

STATE OF VERMONT
PUBLIC SERVICE BOARD

Petition of Entergy Nuclear Vermont Yankee,)
LLC, and Entergy Nuclear Operations, Inc., For a) Docket No. 8300
Certificate of Public Good Pursuant to 30 V.S.A.)
§ 248 and 10 V.S.A. § 6522 to Construct a Second)
Independent Spent Fuel Storage Installation)
("ISFSI") at the Vermont Yankee Nuclear Power)
Station)
)
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PREFILED SURREBUTTAL TESTIMONY OF RICHARD SPIESE

On Behalf of the Vermont Agency of Natural Resources, Department of Environmental
Conservation, Waste Management and Prevention Division

Summary of Testimony

Mr. Spiese's testimony responds to the testimony of Entergy witness George Thomas regarding soils beneath and around the North Warehouse. This testimony supplements Mr. Spiese's Pre-filed Direct Testimony.

1 **Q1. Please state your name.**

2 A1. My name is Richard Spiese.

3

4 **Q2. Have you previously provided testimony in this docket?**

5 A2. Yes.

6

7 **Q3. What is the purpose of your testimony?**

8 A3. The purpose of my testimony is to respond to the prefiled rebuttal testimony of George
9 Thomas.

10

11 **Q4. Do you have any observations concerning the prefiled rebuttal testimony of Mr.
12 Thomas as it relates to excavated soils associated with the Project?**

13 A4. Yes. The testimony of Mr. Thomas appears to be predicated on a misunderstanding
14 concerning the management of excavated soils. Mr. Thomas' testimony appears to
15 segregate soils into just two categories, hazardous waste or non-hazardous waste. In
16 some cases, soils must be managed as a Solid Waste above Soil Screening Levels as
17 opposed to a hazardous waste. The options for management of both soils that are Solid
18 Waste above Screening Levels or a hazardous waste are outlined in the Investigation and
19 Remediation of Contaminated Properties Procedure (IROCPP). The IROCPP is attached
20 as Exhibit ANR-RS-3. Due to the nature of the non-radiological hazardous waste
21 activities, including the burning of waste oil, Entergy must develop a site investigation
22 work plan that includes a sampling plan for soils beneath and around the North

1 Warehouse areas for total petroleum hydrocarbons, volatile organic compounds,
2 polychlorinated biphenyls, RCRA Priority Metals, semi-volatile organic compounds, and
3 dioxin, and comply with the Procedure for Conducting Hazardous Material
4 Investigations and Remediation Activities Under 30 V.S.A. Section 248 (Section 248
5 Procedure) and the IROCPP.

6
7 In addition, Mr. Thomas appears to suggest that Entergy will only sample those
8 excavated soils that have an odor or visual staining during the construction process. As I
9 stated in my August 19, 2015 testimony, burning of waste oil at the North Warehouse is
10 well documented, and unburnt or partially burnt waste oil emissions from the waste oil
11 burner could settle on soils around the building. Waste oil can include total petroleum
12 hydrocarbons, volatile organic compounds, metals, and in some cases, polychlorinated
13 biphenyls. Polychlorinated biphenyls, when partially combusted, could also create
14 dioxin. Atmospheric deposition of these contaminants could occur above Soil Screening
15 Levels and not show any visible staining or odors. In addition, older spills of non-
16 radiological hazardous waste may not give off an odor or show visible signs of
17 contamination. For these reasons, soil sampling and laboratory analysis is the only way
18 to ensure the soils beneath and around the North Warehouse do not contain contaminants
19 above Soil Screening Levels.

20
21 **Q7. Does Mr. Thomas' statement that Entergy will handle the North Warehouse as low-**
22 **level mixed waste (LLMW) address your concerns related to excavated soils?**

1 A7. No. Mr. Thomas' testimony appears to suggest only that the North Warehouse building
2 materials will be treated as LLMW and that initial sampling of the soils beneath the
3 North Warehouse did not identify any radioisotopes. The Agency agrees that soils
4 contaminated with both radioisotopes and hazardous waste can be managed pursuant to
5 the federal and state "Mixed Waste Rule." Contaminated soils that are not radioactive
6 must be managed according to the Agency's Section 248 Procedure and the IROCCP. In
7 any event, disposal of the North Warehouse *building materials* as LLMW does not
8 alleviate Entergy from its obligation to submit a non-radiological site investigation and
9 work plan for the soils beneath and around the North Warehouse, and comply with the
10 Agency's Section 248 Procedure and IROCCP.

11

12 **Q15. Does this conclude your testimony?**

13 A15. Yes.