# Notes NEWMOA Hazardous Waste Conference Call December 17, 2013

Topic: Issues & Regulations – State Definitions of Used Oil & What They Include – Oily, Water Coolants & Machining Fluids

### Disclaimer

NEWMOA organizes regular conference calls or webinars so its members, EPA Headquarters, and EPA Regions 1 and 2 can share information and discuss issues associated with the implementation of the Resource Conservation and Recovery Act (RCRA), compliance assistance, enforcement, and other topics. Members of the group prepare draft notes of the calls for use by those members that were unable to participate and for future reference by the participants. These notes are intended to capture general information and comments provided by the participants and are not a transcript of the call. NEWMOA provides the participants on the calls with an opportunity to review drafts of the notes prior to posting them on the members' only area of the hazardous waste page on the NEWMOA website. NEWMOA staff makes all recommended corrections to the notes prior to posting.

Any comments expressed by participants should not be considered legal opinions or official EPA or State positions on a particular rule, site-specific matter, or any other matters. Participants' comments do not constitute official agency decisions and are not binding on EPA or the States. For exact interpretations of a State's or EPA's RCRA regulations, rules, and policies, NEWMOA recommends that readers of these notes contact the appropriate hazardous waste program in the State's environmental agency or EPA Headquarters or EPA Regional RCRA staff.

# **Participants**

Participants: CT DEEP (11 people); ME DEP (4 people); Mass DEP (5 people); NH DES (8 people); NJ DEP (4 person); NYS DEC (13 people); VT DEC (2); NEWMOA (1 person)

### **Background**

New Hampshire was the lead state on the call. NH DES has been having some issues classifying waste coolants and machining fluids (*i.e.*, oil/water emulsions) generated from metal cutting processes. Specifically, they wanted to know how other states classify these wastes (*e.g.*, used oil, solid waste, or state listed hazardous waste).

New Hampshire posed the following questions for the group to answer:

- 1. Does your state consider waste coolants and machining fluids (*i.e.*, oil/water emulsion) to be "used oil"?
- 2. If yes, is it still considered "used oil" if there is not any recoverable oil?
- 3. Do you have a minimum concentration of recoverable oil that the waste would have to have in order to be considered used oil?
- 4. Do you follow the federal Part 279 Used Oil regulations, or do you have state specific used oil regulations?
- 5. Do you have any State only waste codes for used oil?

- 6. In your state does used oil that cannot be recycled count towards a Generator's classification status?
- 7. Does your state have an exemption for waters separated from used oil?
- 8. If yes, is there a maximum concentration of used oil?
- 9. Do you have any fact sheets, rules, or guidance that you can share on this topic?

They also asked the group to address the following scenarios:

Example A – An emulsified blend of 2 percent petroleum/synthetic based oil and 98 percent water

- 1. Would you classify this waste as used oil?
- 2. Would you allow this waste to be classified as used oil for recycle even if the Generator was only recovering/recycling petroleum based tramp oils (way/lube oils from the machines that have gotten into the coolants/machining fluids) and not breaking any emulsions from the coolant mixture (*i.e.*, the emulsified oil is not recycled but the tramp oil is recycled)?
- 3. Would you require this waste to be subject to a hazardous waste determination and not allow it to be classified as used oil for recycle?
- 4. Would you allow the option of the waste to be handled as used oil or a waste subject to a hazardous waste determination, depending on what works best for the generator?

Example B – An emulsified blend of 2 percent veggie oil and 98 percent water, that has a layer of petroleum-based tramp oil (way/lube oils from the machines that have gotten into the coolants/machining fluids).

- 1. Would you allow this waste to be classified as used oil for recycle if the tramp oil can be recovered/recycled as used oil even though the waste is mostly a veggie oil/water blend?
- 2. Would you require this waste to be subject to a hazardous waste determination and not allow it to be classified as used oil for recycle?
- 3. Would you allow the option of the waste to be handled as used oil or a waste subject to a hazardous waste determination, depending on what works best for the generator?

During the beginning of the call, the group added an additional question asking about whether or not any state has TCLP testing data available for metals in used or waste oils.

The responses and comments from the states are summarized below. The responses first nine questions are also summarized in a Table at the end of the notes:

### Connecticut

- 1. Considers waste coolants and machining fluids used oil if the oil is recoverable
- 2. Would not be considered used oil if the oil is not recoverable
- 3. No minimum concentration of recoverable oil
- 4. Follow 40 CFR Part 279 Used Oil regulations, but also have state specific regulations; modified the state regulations in 2001 to adopt 40 CFR 279 and added more stringent requirements including an expanded definition of use oil that includes non-virgin excess oil (managed same as used oil) and require generators to have secondary containment; allow generators to use knowledge of the process instead of testing, but must be documented; if

- halogens are >1,000 ppm, may test for F001 and F002 constituents to rebut the presumption of mixing (written into the state regs).
- 5. Has State only non-hazardous waste codes for used oil: CR02 & CR03
- 6. If used oil cannot be recycled, must do hazardous waste determination and manage depending on the results; if hazardous, it would count towards a Generator's classification status
- 7. Water separated from oil needs to be evaluated as a potential used oil in its own right (if it still has recoverable oil, it would still be a used oil)
- 8. No maximum concentration of used oil
- 9. Fact sheets, policy letters, and memos available

# Example A

- 1. Assuming the oil is going to be processed at a facility that can recover the oil, the material would be classified as used oil
- 2. Would allow this waste to be classified as used oil even if the Generator was only recovering/recycling petroleum-based tramp oils
- 3. Would not require waste to be subject to waste determination
- 4. Would allow the option of the waste to be handled as used oil or a waste subject to a hazardous waste determination, depending on what works best for the generator

# Example B

- 1. Material could be classified as used oil for recycling if the tramp oil can be recovered/recycled as used oil even though the waste is mostly a veggie oil/water blend
- 2. Would require this waste to be subject to a hazardous waste determination and not allow it to be classified as used oil for recycle; vegetable oils are not considered used oil since used oil is material made from petroleum
- 3. Would allow the option of the waste to be handled as used oil or a waste subject to a hazardous waste determination, depending on what works best for the generator

### Maine

- 1. Considers waste coolants and machining fluids used oil, in Maine the material is called waste oil and metal working oils included in the definition
- 2. Would need to perform a waste determination if the oil is not recoverable
- 3. Do not have a minimum concentration of recoverable oil
- 4. Have state regulations; not adopted FR 279
- 5. Do not have State only waste codes for used oil
- 6. If used oil cannot be recycled, requires waste determination and if hazardous would count towards a Generator's classification status
- 7. No specific state exemption for waters separated from used oil
- 8. No maximum concentration of used oil
- 9. Advisory opinions available

### Example A

1. Material would be classified as waste oil

- 2. Would allow this waste to be classified as waste oil even if the Generator was only recovering/recycling petroleum-based tramp oils
- 3. Once there is a new oil emulsion; characterize to ensure proper disposal
- 4. Would allow the option of the waste to be handled as hazardous waste subject to a hazardous waste determination

### Example B

- 1. Vegetable oil falls out of definition of waste oil; waste oil is petroleum-based; material would need a waste determination for proper classification
- 2. If petroleum-based tramp oil in vegetable-oil emulsion would be waste oil; strictly vegetable-based oil with no hydro-carbons, would fall out of waste oil classification

Note: Generators are not required to conduct TCLP on all waste oil; can look at totals. For example, ran analytics on used oil and found lead >1000 ppm, and the results is that the material has to be handled as hazardous waste

# Massachusetts

- 1. Considers waste coolants and machining fluids used oil if the oil is recoverable
- 2. Would not be considered used oil if the oil is not recoverable
- 3. No minimum concentration of recoverable oil
- 4. Has state specific regulations
- 5. Has State only waste codes for used oil: MA 01- catch all code for all waste oil that can MA listed waste that is a petroleum-based product; MA 98 off spec. used oil fuel; MA 97 used oil specified as used oil fuel and recyclable
- 6. If used oil cannot be recycled, separate the oil status from the HW generator status
- 7. A specific state exemption for waters separated from used oil; water is non-hazardous and exempt from treatment rules
- 8. No maximum concentration of used oil
- 9. Has fact sheets on burning waste oil in space heaters for auto body shops; no comprehensive fact sheet covering all oils
- 10. Have not seen used oil fail for TCLP but testing is not typically required

# Example A

- 1. Material would not be classified as waste oil
- 2. Would allow this waste to be classified as used oil even if the Generator was only recovering/recycling petroleum based tramp oils.
- 3. Would require this waste to be subject to a hazardous waste determination and not allow it to be classified as used oil for recycle
- 4. Would allow the option of the waste to be handled as used oil or a waste subject to a hazardous waste determination, depending on what works best for the generator/

### Example B

- 1. Material would not to be classified as used oil; vegetable oil is not considered hazardous
- 2. Would require this waste to be subject to a hazardous waste determination and not allow it to be classified as used oil for recycle; tramp oil would have to be separated

3. Would not allow the option of the waste to be handled as used oil or a waste subject to a hazardous waste determination, depending on what works best for the generator

# New Hampshire

As stated above, NH DES is addressing issues related to the classification of waste coolants and machining fluids (*i.e.*, oil/water emulsions) generated from metal cutting processes.

# New Jersey

- 1. Considers waste coolants and machining fluids used oil if the oil is recoverable
- 2. Would be considered used oil if the oil is not recoverable
- 3. Have a minimum concentration of recoverable oil
- 4. Follows Federal Register Part 279 Used Oil regulations, but also have state specific regulations
- 5. Do not have State only waste codes for used oil?
- 6. If used oil cannot be recycled, a waste determination needs to be performed to determine if it counts towards the Generator's classification status
- 7. No specific state exemption for waters separated from used oil
- 8. No maximum concentration of used oil
- 9. Does not have fact sheets on this subject

### Example A

- 1. Material would be classified as used oil
- 2. Not applicable because of state rules
- 3. Would require this waste to be subject to a hazardous waste determination
- 4. Would allow the option of the waste to be handled as used oil or a waste subject to a hazardous waste determination, depending on what works best for the generator

### Example B

- 1. Material would not be classified as used oil
- 2. Would require this waste to be subject to a hazardous waste determination
- 3. Not a used oil but can be subject to a hazardous waste determination

# New York

- 1. Considers waste coolants and machining fluids used oil if the oil is recoverable and is petroleum and synthetic-based
- 2. Would be considered used oil if the oil is not recoverable, based on federal preamble "The Part 279 standards apply to all used oil until a person disposes of the used oil, or sends it for disposal." 57 FR 41578, 9/10/92. We don't have any established oil content thresholds for recoverability. The oil content decreases upon further treatment, therefore recovery costs go up. Decision to dispose occurs when the handler no longer finds it feasible to continue treatment.
- 3. Do not have a minimum concentration of recoverable oil, for the time being, anyway. See discussion at item 8.

- 4. Mostly follow Federal Register Part 279 Used Oil regulations, but also have a few state specific regulations
- 5. No State only waste codes for used oil
- 6. NY does not regulate used oil as a <u>listed</u> waste unless it's been contaminated through mixing with a listed waste. Otherwise, it's only considered hazardous if it's disposed <u>and</u> displays characteristics. Generation of hazardous used oil, either through mixing with listed waste or through disposal of characteristic used oil, counts towards generator classification status.
- 7. Is a federally-based exemption for waters separated from used oil Not state-specific. The exemption is 374-2.2(a)(6), which is copied from 40 CFR 279.10(f).
- 8. NY currently follows federal rules, however, 2008 amendments to NY's Bulk Storage Statute to obtain EPA RCRA-I (40 CFR 280) authorization for the state's Petroleum Bulk Storage (PBS) regulations have complicated things. The statutory definition for "petroleum" includes used oil as a type of petroleum. Draft PBS regulations to implement the statute propose to define "petroleum mixture" as a substance containing 1 percent or more of petroleum. If stored in an AST or UST at a PBS-regulated facility, it may also be subject to used oil regulation, regardless of the wastewater provisions of 40 CFR 279.10(f) and 374-2.2(a)(6). But:
  - 1. What if the oil/water mixture <1 percent used oil but contamination was caused by deliberate spillage, i.e. not de minimus?
  - 2. What if the oil/water mixture >1 percent used oil but contamination was inadvertent, i.e., de minimus by 40 CFR 279 standards?
  - 3. What about spent aqueous metalworking oil whose oil constituent was diluted to <1 percent oil prior to usage?

A 2010 reorganization of NYSDEC re-assigned most RCRA-C based programs, including used oil, to the same division that manages PBS. State used oil regulations are being revised to incorporate the 2008 statute. The challenge is to implement the PBS-based provisions into state used oil regulation while still maintaining equivalent stringency with 40 CFR 279. Upon revision, NY anticipates that 1 percent will be the maximum used oil concentration, as a general rule, for waters separated from used oil, but specific details and exceptions need to be worked out.

- 9. No formal guidance available; follow federal guidance
- 10. Used oil testing for metals no data available; water-oil emulsions have seen some fail TCLP

### Example A

- 1. Material would be used oil
- 2. Tramp oil would be used oil; emulsified oil in waste would depend on hazardous waste determination, if directed for disposal
- 3. It is subject to hazardous waste determination if no further effort made at oil recovery. If a subsequent handler wishes to further treat the waste for oil recovery, the material returns to used oil regulation.
- 4. When the <u>handler</u> of the material directs it for disposal, it requires a hazardous waste determination. Until then, used oil regulation applies. The option is whether to dispose or whether to recycle. Disagree with the underlying presumption of the question posed, i.e., that the <u>generator</u> determines whether to manage as used oil or as a waste subject to hazardous waste determination. In real life, the next party receiving the material (waste management

company, oil recovery company, wastewater treatment company, etc.), may be making that decision.

### Example B

- 1. Vegetable oil not subject to regulations; NY has separate definitions for "used oil" and "waste oil." They are not interchangeable terms. "Used oil" definition is same as Part 279. "Waste oil" definition includes all used oil plus other oily items, including vegetable oil. Vegetable oil is not subject to used oil regulation.
- 2. Yes, for waste portion
- 3. Not a used oil

# New York

- 11. Considers waste coolants and machining fluids used oil if the oil is recoverable and is petroleum and synthetic-based
- 12. Would be considered used oil if the oil is not recoverable, based on federal preamble
- 13. Do not have a minimum concentration of recoverable oil
- 14. Mostly follow Federal Register Part 279 Used Oil regulations, but also have a few state specific regulations
- 15. No State only waste codes for used oil
- 16. If used oil cannot be recycled, does not count towards a Generator's classification status; do not regulate non-recycled used oil as hazardous waste
- 17. Is a specific state exemption for waters separated from used oil
- 18. Follow federal rules; classify used oil as a petroleum; State RCRA C program was incorporated into the same Division as manages oil bulk storage facilities; proposed bulk storage amendments are planning definitions for petroleum mixtures; >1 percent petroleum is a petroleum mixture; making the regulations complicated; working on these issue snow
- 19. No formal guidance available; follow federal guidance
- 20. Used oil testing for metals no data available; water-oil emulsions have seen some fail TCLP

### Example A

- 1. Material would be used oil
- 2. Tramp oil would be used oil, emulsified oil in waste would depend on hazardous waste determination and if directed for disposal
- 3. Subject to used oil regulations
- 4. Require hazardous waste determination to ascertain whether to dispose or recycle

### Example B

- 1. Vegetable oil not subject to waste oil regulations
- 2. Yes, for waste portion
- 3. Not a used oil

# Vermont

- 1. This material would be regulated as a Vermont-listed hazardous waste under the VT03 hazardous waste code (i.e., waste water-miscible metal cutting and grinding fluid); it is not considered "used oil" in Vermont. The Vermont regulations also include a conditional exemption (See VHWMR §7-203(l)) that exempts these materials if treated/recycled; under that exemption, treatment/recycling residuals may (if applicable) be managed as used oil.
- 2. N/a (See #1)
- 3. Vermont does not specify a minimum concentration of recoverable oil
- 4. Vermont's used oil regulations are similar to Part 279 but more stringent in areas
- 5. Vermont has a state code (VT99) that may be used when shipping non-hazardous waste on a manifest; if a generator chooses to manage used oil as a Vermont-listed hazardous waste, the VT02 code could apply (i.e., >5 percent by weight petroleum distillate). Also, see response to question #1
- 6. If used oil cannot be recycled, a hazardous waste determination must be performed to determine if the waste is subject to the VT02 listing (i.e., >5 percent by weight petroleum distillate)
- 7. Vermont does not have a state exemption for waters separated from used oil; a hazardous waste determination must be made (i.e., >5 percent by weight petroleum distillate). Also, refer to VHWMR §7-805 (i.e., Used Oil Determination)
- N/a
- 9. Vermont maintains fact sheets for the topics of used oil and used oil fuel

# Example A

- 1. This material would be a Vermont-listed hazardous waste (VT03) if not exempt per VHWMR §7-203(1)
- 2. N/a; see #1 and #A1
- 3. Yes, a waste determination would need to be made (VT03); also, see #1
- 4. No option, waste determination required; also, see #1

# Example B

- 1. The recovered material could be managed as used oil per VHWMR §7-203(l); vegetable oil is not regulated as hazardous waste
- 2. No, we would not require recovered material to be managed as hazardous waste (though it could be if that's how the generator wanted to manage the material)
- 3. Yes

NJ DEP representative asked the group about petroleum-based solvents from dry cleaning operations and whether these materials are disposable as used oil. CT DEEP representative responded that the EPA guidance says that used oil has to be used for lubricating, which excludes solvents. CT DEEP is not "buying" into the marketing about these dry cleaning materials. NYS DEC representative responded that NY is taking a similar view. Mass DEP considers these materials to be MA 01 waste oils, which includes oils used as solvents; their new definition of waste oil considers waste oil solvents; considers flash point

# Additional Information Provided by Participants after the Conference Call

### CT DEEP

CT DEEP Guidance Document, "Regulation of Used Oils in Connecticut" (Copy Attached) See in particular Section 7 beginning on page 27 of the PDF in which CT DEEP documents some criteria they would consider to determine if an oily wastewater or water-soluble coolant contained legitimately recoverable amounts of used oil.

CT DEEP Used Oil Fact Sheet #4, "Materials Containing or Otherwise Contaminated with Used Oil":

http://www.ct.gov/deep/lib/deep/waste\_management\_and\_disposal/used\_oil/MaterialsContaining UsedOil.pdf

Other CT information on used oil: <a href="www.ct.gov/deep/hazardouswaste">www.ct.gov/deep/hazardouswaste</a> (click on "Used Oil" in left-hand menu).

http://www.ct.gov/deep/lib/deep/waste\_management\_and\_disposal/hazardous\_waste\_regs/hwregs.pdf (see in particular, CT DEEP's Used Oil Regulations in Section 22a-449(c)-119).

Listing of areas where CT DEEP's Used Oil Regulations are more stringent or broader in scope than the federal regulations (see attached fact sheet).

# Mass DEP

Links to pertinent guidance documents regarding used oil

Vehicle recyclers - http://www.mass.gov/eea/docs/dep/recycle/hazardous/autowoil.pdf

Waste oil in space heaters - http://www.mass.gov/eea/docs/dep/recycle/laws/spacehtr.pdf

High flash mineral spirit solvents -

http://www.mass.gov/eea/agencies/massdep/recycle/hazardous/managing-spent-high-flash-mineral-spirits-and-petroleum.html

# VT DEC

Used oil FAQ: http://www.anr.state.vt.us/dec/wastediv/rcra/UsedOilFAQ.htm

Used oil Fact Sheet: http://www.anr.state.vt.us/dec/EAD/sbcap/pdf/fs usedoil wm.pdf

Oily Wastes (VT02): http://www.anr.state.vt.us/dec/ead/sbcap/pdf/fs OilyWastes wm.pdf

# **Summary of Responses to Questions**

States	CT	ME	MA	NJ	NY	VT
Questions						
Used Oil if	Yes	Yes	Yes	Yes	Yes	VT HW
recoverable?						
If yes,	No	Do waste det.	No	Yes	Yes	HW – not
considered		if not				applicable
Used Oil if		recoverable				
no						
recoverable						
oil?						
If yes,	No	No	No	Yes	No	No
minimum						
concentration?						
Follow Fed.	Yes, but	Have state	Have state	Yes, but	Yes, but	Have state
279?	also have	regulations	regulations	also have	also have	regulations
	state			state	state	
	regulations			regulations	regulations	
State-only	Yes	No	Yes	No	No	Yes, when
waste codes						shipping
						on a
	*7	**	**	-		manifest
Count toward	Yes	Yes, if waste	Yes	Do waste	No	Do waste
generator		determination		det. if not		det. if not
classification?		found haz.		recycled		recycled
Exemption for	Needs to	No	Yes	No	Yes	No
separated	be					
water?	evaluated	3.7				
If yes,	No	No	No	No		No
minimum						
concentration?						
Fact, sheets,	Yes	Yes	Yes	No		Yes
rules, or						
guidance?						