

Used Oil Regulations Overview

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Do I Need to Know All of This?

Used Oil regulations...

apply to all businesses, including municipalities, hospitals, & service industries, not just manufacturing industries

are written broadly to address hazards posed by all waste streams

Do I Need to Know All of This?

Used Oil regulations...

are written to limit the mixing of hazardous waste with used oil for sham disposal

require that used oil be recycled where feasible

Why Cover These Topics?

Used Oil regulations require businesses to...

properly label all containers

properly store all these materials to prevent escape to the environment

Why Cover These Topics?

Proper management and storage
will...

- ✓ prevent release to the environment
- ✓ prevent costly clean up expenses

Used Oil Regulations

Waste regulations governing proper characterization, accumulation, and recycling of used oil are found in Act 451, Michigan Natural Resources & Environmental Protection Act (NREPA):

- ✓ Part 167, Used Oil
- ✓ Part 111, Hazardous Waste
- ✓ Part 121, Liquid Industrial By-Product
- ✓ Part 115, Solid Waste

Used Oil Regulations

Used oil is subject to waste regulation under Parts 111, 121, and 167 of the Michigan Natural Resource and Environmental Protection Act

Part 111 and 121 establish hazardous waste and liquid industrial by-product management standards for the used oil

Part 167 requires that the used oil be recycled

Used Oil Defined

Under Part 111, used oil is “any oil which has been refined from crude oil, or any synthetic oil, which has been used and as a result of use, is contaminated with physical or chemical impurities” and includes:

- Used motor oil
- Used hydraulic oil
- Used transmission fluid
- Used brake fluid
- All synthetic oil
- Spent quench oil
- Spent gear oil
- Oil-water mixtures
- Non-PCB transformer oil

Used Oil Defined

Used oil that solely exhibits one or more of the hazardous waste characteristics of Rule 212 can still be managed as a used oil when recycled

For example used oil can exceed the TCLP limits in Table 201a of Part 111 if recycled and marketed as specification fuel

Used Oil Defined

Under Part 111, used oil does NOT include petroleum based products that were not designed to function as lubricating agents or other protective applications

Under Part 111, used oil does NOT include:

- Fuels (Gasoline, Diesel, Fuel Oils)
- PCB oils (subject to TSCA)
- Mineral spirits
- Certain test/calibration fluids
- Animal fat or vegetable based oil

Used Oil Common Tests

Total Halogens - Used for testing used oils for chlorine, fluorine, bromine, etc. to determine if a “presumed” hazardous waste

Used oil test method for halogens using SW-846 or equipment like “Chlor-D-Tect”

Used Oil Characterization

The hazardous waste rules applied to used oil containing > 1000 PPM total halogens

Used oil with > 1000 PPM total halogens is a presumed listed hazardous waste unless sufficient characterization data can be presented to “rebut the presumption” that the halogens are present from mixing used oil with a listed hazardous waste halogenated solvents)

Used Oil Characterization

“Rebutting the presumption” is complicated for transporters & processors accepting used oil from multiple sources and most will not accept used oil > 1000 PPM total halogens

Total halogens are usually tested using test method SW 846 or using on-site screening equipment like “Chlor-D-Tect”

Used Oil Characterization

If used oil contains > 1000 PPM total halogens, it is presumed to have been mixed with listed halogenated hazardous waste unless rebutted

Generators can also use knowledge of the used oil to characterize, if feasible, but adequate documentation is required

Used Oil Characterization

Transporter usually screens the used oil prior to pick-up to verify LIB regulatory status

Generators should request and maintain copies of results test on file

Used Oil Characterization

If > 1000 PPM total halogens present, additional, costly testing is required to “rebut” whether used oil was mixed with hazardous waste:

- Analyze for all halogenated Appendix VIII constituent
- If > 100 PPM used oil fails and must be managed as a hazardous waste

Used Oil Characterization

CONCLUSION: Do not mix used oil with other wastes to facilitate required recycling and avoid being required to manage the mixture as a hazardous waste

Used Oil Characterization

Rebuttable Presumption

EPA/DEQ has discretion in determining what concentration is a “significant concentration” prompting rebuttal

RCRA does not contain regulatory threshold for each halogenated hazardous constituent

Generally look for concentrations less than 100 ppm for common hazardous halogenated constituents per FR preamble

Used Oil Characterization

Chlorinated Paraffins:

Typically have a total organic halogen content of 4,000 ppm or more but can be recycled through a tolling agreement per Part 111, Rule 203(1)(e)(i)

Not as valuable as non-chlorinated used oil!

Required Waste Records

Required records include:

- ✓ Used Oil Characterization
- ✓ Shipping Documents

Both documents of proper handling and recycling and are required for at least 3 years from the date of last shipment

Shipping Documents

The image shows a sample of a Uniform Hazardous Waste Manifest form (EPA Form 870-22). The form is titled "UNIFORM HAZARDOUS WASTE MANIFEST" and includes fields for "Generator's Name and Mailing Address", "Generator's Site Address", "Shipper's Name and Mailing Address", "Shipper's Site Address", "Receiver's Name and Mailing Address", "Receiver's Site Address", "Description of Waste", "Quantity", "Hazardous Waste Code", "Manifest Number", and "Date". A large red 'X' is drawn over the form, indicating that this type of manifest is no longer required for shipments of used oil.

Uniform Hazardous Waste Manifests are no longer required for shipments of used oil

Shipping documents can be in written or electronic form

Shipping Documents

May be a log, invoice, bill of lading, or uniform hazardous waste manifest

Must be readable, readily accessible, and have required information

May be written or electronic

Individual Shipping Document

Required information:

- Name and address of the generator
- Name of the transporter
- Type and volume of by-product in the shipment
- Date the by-product was shipped off-site
- Name, address and Site ID number of the designated facility

Individual Shipping Document Certification

Generator or generator representative signs/certifies shipping document stating:

- the shipping document fully and accurately describes the shipment
- the shipment is in proper condition for transport
- the shipping document information is factual

Individual Shipping Document Certification

Transporter signs/certifies shipping document stating by-product listed on shipping document:

- was received
- will be delivered to the designated facility identified on the shipping document

Individual Shipping Document

Distribution

Generator retains copy of shipping documents with generator and transporter signature

Transporter obtains copy of shipping document with both signatures which accompanies the shipment during transport

Individual Shipping Document

Certification and Distribution

Designated facility must:

- provide confirmation of receipt to the generator or generator representative and
- only accept delivery where accompanied by shipping document listing the designated facility

Individual Shipping Document

Certification and Distribution

Designated facility – No certification or shipping document distribution is required

Designated facility confirmation may be written or electronic (documented phone call, email, receipt, shipping document or manifest copy)

Consolidated Shipping Document

For consolidated shipping document, transporter completes shipping document requirements and must leave generator receipt at pickup that includes:

- Transporter's name
- Driver's signature
- Date of pickup
- Type and quantity of by-product (used oil) shipped
- Consolidated shipping document number
- Receiving designated facility name

Management and Recycling

Used oil managed by the generator, transporter or recycler must. . .

- be managed in tanks or containers that are in good condition with no visible signs of leaks
- Be labeled “Used Oil” if stored in a container or above ground storage tank
- Have fill pipes used to transfer used oil labeled “Used Oil”

Management and Recycling

Used oil managed by the generator, transporter or recycler must. . .

- be protected from weather, fire, physical damage and vandals
- Be in closed containers that are only opened to add or remove used oil

Closed Container Used Oil

Containers in storage:

- Cover secured with snap rings bolted
- Bungcaps capped

Containers in use:

- Lids properly affixed to prevent spills
- Funnels with manual or spring-loaded lids or tightly screwed into bung cap with a one-way valve

Closed Container Used Oil

Non-pressurized
mobile oil drain pans,
at a minimum, must
be emptied when not
in use to be
considered closed!



Management and Recycling

Used Oil managed by the generator, transporter or designated facility shall be managed such that:

- Exterior of all vehicles, containers and tanks used to hold used oil are free of use oil residues
- Used oil may not be discharged to soil, surface water, ground water, a drain, sewer, or the air

Used Oil Transport

Generators can self transport if insured and have required MCS-90 form verifying coverage for spills

Generators can only offer used oil for transport to Act 138 permitted and registered transporters

See transporter web page to find authorized transporters at www.michigan.gov/deqwaste

Common Storage Violations of Used Oil



Used Oil Storage Options



Used Oil Recyclers/Marketers

Specification Used Oil Criteria

Specification Used Oil:

Heating Value	17,000 BTU/lb.
PCB	<2.0 ppm
Arsenic	< 5.0 ppm
Cadmium	<2.0 ppm
Chromium	<10 ppm
Lead	<100 ppm
Sulfur	< 1.0 %, Typical
Total Halogens	<1,000 ppm

Used Oil Compliance Tools

- Common Violations C
- Used Oil Overview
- Generator Used Moto
- Generator Other Used
- Used Oil Filter Genera
- Requirements
- Used Oil Sorbents
- Burning Used Oil
- Oil Water Separators
- Mobile Oil Change Bu
- Used Oil Collection Ce

EMERGENCY INFORMATION	
Emergency	Name _____
Coordinator	Phone _____
Alternate	Name _____
	Phone _____
Fire Dept.	Phone _____
Hospital	Phone _____
Police	Phone _____
Fire alarm is located: _____	

Spill control equipment is located: _____	

Fire extinguishers are located: _____	

National Response Center 800-424-8802	
Michigan Pollution Emergency 800-292-4706	

Map of facility with emergency equipment, spill equipment, exit routes, and alarm locations.



USED OIL



USED OIL FILTERS ONLY - NO TRASH!

Available at www.deq.state.mi.us/pubcenter/

Other Used Oil Regulations

Environmental Regulations – See Chapter 4:

- **Spill Prevention, Control, and Countermeasures**
- **Pollution Incident Prevention Planning**
- **LARA, Bureau of Fire Services, Combustible Liquid Storage**

MIOSHA Regulations, Chapter 34 covers Flammable and Combustible Liquids Regulations

Need Help or Resources?

- Go to www.michigan.gov/deqwaste
- Contact the DEQ EAC at 1-800-662-9278
- Go to www.epa.gov/wastes/hazard/downloads/tool.pdf
- Contact DEQ district waste inspection staff
- Contact hazardous waste vendors
- Contact waste consultants

Waste Regulations 101

Thank you!

If you have any specific questions, please feel free to contact me.

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THANK YOU FOR PROTECTING
MICHIGAN'S ENVIRONMENT!