

MAR 14 2014

LES-14-00036-NRC

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

Louisiana Energy Services, LLC
NRC Docket No. 70-3103

Subject: 10 CFR 71.95 60 Day Report – Certificate of Compliance Condition Not Followed

References:

1. NRC Form 618, Certificate of Compliance number 9196 for package USA/9196/B(U)F-96
2. Safety Analysis Report for Model UX-30 Package Public Version dated March 2011

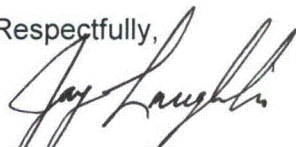
Pursuant to 10 CFR 71.95, Louisiana Energy Services, LLC (dba URENCO USA "UUSA"), herewith submits this report following discovery that shipments were performed using model UX-30 packaging that were not compliant with the certificate of compliance.

Reference 1 condition 9(b) requires each package to meet the requirements of Reference 2. Reference 2 step 8.2.1.1.A requires that weld inspections be performed by qualified NDE personnel within 12 months prior to shipment. Contrary to this requirement, UX-30 packages were included in shipments without a proper weld inspection being performed. Subsequent to the shipments, proper weld inspections were performed and no deficiencies were identified.

Details of this condition are included in Enclosure 1.

Should there be any questions concerning this submittal, please contact Timothy Knowles, UUSA Licensing and Performance Assessment Manager, at 575-394-6212.

Respectfully,



Jay Laughlin
Chief Nuclear Officer and Head of Operations

Enclosures:

1. 10 CFR 95 Transportation Package USA/9196/B(U)F-96 Report

NHSSOI

Cc with attachments:

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ENCLOSURE 1

10 CFR 95 Transportation Package USA/9196/B(U)F-96 Report

Abstract

The UX-30 is a transportation package used as an overpack to ship 30B cylinders containing uranium hexafluoride (UF₆). The package identification number is USA/9196/B(U)F-96.

On December 19, 2013 URENCO Limited Central Technology Group (CTG) inquired about the recent annual UX-30 overpack inspections, specifically weld inspections, performed by Logistics' Container Handlers at URENCO USA (UUSA). CTG requested confirmation that the Container Handlers were trained and SNT-TC-1A qualified inspectors, and were interested in the training program to enable the sharing of experiences with the other URENCO sites. As a result of this request, an investigation was initiated and it has been determined that the weld inspections required by the UX-30 Safety Analysis Report (SAR) were not performed by qualified weld inspectors as stated in Section 3.0 of the UX-30 Manual created by Columbiana Hi Tech (CHT), the manufacturer of the UX-30.

An extent of condition was performed on January 16, 2014 and has identified that there were a total of twelve (12) UX-30 overpacks that received an annual inspection of the welds by unqualified individuals. Attachment I is a summary of annual inspection and shipment dates associated with these reported UX-30 overpacks.

Once the discrepancies shown in Attachment I were identified, the annual weld inspections were then performed by qualified weld inspectors. All associated overpacks used for the shipment leaving UUSA on January 20, 2014 and following, were inspected by correctly trained and weld-certified persons. During these inspections, no weld quality issues were found.

UX-30 Weld Inspection Requirements

The UX-30 Manual states that the UX-30 package Safety Analysis Report (SAR) requires that each package must meet the Acceptance Tests and Maintenance Program of Chapter 8 of the application as supplemented and is quoted as follows.

"The primary source document for the annual inspection of the UX-30 is the UX-30 SAR, Chapter 8, with Section 8.2.1.1 through 8.2.5.2. The appropriate section regarding weld inspections is shown below.

8.2.1.1. *Visual inspection of accessible welds shall be carried out within 12 months prior to shipment in accordance with the following requirements.*

- A. Inspection Personnel: Inspection will be performed by personnel trained, examined and certified under a Quality Program having a Written Practice for the training and certification of nondestructive examination personnel".

Details

Container Handling personnel performed the weld inspections along with the other additional inspections required for the annual inspection. These annual inspections allow for transport of the UX-30 overpacks which contain and protect 30B product cylinders containing nominally 2233kg of UF₆. On August 21, 2012 Columbiana Hi Tech (CHT), manufacturer of the UX-30, performed onsite training of the entire UUSA Container Handling Group. It was during this training that a visual inspection of the welds was discussed and performed. UUSA interpreted this to mean that the Container Handlers were trained to perform the weld inspections as required.

Upon completion of the UX-30 inspection training performed by CHT personnel, Logistics personnel revised the procedure LO-3-4000-01, "Annual Overpack Inspections", to provide more concise instructions, and an associated checklist, to allow for Container Handling personnel to perform the full UX-30 annual inspection (including the weld inspection).

Investigation and Results

During investigation it has been identified that there were a total of twelve (12) UX-30 overpacks that received an annual inspection of the welds by unqualified individuals. Attachment I summarizes the annual inspection and shipment dates associated with these reported UX-30 overpacks. While the "Annual Overpack Inspections" procedure doesn't specifically identify the requirements of the weld inspector, it does state that the inspectors must be trained in accordance with the SAR. Further investigation identified that the training received by the Container Handlers does not meet the intent of Chapter 8 in the SAR. It has been determined that a human performance error resulted in the weld inspection being performed by unqualified individuals. Procedure LO-3-4000-01, "Annual Overpack Inspections", states in Step 7.3 that persons inspecting the overpacks must be trained in accordance with UX-30 Consolidated SAR. As per this procedure, the inspections are only performed annually (infrequently), making the activity uncommon. In hind sight this should have signaled the need to review the SAR to ensure proper training had been provided. Although all UX-30 weld inspections were completed prior to their annual expiration date, the inspections were completed by unqualified personnel. Since the Certificate of Compliance requires inspection per chapter 8 of the SAR, and chapter 8 of the SAR requires inspectors to be certified under a quality program, the inspections were not performed IAW the Certificate of Compliance.

The improper inspections were conducted on 12 overpacks. These overpacks were used on eight shipments resulting in thirty-two examples where an overpack was shipped without a valid weld inspection (see attachment 1).

Assessment of Safety Consequences

There was no impact on safety or product quality as a result of this event. There was also no exposure of personnel to radiation or radioactive materials involving this incident.

In all cases of shipment, the inspections were completed and documented prior to their annual expiration date, however, they were performed by unqualified personnel. The personnel involved completed all other required inspections properly, and identified no discrepancies. Following discovery of the improper weld inspections, the annual weld inspections were performed by qualified weld inspectors. These inspections did not identify any discrepancies, providing assurance that the welds were of sufficient quality during the previous shipments.

Corrective Actions

1. Upon identifying that the weld inspections were performed by unqualified personnel, an Event Report (ER) was initiated to document the incident. Operations was notified, and investigations and corrective actions were documented on the ER.
2. NDE qualified QA/QC personnel performed weld inspections for all overpacks leaving the site 1/20/14 and later.
3. LO-3-4000-01, "Annual Overpack Inspections", procedure will be revised to specify and clarify the requirements of the inspectors for the UX-30, and the welds on the UX-30. The procedure will specify that the welds are to be performed by a Level II VT-welding inspector as required by the SAR.
4. Action will be taken to review the SAR to ensure accuracy of procedures and requirements are met.

5. Lack of attention to detail involving the procedure noncompliance is considered as human performance error. The procedural steps will be identified and revised accordingly to remove any possible vulnerability associated with the annual weld inspections.
6. Present and address in the Pre-Job Brief the need to pay special attention and perform detailed planning due to the annual inspection process being a non-routine activity and performed only periodically.

Similar Events

There are no other known events of this nature involving URENCO USA. However there are similar events elsewhere in the industry as follows.

FirstEnergy Nuclear Operating Company (FENOC) submitted a report including records showing that Perry Nuclear Power Plant had made (12) Class B shipments using the 8-120B cask since 2001. During these shipments the vendor leak test procedure was required to be performed and would have resulted in a vent port seal test of 20 minutes rather than the 60 minutes as required by the cask's SAR.

Global Nuclear Fuel (GNF) made a report to the NRC, in a letter dated December 13, 2013 notifying them of instances where GNF-A made shipments of one Model UX-30 was shipped on September 11, 2013 and October 14, 2013 with a periodic weld inspection interval that exceeded 12 months.

Attachment I
Summary of Annual Inspection and Shipment Dates Associated with Reported UX-30s

Manufacturer Serial #	Ureenco Serial #	Annual Inspection Dates			UUSA 30B Product Shipment Dates						30B Heeled Return from Areva to UUSA	UUSA 30B Product Shipment Dates	
		2012	2013	2014	2013							2014	
CHT1079	UEC052	12/3/12	9/4/13	1/21/2014 *	1/25/2013 (GNF-A)	2/22/2013 (West US)	5/17/2013 (Areva)	7/26/2013 (Areva)			1/3/2014 (Areva)		
CHT1429	UEC094	8/12/12	9/4/13	1/21/2014 *	1/25/2013 (GNF-A)	2/22/2013 (West US)	5/17/2013 (Areva)	7/26/2013 (Areva)			1/3/2014 (Areva)		
CHT1430	UEC095	8/12/12	9/4/13	1/21/2014 *	1/25/2013 (GNF-A)	2/22/2013 (West US)	5/17/2013 (Areva)	7/26/2013 (Areva)			1/3/2014 (Areva)		
CHT1439	UEC104	8/12/12	9/4/13	1/21/2014 *	1/25/2013 (GNF-A)	2/22/2013 (West US)	5/17/2013 (Areva)	7/26/2013 (Areva)			1/3/2014 (Areva)		
CHT1175	5-078	8/12/12	9/4/13	1/21/2014 *	1/25/2013 (GNF-A)	2/22/2013 (West US)	5/17/2013 (Areva)	7/26/2013 (Areva)			1/3/2014 (Areva)		
CHT1061	UEC PSP 034	12/3/12	9/4/13	1/21/2014 *	1/25/2013 (GNF-A)	2/22/2013 (West US)	5/17/2013 (Areva)	7/26/2013 (Areva)			1/3/2014 (Areva)		
CHT1127	5-030	6/8/12	9/3/13	1/28/2014 *					11/18/2013 (Areva)	11/25/13		1/10/2014 (Areva)	
CHT1131	5-034	6/8/12	9/3/13	1/28/2014 *					11/18/2013 (Areva)	11/25/13		1/10/2014 (Areva)	
CHT 1052	UEC PSP 025	6/8/12	9/3/13	1/28/2014 *					11/18/2013 (Areva)	11/25/13		1/10/2014 (Areva)	
CHT1055	USC PSP 028	6/8/12	9/3/13	1/28/2014 *					11/18/2013 (Areva)	11/25/13		1/10/2014 (Areva)	
CHT1060	USC PSP 033	6/8/12	9/3/13	1/28/2014 *					11/18/2013 (Areva)	11/25/13		1/10/2014 (Areva)	
CHT1071	UEC PSP 044	5/27/11	9/4/13	1/28/2014 *					11/18/2013 (Areva)	11/25/13		1/10/2014 (Areva)	

* Proper reinspection performed per Certificate of Compliance 9196
Blue Box Inspections performed by unqualified personnel
Red Box Shipments without valid inspection within 12 months