

Troublesome Waste Stream: Oily Water

Tyler Croteau

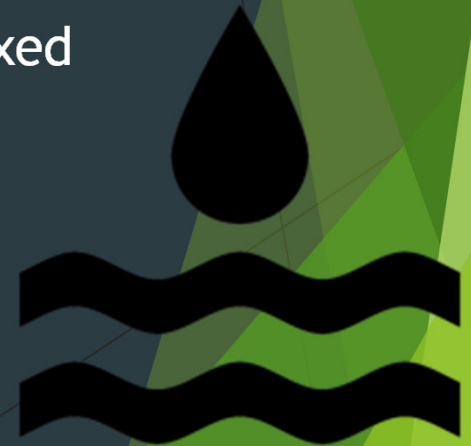
New Hampshire Department of Environmental Services

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Overview

- ▶ Used oil is a listed hazardous waste in New Hampshire (NH01)
- ▶ May be managed under less stringent requirements if recycled (Used Oil for Recycle Rules)
- ▶ Used automotive oil usually straight forward unless mixed
- ▶ Troublesome used oil waste streams include:
 - ▶ Machining Coolant
 - ▶ Oily Mop Water
 - ▶ Heat Transfer Fluids (non-contact)



Defining Used Oil

- ▶ Env-Hw 104.76 - Refined from crude oil and any synthetic oil
- ▶ By policy, must have been used as:
 - ▶ Lubricant
 - ▶ Coolant (non-contact heat transfer fluid)
 - ▶ Emulsion
 - ▶ Some similar use (e.g., hydraulic fluid)
- ▶ Definition does not include % oil or BTU value

Issue #1

- ▶ Should we apply the NH01 waste code to oily waters with less than 5% oil?
- ▶ Env-Hw 401.03(b)(17) - Exemption for waters separated from used oil by gravity separation or other physical or chemical means, unless the waters contain greater than 5% oil
- ▶ NH has allowed oily water <5% oil to either be managed as used oil for recycle or it is subject to a hazardous waste determination, but NH01 would not apply



Defining Used Oil For Recycle

- ▶ Must meet specification or off-specification standards for:
 - ▶ As, Cd, Cr, Pb
 - ▶ Total Halogens
 - ▶ Flashpoint
 - ▶ PCBs
- ▶ Can't exhibit any other characteristic (e.g., Ba, Se)
- ▶ Must be burned for energy recovery or re-refined

Issue #2

- ▶ Do we require TCLP for all oily water waste streams?
- ▶ NH requires an initial used oil determination to see if used oil meets specification or off-specification standards
- ▶ If an oily waste stream fails TCLP for a metal other than As, Cd, Cr, Pb, it must be managed as hazardous waste under more stringent standards than used oil for recycle, even if it goes for recycling
- ▶ NH accepts the used oil determination results as sufficient, but can't ignore TCLP results if the generator performs that test as well



Treatment

- ▶ Oily water waste streams such as coolants and mop water are often treated on-site
 - ▶ Evaporator
 - ▶ Filtration
- ▶ Treatment of hazardous waste or treatment that generates hazardous waste requires a Limited Permit from NHDES

Issue #3

- ▶ As used oil is a listed hazardous waste, does treatment of used oil require a Limited Permit?
 - ▶ If the used oil is managed as used oil for recycle, we have not required a permit for treatment
- ▶ Can oily water <5% oil (exempt) be concentrated in an evaporator to >5% and become NH01 hazardous waste?
 - ▶ Yes, but it can then be managed as used oil for recycle if it meets specification or off-specification standards



Moving Forward

- ▶ New Hampshire hopes to clarify some of these issues in upcoming rulemaking
- ▶ Need to critically evaluate NH's current rules against 40 CFR Part 279
- ▶ Used oil will remain a listed hazardous waste in New Hampshire



Contact

- ▶ Tyler Croteau, Used Oil Program Manager
Hazardous Waste Management Bureau
NHDES, Waste Management Division
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095
- ▶ Email: tyler.Croteau@des.nh.gov
- ▶ Phone: (603) 271-6424

