

Chapter 9



Used Oil

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Used Oil Characterization

To characterize used oil, follow the waste characterization steps found in Section 2 of the [Waste Characterization Reference Book](#). You must also perform the following additional steps when evaluating used oil.

In Michigan, Rule 809 of the [Part 111 rules](#) (R 299.9809) defines what is, and is not, subject to regulation as a used oil and liquid industrial waste versus regulation as a hazardous waste. Additionally, Section 12102a(b) of [Part 121](#) specifies when reclaimed used oil can be managed as fuel and is no longer subject to regulation as a waste. To verify the regulatory status of used oil and to meet the requirements of Rule 202(5) of the Part 111 rules, used oil handlers must maintain sufficient documentation to demonstrate the regulatory status of their used oil.

In Michigan, used oil cannot be mixed with halogenated listed hazardous waste, regardless of the generator regulatory status (conditionally exempt small quantity generator [CESQG], small quantity generator or large quantity generator) and retain regulatory status as a used oil.¹

Moreover, used oil that exceeds 1000 parts per million (ppm) total halogen content is presumed to have been mixed with halogenated hazardous waste and is subject to hazardous waste regulation. The used oil generator can successfully rebut this presumption by demonstrating the following utilizing knowledge of the total halogen content of the used oil backed by documentation and/or analytical test data, as appropriate:

1. that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in [40 C.F.R. part 261, Appendix VIII](#);
2. that the used oil is a metalworking oil containing chlorinated paraffins and the used oil is processed through a tolling agreement per 40 C.F.R. §279.24(c). If the used oil containing chlorinated paraffins is reclaimed/recycled in any other manner, the generator must still rebut the presumption that the used oil was mixed with listed halogenated hazardous waste.
3. that the used oil is contaminated with chlorofluorocarbons removed from refrigeration units, the used oil is not mixed with other non-refrigeration used oil, and the chlorofluorocarbons in the oil are reclaimed.

[Rebutting the presumption](#) is generally requires costly laboratory testing. To maintain the value of used oil and ensure it is easily recycled as required under [Part 167](#), be sure to manage your used oil separate from other waste streams. If the used oil is determined to be subject to regulation as used oil (e.g. it is not a presumed or known hazardous waste), it is also subject to regulation as a liquid industrial waste. Consequently, the used oil must be managed to meet both the used oil regulations found in Part 8 of the Part 111 Rules and the liquid industrial waste regulations found in Part 121.

Before evaluating whether used oil can be recycled and reused as a fuel product, the level of polychlorinated biphenyl (PCB) in the oil must be determined. Per Rule 809(1)(f) and the Toxic Substance Control Act, PCB levels in the oil cannot exceed 2 ppm. Moreover, most air use permits limit the PCB level to 1 ppm. Both levels are intended to represent the method detection level for PCBs when testing oil. Thus, these limits represent a practical way to prohibit PCBs in oil that is intended to be burned as fuel.

To market used oil as a product that is not subject to waste regulation, the generator or designated facility managing the used oil must meet the used oil marketer requirements found in Rule 815 of the Part 111 rules and the relevant Part 121 requirements that apply. The used oil marketer must demonstrate the used oil is a “material not specified as a liquid industrial waste” pursuant to [Section 12102a](#)(b) of Part 121 and meets the following “specification used oil” (also called on-specification used oil or on-spec used oil) criteria:

- A maximum arsenic concentration of 5 ppm
- A maximum cadmium concentration of 2 ppm
- A maximum chromium concentration of 10 ppm
- A maximum lead concentration of 100 ppm

¹ Under the federal Resource Conservation and Recovery Act (RCRA) listed halogenated hazardous waste generated by a CESQG can be mixed with used oil and the mixture retains its regulatory status as used oil provided the resulting mixture does not exceed 1000 parts ppm total halogen content.

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- A maximum total halogen concentration of 4,000 ppm
- A minimum flash point of 100 degrees Fahrenheit
- A minimum energy content of 17,000 BTU/hr

If the oil meets all of the above limits, but exceeds the 1,000 ppm total halogens, the used oil marketer must successfully rebut the presumption that the oil contains listed halogenated hazardous waste. Any successfully rebutted oil exceeding 4,000 ppm halogens and otherwise meeting the above contaminant levels, BTU values and exhibiting no detectable PCBs can be managed as “off-specification used oil” that can be burned as fuel but remains subject to all of the used oil requirements of Part 111 and the liquid industrial requirements of Part 121. Therefore, off-specification used oil, when transported, must be documented as specified by Part 121 and transported by an [Act 138](#) permitted and registered liquid industrial waste transporter.