

# 10 CFR 71.95 REPORT EVALUATION FORM

Docket No.: 71-9218  
Package Model No.: TRUPACT-II  
Report Submitted By: URS-Washington TRU Solutions LLC  
Report Date: June 3, 2011

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

## 3. Summary of the report:

On April 13, 2011, Inner Containment Vessel (ICV) components inspection and cleaning operations of the TRUPACT-II package No. 205 revealed that the main ICV O-ring seals were installed into the wrong grooves: the upper O-ring seal was installed in the lower seal groove while the lower O-ring seal was installed in the upper O-ring seal groove.

The ICV upper main O-ring (cross-sectional diameter of 0.4000 inches) serves as the containment seal for the package, while the ICV lower main O-ring (cross-sectional diameter of 0.375 inches) serves as a test boundary to establish a vacuum for performance of the required pre-shipment leakage rate testing.

TRUPACT-II No. 205 was assembled and the pre-shipment leakage rate test (helium) performed with the O-ring seals placed in the incorrect grooves. Since the package met applicable acceptance criteria for these tests, it was released for shipment to WIPP on April 14, 2011.

Non-compliance was discovered by WIPP personnel during receipt activities for this shipment.

Two similar events occurred on 04/14/2007 and 12/08/2007.

## 4. Corrective actions taken by the licensee:

- Operations were stopped and future shipments scheduled for departure were placed on hold.
- Applicable procedures and shipping documents were reviewed to ensure that there were no similar problems for pending shipments.

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- The Packaging Operations manual was revised to include explicit directions to ensure proper identification of the O-rings during the removal and installation processes.
- DOE Carlsbad Field Office approved changes to the procedures and verified that the increased requirements for identification of the O-rings were incorporated prior to the implementation of the applicable procedures.

## 5. Staff comments:

No components or systems failed. Personnel did not properly install the upper and lower main O-ring seals in the appropriate grooves.

There were no safety consequences and no exposures to individuals as a result of this event.

It is still unclear if the seal configuration would have met design basis leak rates or perform under HAC.

## 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:

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