

2023 Hazardous Waste Generator Training

Standards for Used Oil Generators

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Utah's Used Oil Recycling Program



WASTE MANAGEMENT
& RADIATION CONTROL



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TOPICS WE WILL COVER

- 1 Identifying materials subject to the Rules as used oil
- 2 Used oil specifications
- 3 Prohibitions and disposal
- 4 Disposal of used oil filters
- 5 Used oil generators
- 6 Mixtures of used oil and HW
- 7 Used oil storage
- 8 Response to releases
- 9 On-site burning
- 10 Off-site shipments



IDENTIFYING USED OIL

1

...Any oil, refined from crude oil or synthetic oil, that has been used and as a result of that use is contaminated by physical or chemical impurities.



IDENTIFYING USED OIL

1

- Engine oil
- Transmission fluid
- Compressor oils
- Metalworking oils
- Hydraulic oil
- Brake fluid
- Oils used as buoyant
- Lubricating greases
- Electrical insulating and dielectric oils

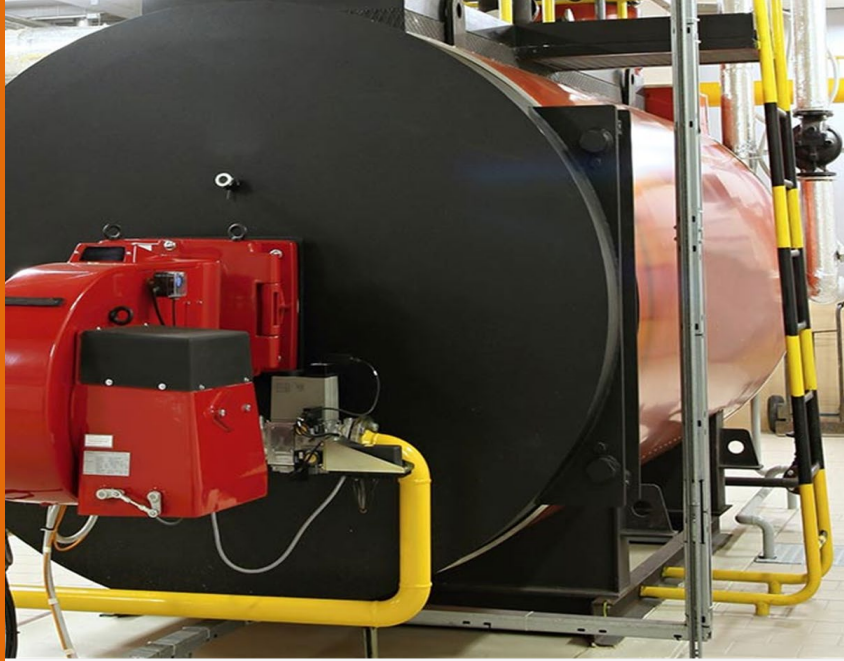


IDENTIFYING USED OIL

1

- Waste oil *
- Vegetable oil
- Animal fat
- Petroleum distillates (solvents)
- Antifreeze
- Kerosene

* Oil that has not been used but is found to be unsuitable for its originally intended purpose. Including bottom clean-out waste from virgin fuel storage tanks, virgin fuel oil spill cleanups, or other oil wastes that have not actually been used. And products such as antifreeze, kerosene, vegetable oil, animal oil, petroleum distillates used as solvents.



USED OIL SPECIFICATIONS

2

Subject to the Rules until:

- Has been demonstrated not to exceed any allowable levels for certain constituents and properties
- The person making that claim complies with the Standards for used oil fuel marketers; and
- The used oil is delivered to a used oil burner.



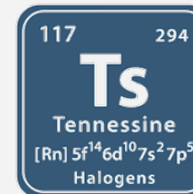
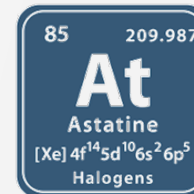
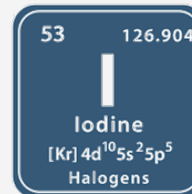
USED OIL SPECIFICATIONS

2



Constituents and properties

- Arsenic 5 ppm maximum
- Cadmium 2 ppm maximum
- Chromium 10 ppm maximum
- Lead 100 ppm maximum
- Flash point 100 degrees F minimum
- Total halogens 4,000 ppm maximum





USED OIL SPECIFICATIONS

2

PCB >50 ppm

- Subject to TSCA regulations in 40 CFR 761.

PCB \geq 2 ppm but <50 ppm

- Subject to both R315-15 and 40 CFR 761.

Testing for total PCBs

- Shall include at least Aroclors 1016, 1221, 1232, 1242, 1248, 1254, 1260 (Other Aroclors if known to be present)

Note: There are 209 individual congeners or 10 homologue groups.





USED OIL SPECIFICATIONS

2

Shall be performed by

- A laboratory that holds a current Utah Certification for environmental laboratories issued by the Utah Department of Health.
- Certified for the method(s) and analyte(s) applied to generate the environmental data.



PROHIBITIONS AND DISPOSAL

3

Placed, discarded, or otherwise disposed of:

- Surface impoundment and waste piles, unless the units are subject to regulation under R315-264 or R315-265.
- Use as a dust suppressant, weed suppressant, or for road oiling or other similar use.
- Any disposal of used oil on the ground is prohibited under Utah Code Annotated 19-6-706(1)(a)(iii).



PROHIBITIONS AND DISPOSAL

3

Mix or commingle with the following substances:

- Solid waste that is to be disposed of in any SW TSDF, except as authorized by the Director; or
- Any HW so the resulting mixture may not be recycled or used for other beneficial purpose as authorized under R315-15.



PROHIBITIONS AND DISPOSAL

3

Disposed in:

- A SW TSDF, except for the disposal of hazardous used oil as authorized under R315-261.
- Sewers, drainage systems, septic tanks, surface or ground waters, watercourses, or any body of water.



PROHIBITIONS AND DISPOSAL

3

Does not apply to:

- Release of de minimis quantities of used oil to land or water as identified under Utah Code Annotated 19-6-706(4)(a) except for the requirements of 19-6-706(4)(a)(i) and (ii).

May dispose of item or substance in disposal facilities if:

- All oil has been reasonably removed from the item or substance; and
- No free-flowing oil remains in the item or substance.



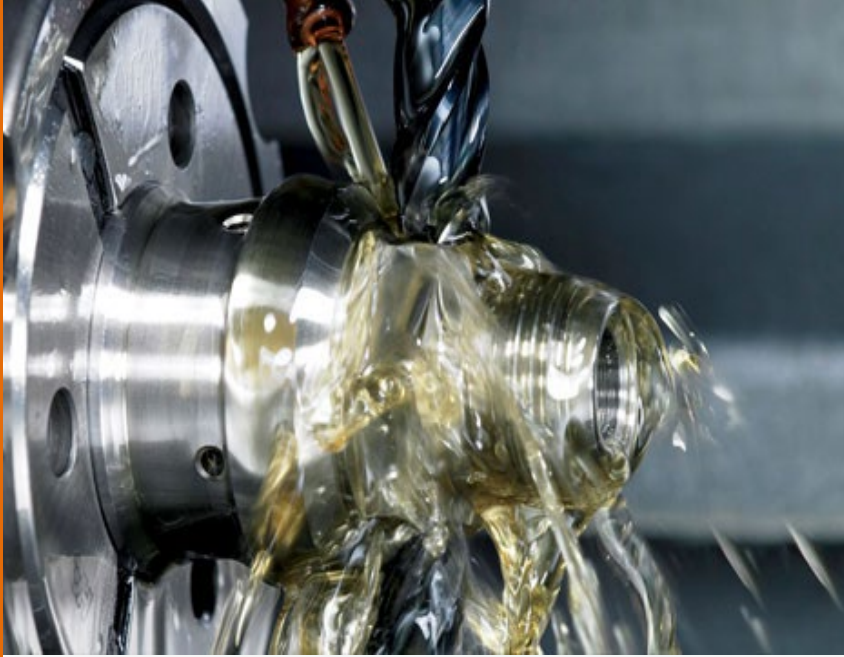
DISPOSAL OF USED OIL FILTERS

4

Dispose of as non-hazardous solid waste, if:

- Not mixed with hazardous waste.
- Punctured (filter anti-drain back valve or the filter dome end) and gravity hot-drained;
- Gravity hot-drained and crushed;
- Dismantled and gravity hot-drained; or
- Any other equivalent gravity hot-draining method authorized by the Director.

Gravity hot-drained = drained for not less than 12 hours near operating temperature but above 60 °F.



USED OIL GENERATORS

5

A used oil generator is

...Any person, by site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation.



USED OIL GENERATORS

5

DIYers

- Not subject to regulation under R315-15, except for the prohibitions (R315-15-1.3) and cleanup requirements (R315-15-9).

Vessels at sea or at port

- Not subject to the used oil generator requirements until transported ashore.



USED OIL GENERATORS

5

Other applicable provisions for generators who:

- Transport ► comply with R315-15-4
- Process or re-refine ► comply with R315-15-5
- Burn off-specification ► comply with R315-15-6
- Direct shipments or first certify ► comply with R315-15-7
- Dispose ► comply with R315-15-8



MIXTURES OF USED OIL AND HW

6

Mixtures of used oil and diesel fuel

- Not subject to R315-15 once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil fuel is subject to the requirements of R315-15-2.

Farmers (generate ≤ 25 gal/month average/calendar year)

- Not subject to the requirements of R315-15, except for the prohibitions (R315-15-1.3) and cleanup requirements (R315-15-9).



MIXTURES OF USED OIL AND HW

6

Mixtures of used oil and HW (listed)

- Certain mixtures of used oil and HW are subject to HW regulations under R315-261.

Rebuttable presumption

- Used oil containing $>1,000$ ppm total halogens is presumed to be a HW.
- Unless a person can demonstrate that the used oil does not contain hazardous waste (Analytical method from SW-846, Edition III, Update IV).



MIXTURES OF USED OIL AND HW

6

Metalworking oils/fluids

- Does not apply to metalworking oils/fluids containing chlorinated paraffins processed through a tolling arrangement, to reclaim metalworking oils/fluids.
- Does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner or disposed of.



MIXTURES OF USED OIL AND HW

6

Used oil contaminated w/Chlorofluorocarbons

- Does not apply to used oils contaminated with CFCs removed from refrigeration units where the CFCs are destined for reclamation.
- Does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.



MIXTURES OF USED OIL AND HW

6

Solely exhibits or is listed because ≥ 1 of the HW characteristics

- Subject to HW regulations if the resultant mixture exhibits any characteristics of HW
- Subject to used oil regulations if the resultant mixture does not exhibit any characteristics of HW
- For ignitability, subject to used oil regulations if the resultant mixture does not exhibit any characteristics of ignitability



MIXTURES OF USED OIL AND HW

6

VSQG of hazardous waste

- Mixtures of used oil and very small quantity generator hazardous waste regulated under Section R315-262-14 are subject to regulation as used oil under R315-15.



MIXTURES OF USED OIL AND HW

6

Not subject to used oil regulations

- If the used oil has been properly drained or removed to the extent possible (no visible signs of free-flowing oil remain).
- If applicable, are subject to the hazardous waste regulations.

Subject to used oil regulations

- If burned for energy recovery.
- If drained or removed from materials containing or otherwise contaminated with used oil.



MIXTURES OF USED OIL AND HW

6

Subject to used oil regulations

- Mixtures of used oil and fuels or other fuel products.

Not subject to used oil regulations

- Mixtures of used oil and diesel fuel mixed on site by the generator for use in the generator's own vehicles, after the used oil and diesel fuel have been mixed.



MIXTURES OF USED OIL AND HW

6



Not subject to used oil or HW regulations

- Reclaimed from used oil (used beneficially, not burned or for disposal) are not used oil (e.g., re-refined lubricants) and are not solid wastes.

Subject to used oil regulations

- Produced from used oil that are burned for energy recovery (e.g., used oil fuels).



MIXTURES OF USED OIL AND HW

6

Not subject to used oil, may be to HW regulations

- Materials derived from used oil that are disposed of or used in a manner constituting disposal and are solid wastes.

Not subject to used oil regulations

- Re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.



MIXTURES OF USED OIL AND HW

6

Not subject to used oil regulations

- If contaminated with de minimis quantities of used oil (subject to the Clean Water Act), including wastewaters at facilities that have eliminated the discharge of wastewater.

Subject to used oil regulations

- If the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases, or to used oil recovered from wastewaters.



MIXTURES OF USED OIL AND HW

6

Exempt from R315-15

- Used oil mixed with crude oil or natural gas liquids (e.g., in a production separator or crude oil stock tank) for insertion into a crude oil pipeline.
- Stored or transported (if less than 1%)
- Inserted into refining process (if less than 1% or meets on-specification).
- Incidentally capture in routine process operations and inserted into process.
- Tank bottoms from stock tanks containing exempt mixtures



MIXTURES OF USED OIL AND HW

6

Subject to the requirements of R315-15

- Prior to the mixing of used oil with crude oil or natural gas liquids.
- Prior to insertion into the petroleum refining facility process.
- Used oil that is intentionally introduced into a hydrocarbon recovery system (e.g., by pouring collected used oil into the wastewater treatment system).



USED OIL STORAGE

7

Subject to...

- All applicable Spill Prevention, Control and Countermeasures (40 CFR 112) in addition to the generator requirements.
- The standards and requirements of USTs, for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of HW.



USED OIL STORAGE

7

In addition...

- Shall not store used oil in units other than tanks, containers, or units subject to regulation under R315-264 and R315-265.
- Containers and aboveground tanks used to store used oil at generator facilities shall be:
 - In good condition, with no severe rusting, apparent structural defects or deterioration; and
 - Not leaking.
 - Closed during storage except when adding or removing used oil.
 - Labeled or marked clearly with the words "Used Oil."



USED OIL STORAGE

7

Must be...

- Managed to prevent releases of used oil to the environment.



RESPONSE TO RELEASES

8

Upon detection of a release and cleanup

- Shall comply with emergency controls section (R315-15-9)

To minimize the threat to human health and the environment

- Stop and contain release
- Clean up and manage released material
- Repair/replace used oil tanks, containers, ancillary equipment (if needed)



RESPONSE TO RELEASES

8

Immediate action

- Notify the Utah State Department of Environmental Quality
 - 24-hour Answering Service (801) 536-4123
 - Releases >25 gallons
 - Smaller releases posing potential threat to human health or environment



RESPONSE TO RELEASES

8

Release cleanup

- Clean up (may required to US EPA Regional Screening Level standards)
- Released material, residue, or contaminated soil, water or other material
- Until no longer a hazard to human health or environment
- At the expense of responsible person



RESPONSE TO RELEASES

8

Reporting to the Director

- Submit written report within 15 days after any reportable release of used oil with the information outlined in the Reporting requirement of R315-15-9.4(a) through (f).



ON-SITE BURNING

9

In general

- Comply with used oil fuel burners (R315-15-6), and
- Obtain air quality permit (if applicable)

Burning used oil without a permit:

- Only generated by the owner or operator
- ≤ 0.5 million BTU/hour
- Vented to the outside ambient air
- Not mixed with HW
- Burned to utilize its energy content



OFF-SITE SHIPMENTS

10

Self-transport ≤ 55 gallons

- Vehicle owned by generator
- To approved collection center
- To aggregation point owned by generator

Tolling arrangements

- If the used oil is reclaimed under a contractual agreement under which reclaimed oil is returned by the processor/re-refiner to the generator for use as a lubricant, cutting oil, or coolant.



OFF-SITE SHIPMENTS

10

Transported by permitted used oil transporter

- Except as provided in R315-15-2.5(a) through (c), a generator shall ensure that its used oil is transported only by a transporter who has obtained:
 - A Utah used oil transporter permit
 - A current used oil handler certificate issued by the Director
 - And an EPA identification number

Questions?



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Thank You



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