

LES-16-000086-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

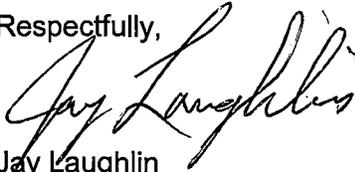
Louisiana Energy Services, LLC  
License Number: SNM-2010  
NRC Docket Number: 70-3103

Subject: 10 CFR 71.95, 60 Day Report – Certificate of Compliance Conditions not Followed

On April 9, 2016, Louisiana Energy Services, d.b.a, URENCO USA (UUSA), self-identified a non-compliance to 30B cylinder transport criteria set forth in ANSI N14.1. In accordance with 10 CFR 71.95(a)(3), UUSA is providing this written report. Enclosure 1 contains this report. Pursuant to 10 CFR 71.95(c), UUSA is also providing a copy of the report to the applicable certificate holder.

If you have any questions, please contact Salem Thyne, Licensing and Performance Assessment Manager, at 575-394-5252.

Respectfully,



Jay Laughlin  
Chief Nuclear Officer and Head of Operations

Enclosure: 1) 10 CFR 71.95 Report

NM5524

cc: w/ enclosure

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**Enclosure 1**  
**10 CFR 71.95 Report**

As required by 10 CFR 71.95, UUSA is providing responses to the following requirements.

- (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.*

On January 29, 2016, UUSA received a shipment of six 30B containers, each with a heel of enriched uranium hexafluoride (UF<sub>6</sub>). On April 9, as an operator was preparing to connect one of the cylinders to process systems, it was discovered that the valve cap on one of the cylinders had no Teflon disk (cap gasket), as would be expected. An Event Report was created in the UUSA Corrective Action Program to evaluate and create corrective actions.

The cylinders data book's Certificate of Conformance documented that the cylinders in the shipment complied with ANSI N14-1 2001 edition. Contrary to ANSI N14-1 Section 6.10, 30B Cylinder, and Figure 12, UF<sub>6</sub> Cylinder Valve 51 (1 inch), the required part, Cap Gasket (#8), was not installed prior to shipment of the cylinder to the UUSA facility.

No other cylinders in the shipment had this non-conformance.

- (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.*

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

The cylinder valve was verified to be closed prior to removing the cap. Upon cap removal, no leakage of material was noted. The cylinder was acceptable for use and was connected to process systems.

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

The cylinder was received on January 29, 2016 and the non-conformance was discovered on April 9, 2016.

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

The cause can only be speculated, but it is believed to be human error during the vendors packaging process.

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

Had the cylinder valve leaked by, there was a potential for leakage through the valve cap threads. The cylinder valve is verified shut as part of UUSA procedures. There is high confidence that no leakage occurred during shipment of the cylinder.

Cylinder was transported in a UX-30 over-pack approved per USA\_9196\_B(U)F-96 Rev32. TID's applied to this over-pack verified no tampering with the over-pack or cylinder. Receipt checks revealed no external contamination.

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

No systems or secondary functions were affected by the missing cap gasket.

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

The missing cap gasket was discovered as part of cylinder connection activities.

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

The cause of the human performance error is not known since this occurred prior to receipt at UUSA. The cylinder shipper is conducting a causal evaluation to determine the cause and extent of this non-conformance. To date, UUSA has not had this issue with any other cylinders provided by this vendor.

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

This was a 30B cylinder, manufactured in accordance with the requirements of ANSI N14-1, 2001 edition. The installed valve was a UF6 Cylinder Valve 51 as specified in ANSI N14-1, 2001 edition.

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

The cylinder contained a heel of UF6 which could not be removed by the fuel fabrication facility. The proper shipping name would be: UN2977, Radioactive Material, Uranium Hexafluoride, Fissile, Class 7(8) (Enriched to 20% or less). Packaged in metal cylinders (Type A). Physical form Solid, normal form, Heels (Net wt. Less than 25lbs ea.) packaged in USA/9196/B(U)F-06 UX-30 type B protective PSP.

- (2) *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.*

Based on procedural activities performed at UUSA, there is reasonable assurance that the 51 valve remained closed and that no leakage of material occurred during shipment of the cylinder.

- (3) *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.*

A causal analysis is being performed by the cylinder shipper which will determine the cause and associated corrective actions.

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

UUSA has no evidence of similar events related to cylinders received from this shipper.

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

If you have any questions, please contact Salem Thyne, Licensing and Performance Assessment Manager, at 575-394-5252.

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

Based on procedural activities performed at UUSA, there is reasonable assurance that the 51 valve remained closed and that no leakage of material occurring during shipment of the cylinder. As such, there was no unexpected exposure to any individuals.