td>
<td>Due January 25 on even years; Form 00648(^2)</td>
<td>No</td>
</tr>
</tbody>
</table>

\(^2\) https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr279_main_02.tpl
\(^3\) https://www.tceq.texas.gov/rules/indxpdf.html/#324
\(^4\) This requirement does not apply to a marketer that is also a generator or collection center.
\(^7\) https://www.tceq.texas.gov/downloads/permitting/waste-registration/forms/used-oil/10062.pdf
\(^8\) https://www.tceq.texas.gov/downloads/permitting/waste-registration/forms/used-oil/00648.pdf
What Are the Storage Requirements?

Containers and aboveground tanks used to store used oil must be in good condition, not leaking, and labeled or marked clearly with the words “used oil” [40 CFR 279.22(b) & (c)(1)]. Fill pipes used to transfer used oil into underground storage tanks at generator facilities must be labeled or marked clearly with the words “used oil” [40 CFR 279.22(c)(2)].

Used oil transfer facilities, processors, re-refiners, and burners must also have secondary containment for their used oil storage. Any secondary containment systems for used oil storage must consist of:

- dikes, berms, or retaining walls, and
- a floor. The floor must cover the entire area within the dikes, berms, or retaining walls; or
- or an equivalent secondary containment system.

The entire containment system, including walls and floors, must be sufficiently impervious to used oil. [40 CFR 279.45(d-f), 279.54(c-e), and 279.64(c-e)] The containment system must prevent the migration of any used oil from the containment system to the soil, groundwater, or surface water. The secondary containment must also comply with 30 TAC 324.22(d)(3).

What Are the Shipping and Tracking Requirements?

Transporters must deliver used oil to facilities registered with the TCEQ. Used oil shipments must comply with all requirements under the U.S. Department of Transportation regulations in 49 CFR parts 171 through 180.

Used oil transporters, processors, re-refiners, burners, and marketers must maintain records to track their used oil activities and retain these records for at least three years. (40 CFR 279.46, 279.56, 279.65, and 279.74) The TCEQ does not require a particular format for tracking and maintaining these records. Records of each used oil shipment must include:

- the name and address of the generator, transporter, or processor/re-refiner who provided the used oil for transport;
- the EPA identification number (if applicable) of the generator, transporter, or processor/re-refiner who provided the used oil for transport;
- the quantity of the used oil accepted;
- the date of acceptance; and
- the signature of a representative of the generator, transporter, or processor/re-refiner who provided the used oil for transport. Intermediate rail transporters do not need to sign the shipping documents.
How Do I Manage a Release?

Upon detection of a release of used oil to the environment (if not subject to the requirements of 40 CFR Part 280, Subpart F), a used oil generator must: [40 CFR 279.22(d)]

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

Notification Requirements

Used oil generators should notify TCEQ; property owners and residents; and local, state, federal authorities when a used oil release occurs at or above the amounts in Table 2.

TCEQ categorizes petroleum-contaminated soil as “special waste” when disposed of in municipal solid waste landfills. [30 TAC 330.3] A special waste is any solid waste that requires special handling and disposal because of its quantity, concentration, physical or chemical characteristics, or biological properties. Regulations covering the management of special waste are found in 30 TAC 330.171. Contact the TCEQ Municipal Solid Waste Permits Section at mswper@tceq.texas.gov or 512-239-2335 for regulations and authorization to dispose petroleum-contaminated soil in MSW landfills.

Table 2: Reportable Quantities for Used Oil Spills

<table>
<thead>
<tr>
<th>Type of Spill</th>
<th>Reportable Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spills or discharges onto land of either:</td>
<td></td>
</tr>
<tr>
<td>- used oil, crude oil, or oil other than that defined as petroleum product</td>
<td>210 gallons (five barrels)</td>
</tr>
<tr>
<td>- petroleum product and used oil from PST exempted facilities</td>
<td></td>
</tr>
<tr>
<td>Spills or discharges onto land of petroleum product and used oil not from PST</td>
<td>25 gallons</td>
</tr>
<tr>
<td>exempted facilities</td>
<td></td>
</tr>
<tr>
<td>Spills or discharges directly into water of used oil; petroleum product and</td>
<td>Sufficient to create a sheen</td>
</tr>
<tr>
<td>used oil; crude oil; or oil other than that defined as petroleum product</td>
<td></td>
</tr>
</tbody>
</table>

TCEQ

As soon as possible, but no later than 24 hours after discovery of the release, the responsible person must report the spill to the applicable regional office. [30 TAC 327.3(b)] The responsible person is the owner or operator of a facility or vehicle that has caused a spill of used oil or any other person who causes or allows such a spill. [30 TAC 327.2(15)] The responsible person may notify the regional office during normal business hours or call the number of the Texas State Emergency Response Commission (SERC) at the state toll-free, 24-hour Spill Reporting Hot Line at 800-832-8224. (30 TAC 327.3(c)]

The initial notification should include information such as the name, address, and telephone number of the person making the report; the date, time, and location of the spill; a description

9 http://www.tceq.texas.gov/agency/directory/region
of the used oil spilled; and an estimate of the quantity spilled. [30 TAC 327.3(d)] Within 30 days of the spill, the responsible person must send the regional office a detailed written description of the spill and actions taken in response. [30 TAC 327.5(c)]

**Property Owners and Residents**

As soon as possible, but not more than two weeks after the spill, the responsible person must notify the owner and residents of the property where the spill occurred and the residents of any other property that may be adversely affected. [30 TAC 327.3(h)]

**Local, State, Federal Authorities**

Other local, state, or federal laws may require additional notification. [30 TAC 327.3(g)]

**CERCLA Liability**

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA addresses who is responsible when hazardous substances, such as used oil, are released into the environment.

A service station dealer is a retail facility, such as a service station, filling station, quick-lube center, or garage that receives most of its business from fueling and servicing motor vehicles. SSDs may qualify for exemption from certain liability provisions of CERCLA—namely, response costs, damage, and injunctive relief. This exemption applies only to releases that occur after used oil has left the SSD.

To qualify for the exemption, an SSD must fulfill all of the following:

- Meet the definition of an SSD according to CERCLA;
- Accept used oil from household do-it-yourselfers;
- Not mix used oil with any hazardous substance; and
- Manage their used oil activities according to used oil management standards.
Who Must Register?

**Used Oil Collection Centers**

Used oil collection centers must register with TCEQ within 30 days of starting operation using *Form 00533*. [30 TAC 324.7(1)(B)] Collection center registrations require renewal by January 25th of every odd year. A collection center should update their registration using Form 00533 for any of the following changes:

- contact person;
- mailing address;
- registered facility name;
- ownership;
- types of used oil accepted; or
- closure of the facility.

Facilities accepting household used oil must post and maintain a [durable and readable sign](https://www.tceq.texas.gov/downloads/permitting/waste-registration/forms/used-oil/00533.pdf) showing that the facility is a public or household used oil collection center and the hours used oil is collected [30 TAC 324.7(3)(A)].

**Automotive Oil Fee Exemption for Collection Centers (34 TAC 3.701)**

Automotive oil is any lubricating oil intended for use in an internal combustion engine, crankcase, transmission, gearbox, or differential for an automobile, bus, or truck. If industry considers the oil suitable and acceptable for these uses, then the oil is considered automotive oil even if the oil is not labeled as such.

The "first sale" is the first time a retail facility in Texas sells automotive oil to a purchaser who is not an automotive oil manufacturer or distributor. An oil manufacturer is any person or organization that formulates automotive oil and packages/repackages, distributes, or sells it. The first sale of new automotive oil is subject to a fee[12](https://comptroller.texas.gov/taxes/auto-oil/) collected by the Texas Comptroller of Public Accounts.

Used oil collection centers can obtain an exemption from the automotive oil fee by:

- registering with TCEQ;
- accepting used oil from household do-it-yourselfers during business hours; and
- providing automotive oil sales and service to the public.

**Used Oil Handlers**

Used oil handlers register using *Form 10062*. TCEQ will issue an EPA ID to used oil handlers when they register and will convey information about the site’s used oil activities to EPA. Used oil handler registrations do not expire. Most used oil handlers require [financial assurance](https://www.tceq.texas.gov/downloads/permitting/waste-registration/forms/used-oil/10062.pdf) when they register. A used oil handler should update their registration using Form 10062 for any of the following changes:

- contact person;
- mailing address;

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12 [https://comptroller.texas.gov/taxes/auto-oil/](https://comptroller.texas.gov/taxes/auto-oil/)
• registered facility name;
• ownership;
• financial assurance;
• square footage of areas where used oil are transported, stored, or processed;
• used oil handling activities; or
• closure of the facility.

For more information on registering, visit the Used Oil Recycling Program website\(^{14}\). For registration help, contact the Industrial Hazardous Waste Registration & Reporting Team at 512-239-6413 or wasteval@tceq.texas.gov.

**Financial Assurance Requirements for Used Oil Handlers**

Used oil transfer facilities, re-refiners, burners, and processors must provide financial assurance for soil remediation. Such handlers may choose from several types of financial assurance mechanisms outlined in 30 TAC 37 Subchapter L\(^{15}\) and 30 TAC 324.22\(^{16}\). 30 TAC 37 Subchapter C\(^{15}\) describes the various financial assurance mechanisms and their specific criteria. 30 TAC 37 Subchapter D\(^{16}\) contains the required wording of the mechanisms.

Used oil transporters must provide proof of automobile liability insurance upon registration and when their insurance policies are changed or renewed. The insurance policy must have at least $500,000 in single limit liability coverage and list TCEQ as the certificate holder.

Some facilities may qualify for exemption from the financial assurance requirements. The qualifications for exemption include used oil stored:

• by a used oil handler which is owned or otherwise effectively controlled by the owners or operators where the used oil is generated; [30 TAC 324.22(a)]
• in an area that measures less than 1000 ft\(^2\); [30 TAC 324.22(c)]
• over concrete that meets the specifications of 30 TAC 324.22(d); or
• at a facility owned and operated by a government agency. (30 TAC 37.2001)

**Do I Need to Submit Any Reports to TCEQ?**

Report the amount of used oil collected, re-refined, or processed. [30 TAC 324.7(1)(E), 324.7(3)(E), and 324.12(4)] See Table 1 for the applicable TCEQ form number, reporting frequency, and reporting deadlines.

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\(^{14}\) [https://www.tceq.texas.gov/permitting/registration/used_oil/Am_I_Regulated.html](https://www.tceq.texas.gov/permitting/registration/used_oil/Am_I_Regulated.html)


Recycling Used Oil

How Do I Manage Used Oil Absorbents?

Used oil contains many toxic metals and additives that may pollute the environment if not managed correctly. Absorbents, when properly selected and used, can soak up and slow the movement of used oil. There are several options for managing used oil absorbents, depending on the type of absorbent.

Table 3: Used Oil Absorbents and Disposal Options

<table>
<thead>
<tr>
<th>Class of Absorbent</th>
<th>Absorbent Characteristics</th>
<th>Recycle/ Disposal Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic pads</td>
<td>• Made of polypropylene</td>
<td>• Reuse (if reusable pad)</td>
</tr>
<tr>
<td></td>
<td>• Water repellant, so moisture will not affect their usefulness</td>
<td>• Burn for energy recovery</td>
</tr>
<tr>
<td></td>
<td>• Not biodegradable</td>
<td>• Incineration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Disposal at landfill</td>
</tr>
<tr>
<td>Clay, commonly called &quot;kitty litter&quot;</td>
<td>• Heavy, highly abrasive, and not biodegradable</td>
<td>• Disposal at landfill</td>
</tr>
<tr>
<td></td>
<td>• High ash content and low heating value—qualities that make it the least desirable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of the three classes to incinerate or use in fuel blending</td>
<td></td>
</tr>
<tr>
<td>Cellulose materials</td>
<td>• Biodegradable</td>
<td>• Burn for energy recovery</td>
</tr>
<tr>
<td></td>
<td>• Examples include peat moss, corn cobs, or recycled paper products.</td>
<td></td>
</tr>
</tbody>
</table>

Manage absorbent materials with signs of free-flowing oil as used oil. [40 CFR 279.10(c)] If there are no visible signs of free-flowing oil and the materials are not burned for energy recovery, then absorbents are not regulated as used oil. If you dispose of absorbent materials in a landfill, the absorbent materials are solid waste and subject to a hazardous waste determination.

What is Re-refining/Processing?

Re-refining used oil produces high-quality base stock for lubricants or other petroleum products. "Base stock" is treated used oil with extracted impurities. Re-refining produces a higher-quality base stock than processing. Re-refined used oil has sufficient quality to be used again as automotive oil, industrial oil, lubricants, and industrial fuels.

Processing used oil applies chemical or physical operations to make used oil more suitable for production of fuel oils, lubricants, or other products derived from used oil. Uses of processed used oil include fuel for producing electricity, blending for marine fuel, or mixing with asphalts.
What is Burning Used Oil for Energy Recovery?

Some applications of used oil burned as a fuel include bunker fuel, supplementary fuel in cement kilns, and fuel for drying sand in asphalt plants.

**Used Oil Fuel Specifications**

Used oil burned for energy recovery has two types: on-specification (on-spec) used oil and off-specification (off-spec) used oil. On-spec used oil contains no more than the allowable levels of contaminants shown in Table 4 (40 CFR 279.11). On-spec used oil burned for energy recovery is not subject to the used oil management standards as long as the used oil:

- is not mixed with or contaminated by hazardous waste, and
- meets the marketer requirements.

Off-Spec used oil exceeds the allowable levels of one or more of the constituents in Table 4. To burn off-spec used oil, use the devices identified in 40 CFR 279.61(a). The questions in the section "Burning Used Oil for Energy Recovery" will help determine if your used oil can be used as a fuel.

**Table 4: Specifications for Used Oil Burned for Energy Recovery**

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Allowable Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>5 ppm maximum</td>
</tr>
<tr>
<td>Cadmium</td>
<td>2 ppm maximum</td>
</tr>
<tr>
<td>Chromium</td>
<td>10 ppm maximum</td>
</tr>
<tr>
<td>Lead</td>
<td>100 ppm maximum</td>
</tr>
<tr>
<td>Total Halogens</td>
<td>4,000 ppm maximum</td>
</tr>
<tr>
<td>Flash Point</td>
<td>100°F minimum</td>
</tr>
</tbody>
</table>
Burning Used Oil for Energy Recovery

Answer the questions below to determine if used oil can be burned for energy recovery.

1. Does the used oil contain less than the allowable levels of the constituents listed in Table 4?
   Yes- Go to question 2.
   No- Cannot be burned for energy recovery.

2. Does the used oil have a flash point of at least 100°F?
   Yes- Go to question 3.
   No- Cannot be burned for energy recovery.

3. Does the used oil contain less than 2 ppm PCBs?
   Yes- Go to question 6.
   No- Go to question 4.

4. Does the used oil contain between 2 and less than 50 ppm PCBs? (Note that used oil containing between 2 ppm PCBs or more is also subject to 40 CFR 761.20(e), which are the federal regulations implementing the Toxic Substances Control Act.)
   Yes- Go to question 6.
   No - Go to question 5.

5. Does the used oil contain more than 50 ppm PCBs?
   Yes- Cannot be burned for energy recovery as used oil and is instead subject to 40 CFR 761.20(e)/TSCA, not used oil management standards.

6. Does the used oil contain less than 1,000 ppm total halogens?
   Yes and less than 2 ppm PCBs- Can be burned in an on-specification unit. (Regulated under 30 TAC Chapter 324.)
   Yes and between 2 and less than 50 ppm PCBs- Can be burned in an on-specification unit that can thermally degrade PCBs. [Regulated under 30 TAC Chapter 324 and 40 CFR 761.20(e)/TSCA]
   No- Go to question 7.

7. Has the hazardous waste presumption been successfully rebutted?
   Yes- Go to question 8.
   No- Handle as hazardous waste. (Regulated under 30 TAC Chapter 335)

8. Does the used oil contain from 1,000 to less than 4,000 ppm total halogens?
   Yes and less than 2 ppm PCBs- Can be burned for energy recovery in an on-specification unit. (Regulated under 30 TAC Chapter 324.)
   Yes and between 2 and less than 50 ppm PCBs- Can be burned in an on-specification unit that can thermally degrade PCBs. [Regulated under 30 TAC Chapter 324 and 40 CFR 761.20(e)/TSCA]
   No- Go to question 9.

9. Does the used oil contain greater than 4,000 ppm total halogens?
   Yes and less than 2 ppm PCBs- Can be burned in an off-specification unit or undergo further processing to be burned in an on-specification unit. (Regulated under 30 TAC Chapter 324)
   Yes and between 2 and less than 50 ppm PCBs- Can be burned in an off-specification unit that can thermally degrade PCBs or undergo further processing to be burned in an on-specification unit that can thermally degrade PCBs. [Regulated under 30 TAC Chapter 324 and 40 CFR 761.20(e)/TSCA]
Managing Mixtures of Used Oil and Hazardous Waste

Used oil management standards permit used oil recycling if the used oil is not mixed with hazardous waste. [40 CFR 279.10(b)] Used oil that does not meet the standards for recycling is regulated as hazardous waste under 30 TAC Chapter 335. Use the questions in the section “Determining if Oil Is Considered Used Oil or a Hazardous Waste” to determine if your used oil is regulated as hazardous waste or used oil.

Used oil generators and handlers must not intentionally mix used oil with a hazardous waste. Each used oil handler must prove, through adequate documentation or testing, that the used oil was not mixed with a listed hazardous waste. This documentation requirement does not apply to used oil:

- Generated by a household do-it-yourselfer - from the maintenance of a personal vehicle, household appliances, or garden equipment; and, in amounts of 25 gallons or less, from farming equipment or heavy equipment.
- Generated by a Conditionally Exempt/Very Small Quantity Generator - a facility or person that generates less than 100 kilograms (220 lbs.) of hazardous waste and less than 1 kilogram (2.2 lbs.) of acutely hazardous waste per month (see 40 CRF 261.5).
- Gathered by a collection center that only accepts household do-it-yourselfer used oil.

If hazardous waste is mixed with used oil, the resulting mixture is assumed to be a hazardous waste. Generators and handlers who mix used oil with hazardous waste can manage the waste as used oil if the waste is:

- Destined to be recycled;
- Not rendered hazardous by mixing with characteristically hazardous waste; and
- Not mixed with a listed hazardous waste.

Mixing or blending used oil with hazardous waste to bring down the level of a hazardous concentration could qualify as hazardous waste treatment and require a hazardous waste permit.

How Do I Manage Mixtures of Used Oil and Halogens?

Used oil containing more than 1,000 ppm of total halogens (for example: fluorine, chlorine, or bromine) is presumed hazardous unless the used oil generator or handler can demonstrate that the used oil was not mixed with listed hazardous waste. [40 CFR 279.10(b)(ii)] This presumption is known as the “rebuttable presumption”. To rebut it, a used oil handler must prove that used oil with more than 1,000 ppm total halogens does not contain listed hazardous waste.

The following used oils are exempt from the rebuttable presumption:

- Metal-working oils contaminated with chlorinated paraffins if the used oils are to be returned to the generator for use as a lubricant, cutting oil, or coolant; [40 CFR 279.10(b)(1)(ii)(A)]
- Used oil from households or a CESQG facility; [40 CFR 279.10(b)(3)]
- Used oil contaminated with chlorofluorocarbons removed from refrigeration units when the CFCs are destined for reclamation. [40 CFR 279.10(b)(1)(ii)(B)]
How Do I Manage Used Oil Containing PCBs?

Used oil handlers can burn used oil containing PCBs (polychlorinated biphenyls) for energy recovery, but only in combustion units that thermally degrade the PCBs such as rotary kilns, cement kilns, liquid injection incinerators, and high-temperature boilers. [40 CFR 761.20(e)(3)]

Used oil burned for energy recovery is presumed to contain 2 ppm or more PCBs unless the person generating the used oil can document, by testing or process knowledge, that the oil contains no detectable PCBs. [40 CFR 761.20(e)(2)]

Used oil that contains less than 2 ppm PCBs that is to be burned for energy recovery is regulated under 40 CFR Part 279. Used oil containing between 2 ppm and less than 50 ppm of PCBs burned for energy recovery is subject to the following regulations:

- the used oil management standards; and
- 40 CFR 761.20(e)—federal regulations implementing the Toxic Substances Control Act; includes requirements on marketing, burning, testing, and record keeping.

Used oil with 50 ppm PCBs or more are regulated under TSCA. Disposal of used oil with 50 ppm PCBs or more must comply with TSCA regulations. (40 CFR section 761.79) Decontaminate all tanks, equipment, and vehicles in accordance with the TSCA regulations. Used oil with 50 ppm PCBs or more from an industrial facility is a Class 1 waste and may require a solid waste registration and reporting. [30 TAC 335.508(5)] If you think your used oil has been contaminated by ≥50 ppm PCBs, you must notify the Region 6 EPA PCB Coordinator. TCEQ does not have authorization for the TSCA program.

Find a Used Oil Collection Center or Recycler

To search for a collection center or recycler who serves your area:

- Visit the TCEQ Central Registry Query:
- In the search fields, enter the following and then click the “Search” button:
  - Program: Used Oil;
  - ID Status: Active; and
  - City: your city.
- Click on the linked RN Number in the left column.
- At the bottom of the page is a list of permits and registrations the location has with TCEQ.
- Click on the linked ID number next to the “Used Oil” Program. Used oil collection centers have a registration number that starts with “C” and used oil handlers have a registration number that starts with “A.”
- Click on “Registration Information” on the next page to show the used oil activities for that registered entity.
- Contact the facility to make sure they will accept the used oil you want them handle.

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19 https://www.epa.gov/pcbs/epa-regional-polychlorinated-biphenyl-pcb-programs
20 https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch
Find Someone To Purchase Your Used Oil

To search for someone who might purchase your used oil, go to the Renew Resource Exchange:\(^{21}\):

- Look for oil under “materials wanted” to see if there is a need for used oil in your area; or
- Create a posting for “materials available.”

Contact Us

For questions about registration and reporting, contact the Industrial and Hazardous Waste/Municipal Solid Waste Registration and Reporting Team at 512-239-6413 or wasteval@tceq.texas.gov.

For questions regarding waste classification, contact the Technical Analysis Group in the Waste Permits Division at 512-239-2335 or ihwper@tceq.texas.gov.

\(^{21}\) http://renewtx.net/