

SEP 01 2011

LES-11-00125-NRC

Attn: Document Control Desk
Director
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: Written Follow-up Report for Event Notification 47131

Louisiana Energy Services, LLC (LES) is providing this letter in accordance with 10 CFR 70.74(b), which requires submittal of a written follow-up report within 30 days of the initial concurrent notification report. On August 5, 2011 Event Notification 47131 was submitted detailing an unanalyzed condition discovered at the Urenco USA site.

The reporting requirements of 10 CFR 70.74(b) are detailed in 10 CFR 70.50(c)(2). Event Notification 47121(Enclosure) 1, details Section (i) requirements of the aforementioned CFR; and the Written Follow-up Report (Enclosure 2) details Sections (ii), (iii) and (iv) requirements.

If you have any questions, please contact Perry Robinson, Acting Licensing Manager, at 575-394-6598.

Respectfully,



David E. Sexton,
Chief Nuclear Officer and Vice President of Operations

Enclosures: 1. Event Notification 47131
2. Written Follow-up Report

IE72

NMSS

cc:

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ENCLOSURE 1

Event Notification 47131

Comments on Event Notification

I. Applicable information required by 10CFR70.50(c)(1)

a. Updates to Event Notification 47131

i. The condition description previously stated:

A criticality anomalous event was declared at approximately 4:30pm, in accordance with CR-3-1000-04, based on a violation of Nuclear Criticality Safety (NCS) guidelines and procedural requirements.

This statement has been revised to read:

A criticality anomalous even was declared due to the apparent non-conformance of Nuclear Criticality Safety Guidelines and procedural compliance.

ii. In response to 10CFR70.50(c)(1)(iii)(A) the report previously stated:

Potential Uranium 235 contaminated PFPE oil ampules in a solid state.

This statement has been revised to read:

All material was contained and no released occurred before or after the discovery of the condition.

Procedure Title: Notifications and Condition Reporting

**Attachment 2
Condition Notification Worksheet
(Pages 42 to 42)**

LS-3-1000-05
Rev. 4
Level 3 - Information Use
Page 42 of 44

Name: Kevin Slavings		Position Title: Shift Manager	Phone Number: 575.394.6175
Condition Date: 8/05/2011	Condition Time: 1630 hours MDT	Exact Location of Condition: Separations Building Module 1001, Mass Spec Room	

Condition Description: During the morning of 8/05/2011, Radiation Protection personnel discovered potentially contaminated waste being stored in an unmarked container in the mass spec room. Radiation Protection Management and Criticality Safety personnel were notified. Upon learning at 4:30pm, the unmarked container was not a safe by design container, a criticality anomalous condition was declared at approximately 4:30pm, in accordance with CR-3-1000-04, based on a violation of Nuclear Criticality Safety (NCS) guidelines and procedural requirements. Thus, at 4:30pm, a cognizant individual was notified of the potential safety significant condition and, therefore, understood the condition could adversely impact safety. This report is being submitted as a conservative measure as the volume of waste, mostly gloves and wipes, was much less than 12L and could easily fit into a Safe By Design (SBD) container. The material that could be surveyed was cleared as non-radioactive material, and placed in a clean waste container. The material that could not be surveyed was transferred to a SBD container pending further analysis. The initial analysis of the material placed in the SBD container did not indicate the presence of any trace uranic material. At no time was there ever a concern of imminent criticality or for the health and safety of workers at URENCO USA.

- (1) Radiological or chemical hazards involved, including isotopes, quantities, and chemical and physical form of any material released

Potential Uranium 235 contaminated PFPE oil ampules in a solid state

- (2) Actual or potential health and safety consequences to the workers, the public, and the environment, including relevant chemical and radiation data for actual personnel exposures to radiation or radioactive materials or hazardous chemicals produced from licensed materials (e.g., level of radiation exposure, concentration of chemicals, and duration of exposure);

None. Radiological surveys were taken on the material in the container. No radiation levels or contamination levels were noted above background. All of the material, except for 4 ampules, were released as non-radioactive. Although the ampules did not have radiation levels above background, there was a slight potential for a trace level of uranic contamination.

- (3) The sequence of occurrences leading to the Condition, including degradation or failure of structures, systems, equipment, components, and activities of personnel relied on to prevent potential accidents or mitigate their consequences; and

One 24 Liter container was placed in the mass spec room. Instead of a 24 Liter container, a 12 Liter safe by design container should have been utilized. Chemistry personnel used the 24 Liter container to store potentially radioactive material. The actual quantity of material in the 24 Liter container was less than 12 Liters. Personnel should not have used the 24 Liter container to store potentially radioactivity contaminated material. This was a violation of site procedure RW-1003-09, Rev. 5.

- (4) Whether the remaining structures, systems, equipment, components, and activities of personnel relied on to prevent potential accidents or mitigate their consequences are available and reliable to perform their function;

The structures, systems, equipment, components, and activities of personnel relied on to prevent potential accidents or mitigate their consequences are available and reliable to perform their function

- (5) External conditions affecting the Condition;

None

Procedure Title: Notifications and Condition Reporting

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LS-3-1000-05
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Page 43 of 44

Name: Kevin Slavings	Position Title: Shift Manager	Phone Number: 575.394.6175
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Condition Date: 8/05/2011	Condition Time: 1630 hours	Exact Location of Condition: Separations Building Module 1001, Mass Spectrometry Room
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Condition Description:

(6) Additional actions taken by the licensee in response to the Condition;

Radiation Protection Technician notified her supervisor who notified criticality safety, who then notified the shift manager. The 24 Liter container was removed from the mass spec room. Radiological surveys were taken and all material released as clean except for 4 potentially contaminated ampules. Initial surveys did not find radiation levels above background on the 4 ampules. The 4 potentially contaminated ampules were placed into a 12 Liter safe by design container until they undergo a final analysis to determine if they contained trace uranic material or not. Actions have been initiated to establish a waste accumulation area in the mass spec room in accordance with RW-3-1000-09. Meetings have been set up with Chemistry personnel to review control of potentially contaminated material. The Criticality Safety Officer generated Condition Report 2011-2560 – Use of non-SBD Container to collect potentially uranic contaminated waste.

(7) Status of the Condition (e.g., whether the Condition is on-going or was terminated);

The condition is not ongoing as the material has been placed in a safe by design container.

(8) Current and planned site status, including any declared emergency class;

Plant is operational; condition is non-emergency

(9) Notifications, related to the Condition, that were made or are planned to any local, State, or other Federal agencies;

None

(10) Status of any press releases, related to the Condition that were made or are planned.

None

Regulatory Agency Contacted: Nuclear Regulatory Agency	Date: 8/06/2011	Time: 1322 EST
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Regulatory Contact: CARL DIEDRICH	Report Number: 47131
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ENCLOSURE 2

Written Follow-up Report

Follow-up Report

I. Applicable information required by 10 CFR 70.50(c)(2)

- a. The probable cause of the event, including all factors that contributed to the event and the manufacturer and model number (if applicable) of any equipment that failed or malfunctions is provided below:

On August 8, 2011, during a Corrective Action Program Screening Committee (CAPSC) meeting, CR 2011-2560 was assigned to Criticality Safety with a Level 3 significance requiring an Apparent Cause Evaluation (ACE) with a Corrective Action Review Board (CARB). A level 3 significance level describes an adverse condition of lower importance, which is the lowest classification of a condition adverse to quality. CAPSC assigned this level of significance in accordance with CA-3-1000-01, Performance Improvement Program.

The ACE for CR-2011-2560 was conducted in accordance with CA-3-1000-02, Apparent Cause Evaluation Guidelines. The following are the probable causes as determined by the ACE.

i. Apparent Cause (AC):

1. AC-1 Rule-Based Errors due to miscommunication:

Due to the use of verbal communications to request the SBD container, Chemistry made assumptions that the SBD was needed due to the potential for uranium contamination in the waste. Recycling personnel made the assumption that the SBD container was needed, not due to potential contamination in the waste, but due to space limitations in the room. These two differing assumptions as to the basis for the need for an SBD container resulted in the radiological waste collection area not being set up in accordance with RW-3-1000-09.

ii. Contributing Causes (CC):

1. No Formal Process to Control the Issuance of SBD Containers:

A formal process for the issuance of SBD containers is needed, such that the waste constituents can be clearly and formally documented prior to the issuance of a container, or the set up of a waste collection area. The formal request should include inter-discipline reviews to ensure all requirements; including labeling requirements are identified and met prior to issuance of the containers.

2. Lack of Container Labeling:

Specific procedures are in place for radioactive material container labeling, and for hazardous material labeling. However, all containers in use need to be labeled to denote the contents, including limitations on the contents, consistent with the requirements of Step 5.2.3 of RW-3-1000-09. The specific labeling requirements should be based on inter-discipline input.

- b. Corrective actions taken or planned to prevent occurrence of similar or identical events in the future and the results of any evaluations or assessments are:

- i. Corrective Action to Minimize Recurrence:
 - 1. Revise RW-3-1000-09 to implement a formal process for the issuance of waste containers that will ensure inter-discipline reviews, clear identification of container criteria, intended use, potential contents, and labeling requirements. The formal request should include inter-discipline reviews to ensure all requirements; including labeling requirements are identified and met prior to issuance of the containers.
 - 2. Revise RW-3-1000-09, to require labeling for all waste containers, such that the waste constituents can be clearly and formally documented prior to the issuance of a container, or the set up of a waste collection area.
- ii. Other Corrective Actions (Program Improvements):
 - 1. Perform a Training Needs Assessment, based on program updates and the implementation of the formal waste container process.
 - 2. Update Waste Generator Training for consistency with programmatic documents, and to incorporate the formal waste container process, and based on the Training Needs Assessment.
 - 3. CH-4-1000-02, Laboratory Safety and Chemical Hygiene Plan, needs to be updated to implement or reference waste handling steps.
 - 4. Provide training to all potential Waste Generators, Waste Handling Technicians and Radiation Protection personnel on updated training and procedures.
 - 5. Provide mentoring and coaching to direct reports pertaining to effective communications methods.
 - 6. Evaluate NCS-CSE-022, Revision 1 and the corresponding analyses to ensure that the inadvertent use of a non-SBD container is analyzed.
- c. UUSA NEF is subject to Subpart H of 10 CFR 70; therefore, a discussion of whether the condition was identified and evaluated in the Integrated Safety Analysis (ISA) is provided below:
 - i. The ISA contains analyses that identify and evaluate two safe storage configurations of potentially contaminated waste. The first configuration is a SBD container that is, by definition, safe by physical geometry and is used in conjunction with local enrichment controls. The second configuration is a 55 gallon drum that involves the use of mass inventory controls and is used in conjunction with local enrichment controls. By procedure, both of these configurations require the use of controlled and serialized containers, and both provide double contingency protection for criticality safety. The ISA neither identifies nor does it evaluate a condition in which personnel initially store potentially contaminated waste material in non-SBD containers without mass inventory controls.
 - ii. Relevant anomalous sequences and conditions identified in the ISA are as follows; 1) Movement of material from a SBD container to a non-SBD container without mass inventory controls, 2) SBD

configuration is compromised due to events external to the container.
These are not applicable to the condition described in this report.