

Notes

NEWMOA Hazardous Waste Conference Call January 8, 2013

Topic: Properly Handling Separator Water from Distillation/Evaporators at Dry Cleaners

Disclaimer

NEWMOA organizes regular hazardous waste monthly 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 (5 people); Maine DEP (3 people); MassDEP (10 people); NH DES (6 people); NJ DEP (2 people); NYS DEC (18 people); VT DEC (6 people); EPA Region 1 (2 people); EPA Headquarters (4 people); and NEWMOA (1 person).

Draft notes prepared by NJ DEP with help from NEWMOA.

Terri Goldberg opened the teleconference with some general "housekeeping" items. She announced that the February teleconference will be held on February 26th. She also said that not all states have completed the "note taking" survey. The survey will continue to be available for the next few weeks, so everybody is encouraged to complete it.

Terri announced that NEWMOA supports Workgroup focused on the "wet garment cleaning" process. The wet process does not involve hazardous solvents and successfully cleans "dry clean only" clothing.

Vermont was the lead state for the conference call. They posed the following questions and asked each state program for a response:

1) Do states concur with EPA's assessment of the treatment of separator water in evaporator units as outlined in the following EPA policy letters (i.e., they are exempt from RCRA permitting as a wastewater treatment unit)? A number of the Region 1 states - including VT - are moving toward adopting more stringent standards for evaporation units (see final paragraph).

[http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/041C831B81EC820A8525670F006BEBBA/\\$file/11752.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/041C831B81EC820A8525670F006BEBBA/$file/11752.pdf)

[http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/4DE1576B69E514E78525670F006BEB9D/\\$file/11749.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/4DE1576B69E514E78525670F006BEB9D/$file/11749.pdf)

[http://yosemite.epa.gov/osw/rcra.nsf/0/E6448E592ED996428525670F006BED29/\\$file/11788.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0/E6448E592ED996428525670F006BED29/$file/11788.pdf)

2) Do states make a distinction between evaporation units and misting units (our understanding is that evaporation units use heat to evaporate filtered separator water while misting units just spray filtered separator water)? If so, how are misting units regulated?

3) Are any states aware of situations where the use of either evaporation or misting units have resulted in site contamination?

4) Do any states require testing of filtered separator water (prior to evaporation/misting) to verify that filters are functioning properly (i.e., breakthrough has not occurred)?

5) Are there other dry cleaning wastes of concern besides separator water, still bottoms and spent filters? Are states seeing any significant use of alternative solvents at dry cleaners? Hazardous waste concerns?

6) What program/s in your state has the most interaction with dry cleaners? (e.g., air, RCRA, P2)

Vermont opened the discussion. The noted below summarize the responses to these six questions by state.

A representative of EPA Region 1 commented that he would like to see each state adopt their own more stringent rules on evaporators. They noted that the “zero-discharge” units may be exempted under the wastewater treatment exemption but may have air emissions issues

Vermont

- Do not agree with EPA's stance on dry cleaning evaporators
- In process of promulgate rule on evaporators
 - Draft rule was included with email announcement about the call
 - Draft rule includes definition and standards for use of evaporators
- Consider perc-contaminated dry cleaning waste F-listed (but can also fail for TCLP)
- Believes there is a difference between evaporators and misting units in terms of potential environmental impact
- Has identified sites where soil contamination has occurred near misting units
 - Contamination occurred most likely because separator water was not properly treated
- Currently do not regulate misting units (other than as “generator treatment”)

- Seeing some shift at dry cleaners to use of non-hazardous materials
- HW program has not focused significant inspection resources on dry cleaners and the use of evaporators
 - Most VT inspections of dry cleaners conducted by air program
 - Some outreach by assistance program
- Found that most dry cleaners are CESQGs and therefore minimally regulated

Connecticut

- Not adopted formal position on EPA's stance on dry cleaning evaporators
- Have had little inspection efforts in the area of evaporators
- Generators must do waste determination before evaporating this material
- Have performed P2 effort and outreach
- Have a guidance document and website on evaporators
- Performed a survey of 12 dry cleaners in 1997
- Found that most dry cleaners are CESQGs and therefore minimally regulated
- Many used an activated charcoal unit that removed almost 100 percent of perc before evaporation
- Generators ship lint, waste perc, and filters off site as hazardous waste
- Many generators do waste determination before evaporating
- Little experience with misting units
- Believe misting units do cause contamination
- No substantial evidence of contamination caused by either unit
- Misting units are not permitted under air regulations
- Require waste determination of filter separator water
- Waste determination done using TCLP
- Do not believe waste is F-listed
- Some dry cleaners are using mineral spirits and advertising it as "green cleaning"
- Seeing many more dry cleaners using alternative cleaning materials

Maine:

- No comments on the questions

Massachusetts:

- Have rules that are more stringent than Federal rules and guidance
- Require annual certification to prove compliance with air, HW and wastewater rules
- Interim policy on evaporators (material must be hard piped and treated before evaporating)
- Rules are being proposed
- This material is subject to recycling permits
- Current evaporators are evaporating about 1 – 5 gallons per week
- Suggest water should be tested, but it is not required
- 25 percent of dry cleaners are shipping all waste off-site as hazardous waste
- Treated water is usually below TCLP standard
- Established an Environmental Results Program (ERP) for dry cleaners a number of years ago
- Dry cleaners in ERP are allowed to evaporate "properly treated" separator water

- One dry cleaner that is not part of ERP evaporates with heat
- Do not regulate misting
- CESQGs are allowed to mist
- Found that misting units caused problems, including high levels of perc in the area and odors
- Found a dry cleaner evaporating water in a crock pot and one using a pan on a hot plate
- Some cleaners transitioning to 100 percent wet cleaning process; grant program at the Toxics Use Reduction Institute (TURI) providing grants to help dry cleaners make this transition

New Hampshire:

- NH understands EPA's policy letters to mean that evaporators for separator water are exempt from RCRA permitting when managed in a wastewater treatment unit; NH's position is that evaporation of separator water that is TCLP for perc is not allowed and would be considered disposal of hazardous waste
- Believe that most dry cleaners are CESQGs
- Dry cleaning separator water would be subject to characteristic and not be a listed hazardous waste
- Have a 1996 policy letter to a CESQG dry cleaner in Hampton, NH stating that free product cannot be evaporated, facility must meet air requirements (will share the letter after the call), and system must be vented outside (not inside); although this letter was valid for 1996, DES would not allow the evaporation of a separator water that is TCLP for perc today and would consider that to be disposal of a hazardous waste
- Also have a 1996 policy letter to Air Quality Laboratories that considers a dry cleaning wastewater unit that recovers perc, carbon filters the separator water to below TCLP for perc, and evaporates the treated water to be a "recycling process" (will share the letter after the call), and therefore no hazardous waste permit is required
- Believe separator water is not hazardous if it passes TCLP
- Filtered wastewater via carbon has been shown to typically pass TCLP
- No knowledge of contamination from misting units
- The sites that are contaminated resulted from direct releases of perc.
- Generators must ensure wastewater is not hazardous before evaporation or misting, but not required to perform analysis

New Jersey:

- Rules cannot be more stringent than Federal unless a cost/benefit analysis is performed
- Issue general air permits, and evaporators are acceptable
- Require one physical separation and carbon filtering before evaporation
- There are no standards for the wastewater that is to be evaporated
- Do make a distinction between evaporation and misting units
- Currently ban misting units via air permits
- Has a proposed rule that will ban misting units, but it is currently on hold
- Do not require testing of filtered wastewater
- No knowledge of contamination from evaporators or misting units

New York:

- Air Division would like to ban evaporators and misters

- Air Division allows discharge of separator water to POTW if they meet a 20 ppb effluent limit
- Air Division requires that material must be tested
- Air Division requires that separator water must go through physical separation and double carbon filtration prior to evaporation
- RCRA wastewater treatment unit (WWTU) exemption allowed to apply as per EPA Guidance RO# 11752 that was cited by Vermont, except subsequent EPA guidance from a recent NEWMOA training video presentation by EPA HQs made it clear that it was the state water authority that must have the concern regarding exfiltration from the sewer pipes – i.e., not merely the site – in order to meet the EPA precondition for the WWTU exemptions that installation of the evaporator be a direct result of a CWA requirement
- Air Division regulates dry cleaners under “part 232”
- Consider the wastewater to be a listed (F002) hazardous waste per EPA guidance RO# 11224; asked the EPA HQ staff on the training call to address the issue of one or two RCRA-authorized states on the call saying that they did not classify the waste as F002; while other RCRA-states do classify the wastewater as F002; some RCRA-authorized states going with EPA'S guidance for # 11224 and concluding that the wastewater was F002; understand that RCRA-authorized states are not allowed to be less stringent than EPA
- Concur with EPA’s lack of distinction between evaporators and misting units
- Have some evidence of contamination from misting units
- Air Division requires dry cleaners to use units as per manufacturers’ specifications
- Aware of some contamination
- Air Division reported that problems caused because filter units are not changed out
- Do not believe current filter units can meet the 20 ppb limit required for POTW discharge
- Trying to promote change-over to safer alternative to perc
- NYS DEC’s Region 2 RCRA Office reportedly wants to no longer allow evaporators and misting units to qualify for the WWTU exemption

NEWMOA

Terri reported that NEWMOA has developed an online wet cleaning virtual trade show to help dry cleaners and others learn about wet cleaning systems and to enable them to compare and contrast information about the features of the various technologies that are available. She urged the participants to check out the site and to let others know about it:

<http://www.newmoa.org/prevention/projects/wetclean/>.