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Your ref: Docket No. 71-9291
Our ref: LTR-LCPT-20-08

May 19, 2020

SUBJECT: Event Report - Docket 71-9291, Certificate of Compliance USA/9291/B(U)F-96,
LIQUI-Rad (LR) Transport Unit Package

Dear Ms. Kock:

A written report is hereby submitted pursuant to 10 CFR 71.95(a)(3). The event occurred on March 26, 2020 and this report is submitted in accordance with the reporting requirements in 10 CFR 71.95(c).

The written report is for an instance in which a condition of approval in the Certificate of Compliance for Liqui-Rad (LR) Transport Unit Package (USA/9291/B(U)F-96) was not observed in making a shipment.

(1) Abstract / Background

This information is provided pursuant to 10 CFR 71.95(c)(1).

The LR Package is designed to transport Type B quantities of fissile uranyl nitrate solutions. The package uses thermal and impact limiting systems to protect the containment vessel and prevent the contents from being released. The primary structural components of the LR packaging consist of a stainless steel containment vessel, a carbon steel outer vessel and a carbon steel framing system.

The Certificate of Compliance 9291, Revision 9, Condition 6 (a) states:

6 (a) The package must be prepared for shipment and operated in accordance with the Operating Procedures in Chapter 7 of the application.

The LR Safety Analysis Report (SAR), Revision 9 addresses Preparation of Empty LRs for transport and states:

7.1.2 g. Install security seals and record their numbers.

*Electronically approved records are authenticated in the Electronic Document Management System.

- 7.3 a. After initial usage, all applicable steps set forth in Section 7.1.2 are required for Transportation of empty packaging, with the exception that the leak test required by 7.1.2 (d) can be waived if the heel contains less than A2 quantity.

(2) Narrative of the Event

This information is provided pursuant to 10 CFR 71.95(c)(2).

On March 26, 2020, at approximately 2:40 pm, Westinghouse was notified by Nuclear Fuel Services (NFS) that the tamper seals on one of the empty LR-230 containers shipped to NFS by Westinghouse had been improperly applied. The two eyelets on both sides of the lid were not engaged with the tamper seal, allowing the lid to potentially be removed without breaking the seals.

The procedure and checklist have one operator apply the tamper seal and another operator and Team Manager verify the seal number and that the tamper seal is correctly applied. There were human performance errors in the application and verification of the tamper seals.

(3) Assessment of Safety Consequences and Implications of the Event

This information is provided pursuant to 10 CFR 71.95(c)(3).

The shipment was received at NFS without incident. There was no loss of containment. The shipment was made under exclusive use. Therefore, there were no safety consequences.

(4) Corrective Actions

This information is provided pursuant to 10 CFR 71.95(c)(4).

This incident has been entered into the Westinghouse corrective action program (CAP Issue Report (IR)-2020-4142) and a causal statement has been documented. Corrective actions were identified. The following actions have been taken.

- Immediately following the event, the following shipment was checked by the process engineer and Team Manager. Photos were taken of each of the 9 packages for records and verification.
- Visual markers have been applied to the tops of the LR-230 packages to allow the operator to visually verify that the eyelets are properly lined up and that the tamper seal is properly installed. Procedure COP-836047 and control form CF-83-239 have been revised to formalize this new process for applying tamper seals.
- A discussion was held with operators to ensure clarity and understanding of the issue and corrective actions.

(5) Extent of Condition

This information is provided pursuant to 10 CFR 71.95(c)(5).

This is the only instance in recent history of the seal being incorrectly applied to the LR-230. In 2015, a similar report had to be made for an instance where the seal was not applied. Corrective actions were put in place to have an independent check of the seals. In the instance discussed in this report, the independent check was conducted, but the operator missed that the lid was not aligned and therefore that the seal was not properly applied.

(6) Contact

This information is provided pursuant to 10 CFR 71.95(c)(6).

Please contact Wes Stilwell at (803) 647-3438 for any additional information about this event.

(7) Extent of Exposure to Radiation

This information is provided pursuant to 10 CFR 71.95(c)(7).

There was no exposure to radiation due to the tamper seals not being properly applied to the shipping container.

Sincerely,

** Electronically approved*

Wes Stilwell
WESTINGHOUSE ELECTRIC COMPANY, LLC
Nuclear Fuel Transport Director

cc
Amanda Spalding, Columbia Licensing Manager, Acting
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