



A URS-led partnership with D&W and AREVA

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November 11, 2013

ATTN: Document Control Desk  
Director, Spent Fuel Project Office  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Subject: REPORT PURSUANT TO 10 CFR 71.95

Dear Ms. Akhavannik:

Nuclear Waste Partnership (NWP) LLC, on behalf of the U.S. Department of Energy Carlsbad Field Office, submits this letter to report a condition pursuant to 10 CFR 71.95 regarding the use of the Type B packaging model number HalfPACT, serial number 513. This packaging operates under the U.S. Nuclear Regulatory Commission Certificate of Compliance (CofC) No. 9279. During a shipment of transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP) originating from the Advanced Mixed Waste Treatment Plant (AMWTP) located at Idaho National Laboratory (INL), the conditions in Section 10 of CofC No. 9279 were not followed in their entirety.

Following is a description of the event, reported in accordance with 10 CFR 71.95(c):

*(1) A brief abstract describing the major occurrences during the event, including all component or system failures that contributed to the event and significant corrective action taken or planned to prevent recurrence:*

TRU waste shipment #IN130194 originated at AMWTP bound for delivery to the WIPP in New Mexico. The shipment consisted of one tractor-trailer hauling two TRUPACT-II and one HalfPACT packages, units 130, 177 and 513 respectively. Each package contained one payload assembly. Shipment #IN130194 was designated as a 10-day controlled shipment in accordance with CH-TRU Payload Appendix 3.6 and was subject to the administrative controls identified in section 6.2.3 of the CH-TRAMPAC for transport and unloading time relative to venting of the package at the receiving site. HalfPACT 513 was not vented at the WIPP site (receiving site) in accordance with the 9 day transport and unloading time required for a 10 day controlled shipment. CofC 9279 specifies, "For close proximity and controlled shipments meeting the conditions specified in Appendices 3.5 and 3.6, respectively, of CH-TRU Payload Appendices, shipping periods of 20 days and 10 days may be applicable." A failure to fully implement the administrative controls (procedures) for HalfPACT 513 in this shipment at the receiving site resulted in the non-compliance.

IE72

There were no major occurrences during the event and no component or system failures that contributed to the event. All other conditions for this shipment were in compliance with the applicable requirements for CofC 9279. However, due to the failure to fully implement the administrative controls (procedures) for HalfPACT 513 in this shipment at the receiving site, the conditions in CofC 9279 were not followed in their entirety for this shipment.

The following interim corrective/preventive actions were implemented to preclude recurrence:

- A review was performed to identify if any additional controlled shipment packages were on site and the status of their vent times were established.
- Waste Handling Operations Management at the WIPP site implemented a "Standing Order" that requires all controlled shipments be processed (unloaded) using a "first in / first out" schedule until such time that the condition(s) that caused/contributed to the break down in the applicable administrative controls (procedures) for receipt and processing of controlled shipments has been identified and the appropriate corrective actions have been implemented.
- A daily "Senior Supervisory Watch" has been implemented to verify the status and vent times for all controlled shipments at the WIPP site until such time that the condition(s) that caused/contributed to the break down in the applicable administrative controls (procedures) for receipt and processing of controlled shipments has been identified and the appropriate corrective actions have been implemented.
- A Root Cause Analysis shall be performed to identify any factors that contributed to the failure in the administrative controls (procedures) for processing of controlled shipments at the WIPP site.

*(2) A clear, specific, narrative description of the event that occurred so that knowledgeable readers conversant with the requirements of part 71, but not familiar with the design of the packaging, can understand the complete event. The narrative description must include the following specific information as appropriate for the particular event:*

The NRC issued CofC 9279 for the HalfPACT, specifies in section 10, "For close proximity and controlled shipments meeting the conditions specified in Appendices 3.5 and 3.6, respectively, of CH-TRU Payload Appendices, shipping periods of 20 days and 10 days may be applicable.". CH-Payload Appendix 3.6 states in section 3.6.3, "The unloading time begins with the arrival of the shipment at the receiving site and ends with the venting of the ICV. Normal unloading will be accomplished in less than one day (24 hours). Section 6.2.3 of the CH-TRAMPAC outlines administrative controls imposed to ensure venting of the ICV within 9 days of shipment departure from the shipping site.

The Inner Containment Vessel (ICV) for HalfPACT 513 was sealed on 09/16/13 at 0745 hours (MST) and successfully passed the required pre-shipment leakage rate tests. Then, HalfPACT 513 which comprised a portion of shipment #IN130194 departed AMWTP on 09/16/13 at 1245 hours (MST) and was received at the WIPP site on 09/18/13 at 0135 hours (MST). The 9 day unloading time was

established as 09/25/13 at 1245 (MST) for HalfPACT 513. HalfPACT 513 was vented on 09/25/13 at 1438 hours (MST). It should be noted that the total 10-day (240 hour) time required to vent the ICV and comply with the regulatory gas generation requirements was established as 09/26/13 at (MST) and was met.

All other conditions required for the operation and shipment of the package in accordance with the CofC were adhered to.

*(2)(i) Status of components or systems that were inoperable at the start of the event and that contributed to the event;*

This criterion is not applicable to the event because there were no components or systems that were inoperable at the start of the event.

*(2)(ii) Dates and approximate times of occurrences;*

09/25/13 at 1438 hours (MST)

*(2)(iii) The cause of each component or system failure or personnel error, if known;*

No components, systems, or personnel failed.

*(2)(iv) The failure mode, mechanism, and effect of each failed component, if known:*

This criterion is not applicable to the event because no components failed.

*(2)(v) A list of systems or secondary functions that were also affected for failures of components with multiple functions;*

This criterion is not applicable to the event because no components failed.

*(2)(vi) The method of discovery of each component or system failure or procedural error;*

WIPP site Waste Handling Personnel discovered that the 9 day transport and unloading time had been exceeded during processing of HalfPACT 513.

*(2)(vii) For each human performance-related root cause, a discussion of the cause(s) and circumstances;*

No human related errors occurred.

*(2)(viii) The manufacturer and model number (or other identification) of each component that failed during the event; and*

Manufacturer and model numbers associated with component failure are not applicable because no components failed.

*(2)(ix) For events occurring during use of a packaging, the quantities and chemical and physical form(s) of the package contents.*

Package Unit 130

Payload ID 97177:

Security-Related Information  
Table Withheld Under 10 CFR 2.390

Physical and Chemical Form:

Security-Related Information  
Table Withheld Under 10 CFR 2.390

Package Unit 177

Payload ID 97118

Security-Related Information  
Table Withheld Under 10 CFR 2.390

Physical and Chemical Form:

Security-Related Information  
Table Withheld Under 10 CFR 2.390

Package Unit 513

Payload ID 97137

## Security-Related Information Table Withheld Under 10 CFR 2.390

Physical and Chemical Form:

## Security-Related Information Table Withheld Under 10 CFR 2.390

*(3) An assessment of the safety consequences and implications of the event. This assessment must include the availability of other systems or components that could have performed the same function as the components and systems that failed during the event.*

There were no systems or components that failed during the event. There were no safety consequences or implications of the event.

*(4) A description of any corrective actions planned as a result of the event, including the means employed to repair any defects, and actions taken to reduce the probability of similar events occurring in the future.*

In addition to the interim corrective actions identified in (1) above the following preventative corrective actions are planned

- Revise all applicable WIPP site Waste Handling Operation Procedures once the root cause analysis has been completed and the root cause along with contributing factors of the failure in the process has been identified.

- Waste Handling Management to perform briefing of personnel on this incident along with any required training resulting from revisions to applicable procedures.

There were no defects requiring repair associated with this event.

*(5) Reference to any previous similar events involving the same packaging that are known to the licensee or certificate holder.*

This is the only occurrence of this event

*6) The name and telephone number of a person within the licensee's organization who is knowledgeable about the event and can provide additional information.*

*T.E. Sellmer, Manager, NWP, Transportation Packaging (575) 234-7396*

*R.M. Britain, Manager, NWP, Waste Operations (575) 234-8738*

*(7) The extent of exposure of individuals to radiation or to radioactive materials without identification of individuals by name.*

There were no exposures to individuals as a result of the event.

If you have any questions or require additional information regarding this report, please contact me at (575) 234-7396.

Sincerely,



T. E. Sellmer, Manager  
Transportation Packaging

TES:jmc

cc: M. R. Brown, CBFO  
G. Hellstrom, CBFO  
D. Miehl, CBFO  
J. C. Rhoades, CBFO  
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