## Notes NEWMOA Hazardous Waste Conference Call January 28, 2014

## **Topic: Regulation of Generator Treatment in Tanks or Containers**

# Disclaimer

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**Participants:** CT DEEP (7 people); Mass DEP (2 people); NH DES (9 people); NJ DEP (5 people); NYS DEC (7 people); RI DEM (2 people); VT DEC (5 people); EPA Region 1 (4 people); EPA HQs (2 people)

The call was led by VT's Steve Simoes and Lynn Metcalf.

# Background

VT DEC shared the following information via email prior to the call.

The Vermont program is not comfortable relying on the wide-open federal position on generator treatment that is expressed only in FR preamble and guidance. They feel that it is important to make it clear in regulation that treatment in containers/tanks by generators is allowable, but to also establish ground rules for such activity in the form of a conditional permitting exemption (See VHWMR 7-502(o), attached). The key components of the exemption include:

- Written notification of treatment activity;
- Clarification that treatment may only be conducted on-site;
- Management standards of waste prior to treatment;
- HW determination of treatment by-products and proper management of any resulting HW;
- A new provision that addresses the use of "wastewater evaporation units";
- Record-keeping;

- Required compliance with Land Disposal Restrictions (LDR) waste analysis requirements (if applicable);
- Prohibition of "thermal treatment" and treatment of mercury-containing wastes; and
- A general provision stating that treatment activity cannot result in "adverse impact to human health/environment."

They authorized this approach in 2005.

So far they have received about a dozen notifications. They have created a Form to assist generators that they will share with the other states. They have received the Forms mostly as a result of inspections, but they are starting to get unsolicited Forms.

DEC has started tracking the treatment forms in the state activity area in RCRA Info. They enter it in RCRA Info in the handler record and that way they can search on the handler's activity.

In VT, generators can treat at satellite area. They must treat in either in a satellite area or a "short-term storage area."

VT has found that the most common forms of treatment are compaction; distillation like solvent stills; paint gun cleaning, and aerosol can puncturing. Given that the federal guidance on what constitutes allowable thermal treatment by generators is inconsistent and, during inspections, VT DEC inspectors routinely observe distillation/ evaporation units being used by generators (typically in a safe manner), DEC opted to allow the use of such units by generators as indicated by the note that follows subsection 7-502(o)(10). Also, Vermont does not consider all recycling activities to be flat-out exempt; they consider activities, such as evaporation/distillation to be a form of treatment subject to their generator treatment provision.

As covered in NEWMOA's December call, Vermont is authorized for its generator treatment provision (with the exception of the subsection that deals with wastewater evaporation units). Types of treatment that they commonly see include compaction, aerosol can puncturing, and distillation (e.g., paint and paint-gun cleaner waste at body shops).

They have just started tracking generator treatment in tanks and containers in RCRAInfo by creating a state-only activity for generator treatment that is entered into the handler record when the generator notifies that they are performing generator treatment.

Questions to discuss during the conference call:

- Does your state allow generator treatment in containers/tanks?
- If so, do you address by regulation, procedure, or guidance?
- What sorts of generator treatment activities have you encountered?
- Are there types of generator treatment that you do not allow?

The participants added the following question during the call: "Is generator treatment allowed to occur at satellite accumulation areas?"

VT has found that hospitals are using distillation units. Fletcher Allen is their largest hospital and they will check on their status and get back to the group with an answer.

CT DEEP noted that they have seen quite a few distillation units, and in CT and NYS they are considered recycling units; CT requires a notification/recycling registration. CT receives notifications but does not enter them into RCRA info.

VT stated elementary neutralization is not regulated under treatment in containers and tanks but is managed under a separate exemption.

### Rhode Island

Rhode Island shared the following material prior to the conference on the section of their new hazardous waste regulations that address generator treatment (effective on 2/10/2014) and include certain exemptions to the prohibition against generator treatment:

[Generator may not treat hazardous waste unless...]

- 6. is treating the waste in tanks or containers under the following conditions:
  - (a) The generator provides written notification to the Department that includes:
    - (i) The facility name, EPA identification number, generator status, mailing address, street address, telephone number, and contact person
    - (ii) A detailed description of the treatment process(es) to be used including process design drawings, plans or process flow diagrams;
    - (iii) An estimate of the frequency that treatment will occur;
    - (iv) The type(s) and estimated quantity of hazardous waste to be treated including a detailed description of the process(es) generating the waste; and
    - (v) A detailed description of how all treatment products and by-products will be managed following treatment.
  - (b) A revised written notification is provided to the Department if the information required above if this section changes significantly.
  - (c) The treatment occurs in containers and tanks that comply with the requirements of Rule 5.13, 5.14 and 5.15 as appropriate.
  - (d) The treatment does not violate the applicable requirements of subparts AA, BB, and CC of 40 CFR part 265 (as administered by EPA).
  - (e) The hazardous waste being treated is generated and treated on-site.
  - (f) During treatment and during any storage prior to treatment, hazardous waste is:
    (i) Counted for the purpose of determining generator status under Section 5.6; and
    (ii) Managed in accordance with the applicable requirements of this rule (Rule 5).
  - (g) The generator determines if treatment by-products are hazardous waste in accordance with Rule 5.3.
  - (h) The generator maintains records for three years documenting:
    - (i) The type(s) and quantity of waste treated;
    - (ii) The method(s) of treatment used; and
    - (iii) The date(s) that treatment occurred.
  - (i) All hazardous waste generated from the treatment is managed in accordance with the applicable standards of this rule (Rule 5).
  - (j) If a generator is managing and treating waste or contaminated soil in tanks or containers to meet Land Disposal Restriction treatment standards found at 40 CFR 268.40, the generator develops and follows a written waste analysis plan in accordance with the requirements of 40 CFR § 268.7(a)(5) (as administered by EPA).

- (k) The generator does not treat hazardous waste using thermal treatment processes.
- (1) The generator does not treat, break or shred mercury-containing wastes or devices (e.g., fluorescent lamps, thermostats).
- (m) The generator does engage in breaking or shredding of CRT's as prohibited by Section 13.5G.
- (n) The generator does not engage in shredding of circuit boards except under the conditions of Rule 11.
- (o) Treatment does not result in any adverse impact to human health or the environment.

Note: The Department reserves the right, upon receiving written notification of treatment by a generator, to require that treatment-specific requirements be met.

These rules are very similar to VT's. They must notify but not get a permit.

The revised regulations are new, so they have not received any notifications. They do not have information on the types of treatment occurring.

Regarding whether treatment in satellite accumulation is allowed, they are sure that that is affected. They did specifically address in the regulation, but they thinks they could. They cited "at or near the point of generation" in their regulations. Line of sight of the operator is required in order to be at or near the point of generation, so with a "half-wall" scenario a variance would be needed.

They are planning to send a mass email to generators about the new regulations.

They plan to address puncturing aerosol cans through policy.

#### New Jersey

NJ DEP's regulations incorporate federal regulations by reference. They do not require written notification, a database, or any recordkeeping. They address many situations on a case-by-case basis.

During inspections they see distillation, filter presses, and aerosol can puncturing. They do not information on treatment for mercury waste.

#### New York

Generator treatment in tanks and containers is allowed but must meet applicable *storage* requirements. Regarding the requirement that a container be kept closed except when adding and removing wastes, NY is in line with VT's 1/27/14 3:14 email saying that when EPA first came out in the 3/24/86 FR with the treatment-in-containers-and-tanks policy, they made no mention of whether it had to be kept closed, so it is reasonable to assume that EPA would allow the lid to be open, if necessary to do more than add or remove waste (e.g., adding chemicals and stirring). Off-gassing could arguably be considered removing waste, which the regulations specifically allow.

NY allows treatment in containers and tanks through regulation, policy, and guidance. EPA has evolved from its 1986 version to no longer have the constraints that DEC first codified so with

time DECs and EPAs positions drifted apart. However, a few years ago the decision was made (during an enforcement action involving Owl Wire) to go with EPA's guidance on treatment-incontainers-and-tanks, so now NY has both its original codified exemption and EPA's version in place.

Types of treatment encountered include: rendering waste less hazardous e.g., safer to transport (e.g., eliminating reactivity); compaction; rendering a waste non-hazardous. NY noted that treatment in containers and tanks that removes a characteristic waste must comply with the Land Disposal Restrictions' (LDRs) Waste Analysis Plan requirement, since elimination of the characteristic is part of the LDR treatment standard. DEC is in line with CT's view that distillation is considered to be eligible for the 261.6(c)(2) recycling exemption.

NY is in line with EPA HQs in not allowing evaporation to qualify for the treatment in tanks and containers exemption because it is thermal treatment.

In response to a question from CT, NY acknowledged that a case could be made that evaporative processes not utilizing heat input, such as misters is not a thermal treatment device, but noted that such non-thermal evaporators were not the predominant type in use.

Treatment is allowed satellite areas in NY, noting that EPA's 2004 hazardous waste generator Advanced Notice of Proposed Rulemaking (ANPRM) memo mentions treatment in containers being done in satellite areas but does not say whether it would be allowable. Kristin noted that she authored that particular language, and that there is nothing more in writing on the topic but the general consensus at EPA HQs is that treatment in satellite areas should *not* qualify for the exemption. Jim O'Leary indicated that there might be an opportunity to address this issue in the upcoming Hazardous Waste Generator Improvements Proposed Rule Making.

#### New Hampshire

New Hampshire does allow generator treatment in tanks and containers. They have nothing written in rules or guidance, and they do provide site-specific interpretation letters. They have drafted generator treatment rules similar to VT's. The differences in their draft from VT's requirements is that they would not require notification; they added a section on treatment on drip pads or in containment buildings based on RCRA documents; and compliance with AA, BB, and CC.

The treatments that they frequently see in the field are stabilization of heavy metals in soil or water; silver in wastewater (from dental offices); silver recovery, lead in soil, and aerosol can puncturing.

They consider distillation recycling and not treatment. They issue permits for evaporators. They do not allow thermal treatment except evaporation of wastewater. They do not allow lamp crushing or dismantling. They can issue an emergency permit for emergency detonation.

The do not distinguish between satellite and other treatment areas.

EPA's Solvent Wipes Rule will be affecting treatment since the generators will be compacting the rags. They do not consider compaction as treatment.

They hope to do through their rulemaking process this summer and will share their materials when they go to draft rules.

#### **Massachusetts**

Massachusetts does not allow generator treatment in containers or tanks, unless they apply for a waiver from licensing. They recently issued a waiver for a process that connects one vacuum evaporator to another evaporator. They considered this treatment acceptable even though it's not totally enclosed.

Their regulation allow in process treatment that is hard-piped and integrally connected.

They do not consider distillation for spent solvents treatment, but require notification if on-site or a recycling permit if receiving from off-site.

They find distillation and aerosol can puncturing occurring. There is a waste water treatment unit exemption. They have not seen many other treatment activities.

They do allow any treatment unless it's recycling, closed-looped, or they have a waiver, or elemental neutralization unit / waste water treatment unit.

Treatment in satellite containers not allowed.

They had previously not allowed fluorescent lamp crushers at LQGs and SQGs, but previously allowed drum top crushing at very small quantity generators (VSQGs). They plan to propose that VSQG's are no longer allowed to do drum top crushing.

VSQG's are allowed to treat but not thermal treatment.

They consider compaction treatment since it results in volume reduction.

MA has two class C fluorescent lamp recyclers (that have abbreviated TSDF permits).

MA considers use aerosol can puncturing to be treatment and SQGs and LQGs cannot do it but VSQGs can. Facilities need a permit to do this form of treatment.

#### Connecticut

Their regulations do not categorically prohibit treatment in tanks and containers. Their policy has been in effect since around 1991 helps to clarify the standards to ensure protection of human health and the environment.

They follow 262.34 standards, LDRs, and state marking requirements. They incorporate preparedness and prevention subpart 265, and require waste determinations on treatment residues.

They encourage treatment when first placed into the container and recognize the environmental benefit associated with treatment.

The types of treatment that they find are phase separation decanting and plug mills (large scale treatment of soil, which requires a permit). Eligibility includes no release to air, water, soil, cannot produce hazards.

Exemptions include elementary neutralization, recycling, and treatment occurring under other exemptions.

They do not allow treatment at satellite accumulation areas because they could not meet the standards in the policy.

Question: for states that allow generator treatment and have a "no releases" standard: How do you limit emissions?

VT responded that they coordinate with air standards because the process might not be allowed under the air requirements. There is a prohibition against disposal by evaporation. The generator would probably need an air permit.

NY noted that treatment in 90 day areas must meet subpart CC so that would take care of organic emissions.

### EPA Headquarters

Jim O'Leary - noted that he and Kristen are interested in this topic and want to stay informed. .

Connecticut asked about whether EPA has conducted any air testing and if so are constituents released, whether or not they are below air permitting requirements.

NY noted there was a major difference between EPA Regions 1 and 2 on whether evaporators are thermal treatment units (and therefore ineligible for the treatment-in-containers-and-tanks exemption): in Region 2, considered to be thermal treatment, so evaporators do not meet treatment in containers or tanks.

CT asked NY whether this prohibition was also applicable to ambient temperature units (e.g., low pressure; packed column, or misters)

NY stated that a case could be made that those were not thermal treatment, but most units are thermal treatment.

Kristen noted that to her knowledge there is a "little known" document that was issued by an EPA business office (and not OECA or ORCR) that describes allowable ways to treat hazardous waste. The document mentioned precipitation and flocculation; EPA repeated those in a 1992 memo; but to her knowledge, these are the only two that they've specifically addressed. Kristin will send Terri the "little known" document to share with the group.

For fire purposes, facilities are wary of high temperatures and use of propane and natural gas.

In a 2002 memo, EPA tried to talk about whether treatment was allowed in satellite areas, but was later dissuaded from doing so. HQs has never written about it. When they first allowed generator treatment, the applied the same technical standards for generators as those for treatment, storage, and disposal facilities (TSDFs), but now satellite area requirements are considerably reduced and are not the same standards as those applied to TSDF standards. Most HQ people would consider satellite treatment not to be allowed.

NY commented on the 2004 ANPR's satellite treatment question. Jim does not know if there is a window to address this in the upcoming HW Generator Improvements Proposed Rule.

NH noted that EPA Region 1 letters touching upon treatment-in-tanks-and-containers went out to everyone in Region 1 and addressed specific scenarios. NH uses these as guidance for their programs. NH mentioned a NYNEX memo regarding stabilization of lead contaminated soil in a tank. They will share these letters with Terri for distribution to the group.

#### Plans for the Next Conference Call

The group discussed the plans for the next scheduled call on bag house filters at resource recovery facilities and decided to postpone the topic since several states are waiting for a response from EPA to a letter that they sent on this topic. The group decided to swap topics, with "generator flexibility" for the next call and bag house filter waste as a topic for the March 11 call. Terri indicated that she will send a follow-up email.