

10 CFR 71.95 REPORT EVALUATION FORM

Docket No.: 71-9218

Package Model No.: TRUPACT-II

Report Submitted By: T.E. Sellmer, Manager, Packaging and Information Services, Nuclear Waste Partnership LLC (on behalf of the U.S. Department of Energy)

Report Date: January 14, 2022.

Report ADAMS Accession No.: ML22014A020

Review the incoming report to determine if additional Commission or staff action is warranted. The review should consider whether the report identifies a generic defect or problem with the package design and the safety significance of the issue. Note that a high safety significance represents a potential for significant radiation exposure, medium safety significance represents a potential for some moderate radiation exposure, and low safety significance represents little or no potential for radiation exposure.

1. The report identifies:

- Significant reduction in the effectiveness of a package during use;
- Defect with a safety significance;
- Shipment in which conditions of the approval were not observed.

2. What is the safety significance? High Medium Low

The subject report, "REPORT PURSUANT TO 10 CFR 71.95," dated January 14, 2022, describes that section 7.1.5.10 of the TRUPACT-II Safety Analysis Report (SAR) specifies, "Install the inner containment vessel (ICV) outer vent port plug; tighten to 55 – 65 pound force per inch (lb_f-in) torque." The subject report further describes that after receipt at the Waste Isolation Pilot Plant (WIPP) during the unloading process of the TRUPACT-II unit 154, it was discovered that unit 154 was received without the ICV outer vent port plug installed. Nuclear Waste Partnership (NWP) described in the subject report that there were no exposures to individuals as a result of this event.

3. Corrective actions taken by the licensee:

In the subject report, NWP described that the following standing orders were issued that require:

- a. an independent verification that the ICV outer vent port plug has been installed and torqued to 55 – 65 lb_f-in torque has been put in place. This standing order is applicable for all TRUPACT-II and HalfPACT Type B Packages loaded at all shipping sites prior to shipment.
- b. an independent verification that the vent port retaining ring/insert assembly has been installed and torqued to 295 +/- 22 lb_f-ft when operating the TRUPACT-III Type B Package prior to shipment.
- c. NWP performed an internal investigation relative to human performance improvement elements for this event at both Los Alamos National Laboratory (LANL) and WIPP

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4. Corrective actions taken by the licensee:

In addition to the corrective actions described above, NWP will revise the DOE/CBFO CH Packaging Operations Manual (DOE/WIPP 02-3184) to include an independent verification and signoff of the installation of the ICV outer vent port plug and associated O-ring along with verification of the required 55 – 65 lb_f-in of torque has been applied.

5. Staff comments:

The staff (containment reviewer) reviewed documentation for the TRUPACT-II unit 154 that reflects that it passed the required pre-shipment leakage rate tests. The staff reviewed the subject report dated January 14, 2022, as described above, and finds the corrective actions that have been and will be implemented provide reasonable to prevent reoccurrence of this event. The staff did not find safety issues associated with the issue reported.

6. Staff conclusion:

- The report does NOT identify generic design or license/certificate issues that warrant additional Commission or staff action. This report is considered closed.
- There is a need to take additional action. Provide a summary of the bases and recommended actions: