

**State of Vermont**  
**Department of Environmental Conservation**  
**Waste Management & Prevention Division**  
**1 National Life Drive – Davis 1**  
**Montpelier, VT 05620-3704**  
**(802) 828-1138**

*AGENCY OF NATURAL RESOURCES*

July 31, 2015

CERTIFIED MAIL  
7013 0600 0001 3411 3789

Mr. Christopher Wamser, Site Vice President  
Entergy Nuclear Vermont Yankee  
320 Governor Hunt Road  
Vernon, Vermont 05354

**RE: Notice of Alleged Violation**  
May 18, 2015, Hazardous Waste Compliance Evaluation Inspection  
EPA ID # VTR000504167

Dear Mr. Wamser:

On May 18, 2015, representatives of the Agency of Natural Resources, Waste Management & Prevention Division (Agency) conducted a hazardous waste compliance evaluation inspection of the Entergy Nuclear Vermont Yankee (ENVY) facility located at 320 Governor Hunt Road in Vernon, Vermont, to evaluate compliance with the Vermont Hazardous Waste Management Regulations (VHWMR) promulgated pursuant to the federally delegated authority by EPA to the Agency under the Resource Conservation and Recovery Act (RCRA). The inspection was directed solely at compliance with the state regulations for the management of non-radiological hazardous waste. The inspection was not intended to include and did not include any examination of radiological contamination or radiological activities at the facility.

During the inspection, the Agency representatives identified several violations of the VHWMR. These alleged violations were discussed with ENVY representatives during the inspection closing conference. On June 5, 2015, the Agency received follow-up correspondence via email from Lynn DeWald of ENVY, who was present during the inspection. The correspondence describes ENVY's initial responses to each of the alleged violations identified during the inspection and actions taken to achieve compliance with the VHWMR.

The purpose of this letter is to notify you that the Agency believes that, at the time of the inspection, ENVY was in violation of the VHWMR as described below. This letter also acknowledges any initial steps taken by ENVY to achieve compliance (as stated in the June 5 correspondence), and summarizes the status of ENVY's compliance with regard to each alleged violation. None of the alleged violations relate to radiological contamination or radiological activities at the facility; rather, the alleged violations pertain to regular, ongoing handling, storage and/or disposal of non-radiological hazardous waste at the ENVY facility.



**VHWMR Section 7-303:**

**§ 7-303 HAZARDOUS WASTE DETERMINATION**

*Any person who generates a waste shall determine if that waste is a hazardous waste in accordance with Section 7-202.*

**Alleged Violation:** While reviewing the non-radiological uniform hazardous waste manifest shipping documents initiated by ENVY since January 1, 2013, the Agency inspector questioned ENVY's use of the VT99 (non-hazardous waste) code in conjunction with the U.S. DOT Description of "Non Hazardous, Non DOT Regulated Material" on a number of manifests. Specifically, the inspector questioned if ENVY had properly characterized each of these wastes since the U.S. DOT Descriptions provided no information to support non-hazardous waste determinations. The inspector began investigating these questions by reviewing the supplemental packing list information provided to ENVY by the transporter of the two drums (400 pounds) of waste identified by the VT99 code on line #8 of the continuation sheet attached to manifest #007790512FLE, (initiated on February 19, 2015). After reviewing the packing list and ENVY's electronic inventory system, it was determined that the two drums were "lab-packs" containing waste ethylene glycol, a material regulated in Vermont as hazardous waste under the VT08 hazardous waste code. ENVY failed to make a determination that the waste ethylene glycol was hazardous waste.

In addition, a one quart container of Sherwin Williams "White Pigmented Shellac Primer" was observed in the "Outer" hazardous waste short-term storage area on a shelf marked as "NON Hazardous Waste." The Material Safety Data Sheet (MSDS) for this product states that it contains 45% ethanol by weight. The MSDS also indicates that "[w]aste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Incinerate in approved facility." The flash point of pure ethanol is approximately 62° F. Based on the information provided in the MSDS and the flashpoint of ethanol, ENVY failed to make a determination that the waste shellac primer was hazardous waste.

**Note:** See the "Requested Actions" section below. Since sufficient time was not available during the inspection to investigate other instances where the VT99 code had been used in conjunction with the "Non Hazardous, Non DOT Regulated Material" U.S. DOT description, the Agency requests that ENVY provide documentation describing each non-radiological waste shipped off-site as "Non Hazardous, Non DOT Regulated Material" since January 1, 2013.

*ENVY's June 5, 2015 response regarding this alleged violation is unclear. ENVY claims that waste ethylene glycol identified on line #6 of the continuation sheet (attached to manifest #007790512FLE) should have been shipped using the VT99 non-hazardous waste code instead of the VT08 hazardous waste code because that ethylene glycol was "recycled" and therefore exempt from regulation as hazardous waste. However, it is not clear if ENVY is making the same claim for the ethylene glycol waste shipped in the lab packs identified on line #8 of that same manifest.*

*Regarding ENVY's claim that the waste ethylene glycol identified on line 6 of manifest #007790512 FLE is non-hazardous waste, the Agency received a manifest discrepancy notice from the Clean Harbors Reidsville facility changing the VT08 hazardous waste code originally used on the manifest*

to the VT99 non-hazardous waste code. An Agency representative contacted the Clean Harbors facility and was informed that the ethylene glycol waste in question had been sent for disposal (i.e., incineration). Since the VHWMR § 7-204(i) exemption for waste ethylene glycol only applies to ethylene glycol that is “recycled for reuse (e.g., filtered) and/or treated for reuse (e.g., additives added),” the waste ethylene glycol identified on line 6 of manifest #007790512 FLE is subject to regulation as hazardous waste under the VT08 code.

**VHWMR Section 7-311(d)(1):**

**§ 7-311 SHORT-TERM STORAGE AREA STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS**

\* \* \* \* \*

*(d) Inventory and Inspection*

*(1) Small and large quantity generators shall maintain, at a location apart from the short-term storage area, a list of all hazardous waste currently in storage. For generators storing hazardous waste in containers, the list shall identify each container being stored and the type of hazardous waste held by each container. Any waste being accumulated within a short-term storage area must be included on the list of hazardous waste in storage.*

**Alleged Violation:** While at the time of the inspection ENVY was maintaining an electronic inventory of all non-radiological materials (i.e., hazardous waste, non-hazardous waste and materials under evaluation for potential further use) stored in certain designated hazardous waste short-term storage areas, that inventory did not identify which materials were hazardous wastes. In addition, according to a ENVY representative interviewed at the time of the inspection, no inventory was being maintained for the “absorbent storage shed,” an area where the inspector observed hazardous wastes (i.e., oily rags, pads and absorbents identified by the VT02 hazardous waste code) being stored.

*In its June 5, 2015, email response to the inspection, ENVY stated that “a request by ANR was made to add a column to the inventory list that indicates whether a product is hazardous or non-hazardous. The column has been added and as products are placed into overpacks...the hazard status of each product will be noted in the inventory list.” ENVY should note that while the inspector agreed that this alleged violation could be addressed by adding a column to the inventory list – he did not request that a column be added to the inventory. The Agency would also like to clarify that an inventory must identify: 1) whether a material is “hazardous waste” (not just “hazardous”), 2) which short-term area that each hazardous waste is stored in, and 3) all hazardous wastes in short-term storage (not just those placed in overpack containers).*

**VHWMR Section 7-311(d)(2):**

**§ 7-311 SHORT-TERM STORAGE AREA STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS**

\* \* \* \* \*

*(d) Inventory and Inspection*

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*(2) Small and large quantity generators shall conduct daily inspections during regular business days of each short-term storage area. The inspections shall be recorded in a log that is kept at the facility for at least three years.*

**Alleged Violation:** During the inspection, the Agency inspector reviewed ENVY’s short-term (non-radiological) storage area inspection log with an ENVY representative. This review revealed that inspections were not being conducted on a daily basis and, according to the ENVY representative, no inspections were being conducted at the “absorbent storage shed,” an area where hazardous wastes (i.e., oily rags, pads and absorbents identified by the VT02 hazardous waste code) were observed at the time of the inspection.

*ENVY’s June 5, 2015 response states that it has “improved the forms being used to document the inspections and communicated the expectation of required daily inspections during the work week.” ENVY also stated that the roll-top secondary containment structure for oil debris “has been placed on the daily inspection rounds.” Based on the corrective action taken by ENVY, the Agency believes this alleged violation has been sufficiently addressed.*

**VHWMR Section 7-311(e)(1):**

**§ 7-311 SHORT-TERM STORAGE AREA STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS**

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*(e) Security*

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*(1) Small and large quantity generators must post a sign at each short-term hazardous waste storage area, which must be visible from at least 25 feet with the legend, "Danger-Hazardous Waste Storage Area-Authorized Personnel Only". The legend must be written in both English and French in facilities located in counties bordering the Canadian province of Quebec. Existing signs with a similar legend may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the storage area, and that entry into the storage area can be dangerous.*

**Alleged Violation:** During the inspection, the Agency inspector observed that a sign with the required legend “Danger – Hazardous Waste Storage Area-Authorized Personnel Only” was not posted at either the “Tool Crib” short-term storage area or the roll-top structure used for short-term storage of oily hazardous waste.

*While ENVY’s June 5, 2015 response includes a photograph showing that a sign with the required legend had been affixed to the roll-top structure following the inspection, it is difficult to tell if that sign would be visible from 25 feet. The ENVY response does not indicated if a sign with the required legend has been posted at the Tool Crib short-term storage area.*

**VHWMR Section 7-311(f)(1):**

**§ 7-311 SHORT-TERM STORAGE AREA STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS**

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*(f) Use and Management of Containers*

*(1) With the exception of satellite accumulation containers managed in accordance with § 7-310(a), containers, and packages used for the storage of hazardous wastes shall be clearly marked from the time they are first used to accumulate or store waste. Such marking shall include:*

*(A) The generator's name, address, and EPA identification number;*

*(B) The name and hazardous waste identification code(s) of the hazardous waste stored therein;  
The date when the container was first used to accumulate or store hazardous waste; and*

*(C) The following language, "Hazardous Waste - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency."*

**Alleged Violation:** During the inspection, the Agency inspector observed numerous non-radiological containers that, according to a ENVY representative, contained hazardous waste but were not marked as required.

*ENVY's June 5, 2015 response states that "(l)abeling on the drums collecting oily rags inside (the roll-top secondary containment structure) has... been improved" and that ENVY intends "...to place compatible products into over-packs and attach proper shipping labels to the exterior of the over packs." While these corrective measures generally address this alleged violation, ENVY should note that all containers of hazardous waste must be properly marked, not just overpack containers and containers holding oily rags. Additionally, packing lists must be maintained for overpack containers.*

**VHWMR Section 7-702(b)(5):**

**§ 7-702 MANIFEST REQUIREMENTS FOR GENERATORS**

\* \* \* \* \*

*(b) Any generator who transports or offers for transport hazardous waste to a designated facility using a manifest shall:*

\* \* \* \* \*

*(5) Retain a signed copy of the manifest for at least three (3) years from the date of initial shipment or until receipt of a completed copy. A completed copy of the manifest must be retained as a record for at least three years from the date the waste was accepted by the initial transporter.*

**Alleged Violation:** At the time of the inspection, no copy of manifest #006628043FLE, initiated on June 12, 2013, was available for review. The waste at issue was non-radiological hazardous waste.

*As ENVY provided a completed copy of manifest #006628043FLE with its June 5, 2015 response, this alleged violation has been resolved.*

In response to the alleged violations, the Agency may issue a Civil Complaint pursuant to 10 V.S.A. Section 8019 which would assess a penalty. The Agency may also issue an Administrative Order pursuant to 10 V.S.A. Section 8008 which would require full compliance with all applicable statutes, rules, and/or permits; assess penalties; and if necessary, require corrective/restorative action and any other measures deemed appropriate. Prompt response to this Notice of Alleged Violation and correction of the alleged violation may lessen the possibility or severity of any enforcement action taken by the Agency.

**Compliance Directives:**

1. Within 35 days of your receipt of this letter, please submit a written response to this NOAV. Include in or with your response:
  - A detailed description of further specific modifications that have been made to your hazardous waste management program to correct the outstanding alleged violations identified in this letter; and
  - Copies of any documentation that describes non-radiological wastes shipped off-site since January 1, 2013, using the VT99 non-hazardous waste code and the “Non Hazardous, Non DOT Regulated Material” description.

Lastly, during the site inspection a floor drain was identified in the Edson Garage. The Agency’s understanding is that this garage was used in the past exclusively for non-radiological related activities, namely vehicle maintenance and repairs. Discharge of non-radiological fluid wastes from floor drains to the subsurface (leachfield, drywell, etc.) by businesses are regulated as Underground Injection Control (UIC) Wells and are subject to the UIC Rules (amended 10/29/14). Floor drains that receive such waste from the location within a facility where high risk non-radiological activities occur (vehicular repair or maintenance activities, etc.) and which lead to a UIC well pose a risk to soil and groundwater quality and these floor drains are prohibited (***UIC Rule §11-301***).

The Agency requests that you investigate this floor drain to determine the location of its discharge point. If the floor drain discharges to a UIC well, to avoid future possible releases, it must be “closed”. Closure options include plugging the floor drain with concrete, connecting to municipal sewer or to a holding tank. Closure activities must be documented. A *Prohibited Well Closure Form* is provided on the UIC website. When there are further closure activities at the garage, ENVY should determine if there is any subsurface contamination that may require additional investigation and remediation.

If you have any questions concerning this Notice of Alleged Violation, please contact Steve Simoes of my staff by telephone at (802) 522-0386 or by e-mail at [steve.simoes@state.vt.us](mailto:steve.simoes@state.vt.us).

Sincerely,



Chuck Schwer, Director  
Waste Management & Prevention Division

cc: Michael Twomey, Entergy Nuclear Operations, Inc., Vice President of External Affairs  
Joseph Lynch, Entergy Nuclear Operations, Inc., Manager of Government Affairs  
Bill Glew, Esq., Entergy Nuclear Operations, Inc.  
Daniel Dorman, Regional Administrator, U.S. Nuclear Regulatory Commission, Region 1  
Jeffrey Fowley, Regional Counsel, Environmental Protection Agency, Region 1  
Scot Kline, Assistant Attorney General, Vermont Office of the Attorney General  
Christopher Recchia, Commissioner, Vermont Department of Public Service  
Dr. Harry Chen, Commissioner, Department of Health  
Mr. Perry Plummer, Director, New Hampshire Department of Safety  
Mr. John Giarrusso, Jr., Nuclear Preparedness Manager, the Commonwealth of Massachusetts