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**LOST CREEK ISR, LLC****WYOMING OFFICE**

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July 18, 2017

Information Systems Manager
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Office of Hazardous Materials Safety DHM-63
Washington, D.C. 20590-0001

AND

ATTN: Document Control Desk

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

40-9068

**RE: Hazardous Materials Incident Report Submittal for the Lost Creek ISR Project for DOT
Report Number 1181739 on June 20, 2017.
Lost Creek ISR Project SUA-1598**

To Whom It May Concern,

This report has been submitted in conjunction with the incident report to the National Response Center (#1181739) in accordance with 49 CFR 171.15 and 171.16 for the Lost Creek ISR Project for an incident involving the minor spill of Class 7 material. Although the conditions of this event do not require notification as described in the "Guide for Preparing Hazardous Materials Incidents Reports", notification had already commenced prior to that determination. Therefore, this report fulfills the requirement for 30 day post incident reporting. The event occurred during loading of a contract carrier trailer that was not connected to a power unit since the power unit was not scheduled to arrive for transport until two days later at which time all loading operations would have been completed. Nonetheless, the following is a summary of the incident that occurred on June 20, 2017.

The incident occurred at the Lost Creek ISR Project facility during the loading of drums into a contract carrier conveyance (53 foot enclosed cargo trailer) via forklift fitted with a drum carrying apparatus. The Heath Physics Technician (HPT) and two maintenance workers were involved in the loading operation of packaged uranium yellowcake (U_3O_8 , 1A2 drums, Lot # LC-060D). The forklift operator (maintenance worker certified on forklift) was positioning a drum between the trailer wall and another loaded drum with the forklift when the drum carrying apparatus accidentally struck

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NM5501

IE72
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the adjacent drum causing a rupture. Yellowcake within the drum was released and a small amount spilled onto the trailer deck. The linear rupture was approximately 2-3 inches at the approximate midpoint of the side of the drum. See attached **Figures 1 and 2**.

The ruptured package was drum #33, with a gross weight of 871.5 lbs, and a net weight of yellowcake of 828.5 lbs. This barrel was the seventh (7th) barrel loaded and the incident occurred while loading and positioning the eighth (8th) barrel on the conveyance. The Radiation Safety Officer (RSO) and HPT were contacted immediately after the spill. The breach was immediately covered with adhesive tape by the maintenance worker under the supervision of the HPT to prevent any additional spillage. The RSO estimated a maximum total of 0.5 lbs of yellowcake spilled in the trailer. The spill occurred at approximately 1045 hrs inside of the trailer. The contract carrier was not on-site during loading, the incident, or during the cleanup process.

Notification to the National Response Center was made via telephone at approximately 1230 hrs. Notification was also made to the Nuclear Regulatory Commission Project Manager via phone and email that afternoon. The RSO and HPT conducted cleanup as authorized by a Radiation Work Permit at approximately 1300 hrs. Air samples for potential dose estimates were collected starting at approximately 1230 hrs. Calculated dose results from the air samples showed no significant dose (all <100mrem 24hr) and the results were reported to NRC Operations Center and NRC Region IV. No additional notifications were required under 10 CFR 20.2202 and 2203 as a result.

The trailer was completely unloaded on June 21, 2017 to allow for contamination surveys to be completed. Upon determination that no contamination remained, the trailer was loaded with the full shipment. On June 22, 2017, the contract carrier arrived with the power unit and hauled the trailer.

Corrective actions and reporting includes the following:

- Provide a spotter within the trailer during loading as feasible and only if it is safe to do so.
- Evaluate different types of drum carrying apparatus for the forklift to determine if there is a more appropriate style of drum carrier.
- Provide a 30 day report to DOT PHMSA (49 CFR 171.16) and NRC Headquarters (NRC License Condition 11.6)

If you have any questions regarding this report or require additional information please contact me at the Casper office.

Sincerely,



Michael D. Gaither
Manager EHS and Regulatory Affairs
Ur-Energy USA, Inc

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Attachments: **Figure 1: Drum Detail**
Figure 2: Spill View
Form DOT F 5800.1

Cc: Deputy Director
Division of Decommissioning, Uranium Recovery and Waste Programs
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Mail Stop T-8F5
11545 Rockville Pike, Two White Flint North
Rockville, MD 20852-2738
John Saxton, NRC (via email)
Nancy Williams, WDEQ-LQD, Lander (via email)
Theresa Horne, Ur-Energy, Littleton (via email)

Figure 1: Drum Detail

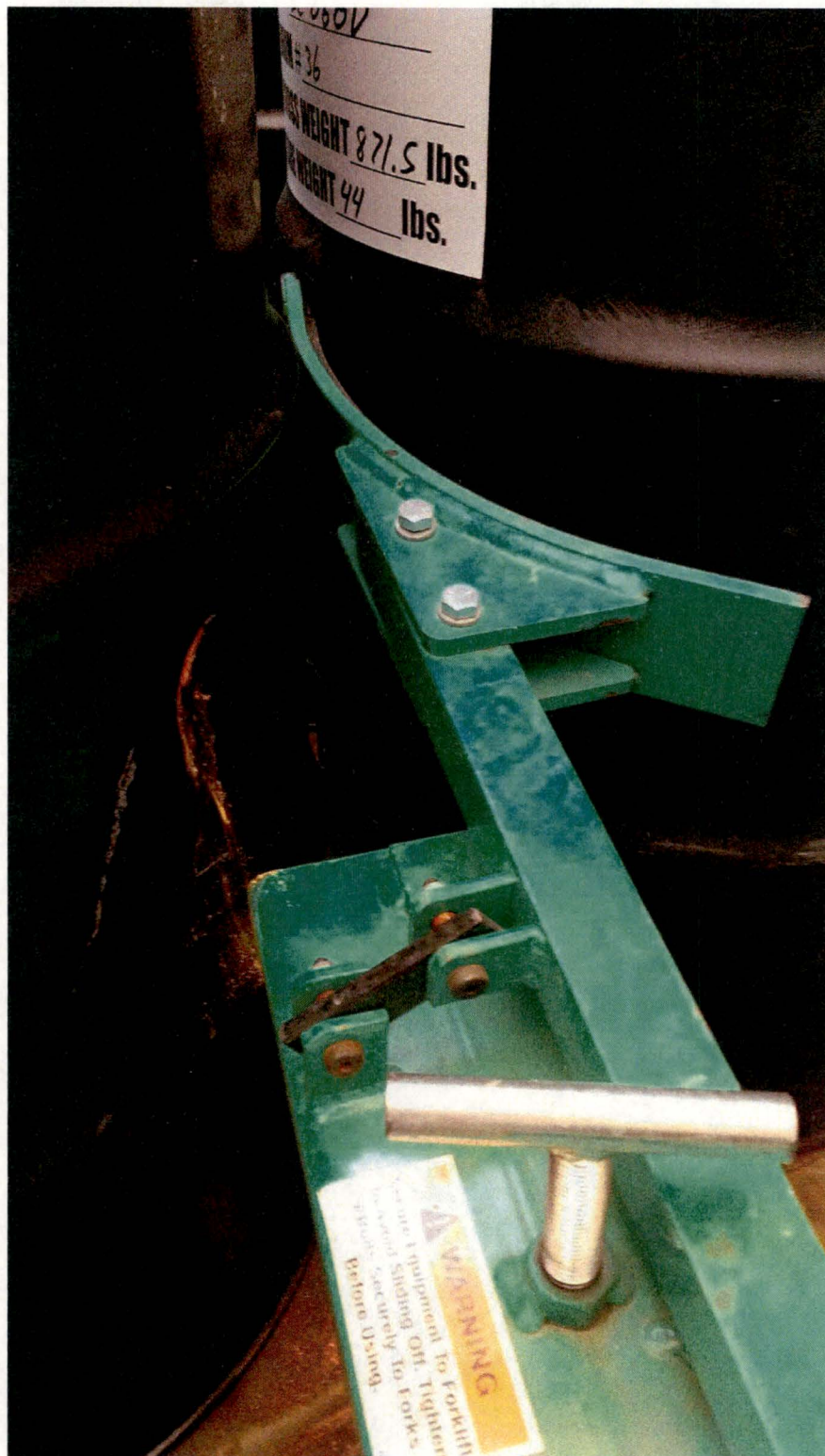


Figure 2: Spill View





Hazardous Materials Incident Report

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 2137-0039. The filling out of this information is mandatory and will take 96 minutes to complete.

INSTRUCTIONS: Submit this report to the Information Systems Manager, U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Hazardous Materials Safety, DHM-63, Washington, D.C. 20590-0001. If space provided for any item is inadequate, use a separate sheet of paper, identifying the entry number being completed. Copies of this form and instructions can be obtained from the Office of Hazardous Materials Website at <http://hazmat.dot.gov>. If you have any questions, you can contact the Hazardous Materials Information Center at 1-800-HMR-4922 (1-800-467-4922) or online at <http://hazmat.dot.gov>.

PART I - REPORT TYPE

1. This is to report: ☒ A) A hazardous material incident ☐ B) An undeclared shipment with no release
☐ C) A specification cargo tank 1,000 gallons or greater containing any hazardous materials that
(1) received structural damage to the lading retention system or damage that requires repair to a system
intended to protect the lading retention system and (2) did not have a release.
2. Indicate whether this is: ☐ An initial report ☒ A supplemental (follow-up) report ☐ Additional Pages

PART II - GENERAL INCIDENT INFORMATION

3. Date of Incident: 06/20/2017 4. Time of Incident (use 24-hour time): 10:45
5. Enter National Response Center Report Number (if applicable): 1181739
6. If you submitted a report to another Federal DOT agency, enter the agency and report number: _____
7. Location of Incident: City: Wamsutter County: Sweetwater State: WY ZIP Code (if known): 82336
Street Address/Mile Marker/Yardname/Airport/Body of Water/River Mile 3424 Wamsutter-Crooks Gap Road
8. Mode of Transportation ☐ Air ☒ Highway ☐ Rail ☐ Water
9. Transportation Phase ☐ In Transit ☒ Loading ☐ Unloading ☐ In Transit Storage
10. Carrier/Reporter Name Ur-Energy USA, Inc.
Street 5800 Enterprise Dr Suite 200
City Casper State WY ZIP Code 82609
Federal DOT ID Number _____ Hazmat Registration Number _____
11. Shipper/Officer Name Lost Creek ISR, LLC
Street 3424 Wamsutter-Crooks Gap Road
City Wamsutter State WY ZIP Code 82336
Waybill/Shipping Paper _____ Hazmat Registration Number _____
12. Origin (if different from shipper address) Street _____
City _____ State _____ ZIP Code _____
13. Destination Street _____
City _____ State _____ ZIP Code _____
14. Proper Shipping Name of Hazardous Material: Radioactive material, low specific activity (LSA-I) non fissile or fissile-except
15. Technical/Trade Name: Uranium oxides (yellowcake)
16. Hazardous Class/ Division: 7 17. Identification Number: UN2912 (E.g. UN2764, NA 2020) 18. Packing Group: _____ (if applicable) 19. Quantity Released: 0.5 lbs (Include Measurement Units)
20. Was the material shipped as a hazardous waste? ☐ Yes ☒ No If yes, provide the EPA Manifest Number: _____
21. Is this a Toxic by Inhalation (TIH) material? ☐ Yes ☒ No If yes, provide the Hazard Zone: _____
22. Was the material shipped under an Exemption, Approval, or Competent Authority Certificate? ☐ Yes ☒ No
If yes, provide the Exemption, Approval, or CA number: _____
23. Was this an undeclared hazardous materials shipment? ☐ Yes ☒ No

PART III - PACKAGING INFORMATION

24. Check Packaging Type (check only one - if more than one, list type of packaging, copy Part III, and complete for each type:

- | | | | |
|--|------------------------------|--|--------------------------------------|
| <input checked="" type="checkbox"/> Non-bulk | <input type="checkbox"/> IBC | <input type="checkbox"/> Cargo tank Motor Vehicle (CTMV) | <input type="checkbox"/> Tank Car |
| <input type="checkbox"/> Cylinder | <input type="checkbox"/> RAM | <input type="checkbox"/> Portable Tank | <input type="checkbox"/> Other _____ |

25. See instructions and enter the appropriate failure codes found at the end of the instructions. Be sure to enter the codes from the list that corresponds to the particular packaging type checked above. Enter the number of codes as appropriate to describe the incident. Enter the most important failure point in line 1. If there are more than two failure points, provide in this format in part VI.

1. What Failed: <u>1</u> <u>0</u> <u>4</u>	How Failed: <u>3</u> <u>0</u> <u>9</u>	Causes of Failure: <u>5</u> <u>1</u> <u>3</u>
2. What Failed: _____	How Failed: _____	Causes of Failure: _____

26a. Provide the packaging identification markings, if available.

Identification Markings: _____

(Examples: 1A1/Y1.4/150/92/USA/RB/93/RL, UN311H1/Y0493/USA/M9339/10800/1200, DOT - 105A - 100W (RAIL), DOT 406 (HIGHWAY), DOT 51, DOT 3-A)

26b. For Non-bulk, IBC, or non-specification packaging, if identification markings are incomplete or unavailable, see instructions and complete the following:

Single Package or Outer Packaging:

Packaging Type: 1A2 Drum

Material of Construction: Steel

Head Type (Drums only): ☒ Removable ☐ Non - Removable

Single Package or Inner Packaging (if any):

Packaging Type: _____

Material of Construction: _____

27. Describe the package capacity and the quantity:

Single Package or Outer Packaging:

Package Capacity: 55 gal

Amount in Package: 828.5 lbs net wt

Number in Shipment: 8 at the time

Number Failed: 1

Single Package or Inner Packaging (if any):

Package Capacity: _____

Amount in Package: _____

Number in Shipment: _____

Number Failed: _____

28. Provide packaging construction and test information, as appropriate:

Manufacturer: _____

Manufacture Date: _____

Serial Number: _____

Last Test Date: _____

Material of Construction: _____ (if Tank Car, CTMV, Portable Tank, or Cylinder)

Design Pressure: _____ (if Tank Car, CTMV, Portable Tank)

Shell Thickness: _____ (if Tank Car, CTMV, Portable Tank)

Head Thickness: _____ (if Tank Car, CTMV)

Service Pressure: _____ (if Cylinder)

If valve or device failed:

Type: _____	Manufacturer: _____	Model: _____
	(if present and legible)	(if present and legible)

29. If the packaging is for Radioactive Materials, complete the following:

Packaging Category: ☐ Type A ☐ Type B ☐ Type C ☐ Excepted ☒ Industrial

Packaging Certification: ☐ Self Certified ☐ U.S. Certification Certification Number _____

Nuclide(s) Present: Uranium, natural Transport Index: _____

Activity: _____ Critical Safety Index: _____

PART IV - CONSEQUENCES

30. Result of Incident (check all that apply): ☒ Spillage ☐ Fire ☐ Explosion ☐ Material Entered Waterway/Storm Sewer
☐ Vapor (Gas) Dispersion ☐ Environmental Damage ☐ No Release

31. Emergency Response: The following entities responded to the incident: (Check all that apply)

☐ Fire/EMS Report # _____ ☐ Police Report # _____ ☒ In-house cleanup ☐ Other Cleanup

32. Damages: Was the total damage cost more than \$500? ☐ Yes ☒ No

If yes, enter the following information: If no, go to question 33.

Material Loss: _____ Carrier Damage: _____ Property Damage: _____ Response Cost: _____ Remediation/Cleanup Cost: _____
\$ _____ \$ _____ \$ _____ \$ _____ \$ _____

(See damage definitions in the instructions)

33a. Did the hazardous material cause or contribute to a human fatality? ☐ Yes ☒ No

If yes, enter the number of fatalities resulting from the hazardous material:

Fatalities: _____ Employees _____ Responders _____ General Public _____

33b. Were there human fatalities that did not result from the hazardous material? ☐ Yes ☒ No If yes, how many? _____

34. Did the hazardous material cause or contribute to personal injury? ☐ Yes ☒ No

If yes, enter the number of injuries resulting from the hazardous material:

Hospitalized (Admitted Only): _____ Employees _____ Responders _____ General Public _____

Non-Hospitalized: _____ Employees _____ Responders _____ General Public _____

(e.g.: On site first aid or Emergency Room observation and release)

35. Did the hazardous material cause or contribute to an evacuation? ☐ Yes ☒ No

If yes, provide the following information:

Total number of general public evacuated _____ Total number of employees evacuated _____ Total Evacuated _____

Duration of the evacuation _____ (hours)

36. Was a major transportation artery or facility closed? ☐ Yes ☒ No If yes, how many? _____ (hours)

37. Was the material involved in a crash or derailment? ☐ Yes ☒ No

If yes, provide the following information: Estimated speed (mph): _____ Weather conditions: _____

Vehicle overturn? ☐ Yes ☐ No

Vehicle left roadway/track? ☐ Yes ☐ No

PART V - AIR INCIDENT INFORMATION (please refer to § 175.31 to report a discrepancy for air shipments)

38. Was the shipment on a passenger aircraft? ☐ Yes ☒ No

If yes, was it tendered as cargo, or as passenger baggage?

☐ Cargo ☐ Passenger baggage

39. Where did the incident occur (if unknown, check the appropriate box for the location where the incident was discovered)?

☐ Air carrier cargo facility ☐ Sort center ☐ Baggage area
☐ By surface to/from airport ☐ During flight ☐ During loading/unloading of aircraft

40. What phase(s) had the shipment already undergone prior to the incident? (Check all that apply)

☐ Shipment had not been transported ☐ Transported by air (first flight) ☐ Transport by air (subsequent flights)
☐ Initial transport by highway to cargo facility ☐ Transfer at sort center/cargo facility

PART VI - DESCRIPTION OF EVENTS & PACKAGE FAILURE

Describe the sequence of events that led to the incident and the actions taken at the time it was discovered. Describe the package failure, including the size and location of holes, cracks, etc. Photographs and diagrams should be submitted if needed for clarification. Estimate the duration of the release, if possible. Describe what was done to mitigate the effects of the release. Continue on additional sheets if necessary.

See attached letter report.

PART VII - RECOMMENDATIONS/ACTIONS TAKEN TO PREVENT RECURRENCE

Where you are able to do so, suggest or describe changes (such as additional training, use of better packaging, or improved operating procedures) to help prevent recurrence. Provide recommendations for improvement to hazardous materials transportation beyond the control of your individual company. Continue on additional sheets if necessary.

See attached letter report.

PART VIII- CONTACT INFORMATION

Contact's Name (Type or Print): Michael Gaither

Telephone Number: () (307) 265-2373

Contact's Title: Manager EHS and Regulatory Affairs

Fax Number: () (307) 265-2801

Business Name and Address: Ur-Energy USA, Inc.
5880 Enterprise Dr. Suite 200, Casper WY 82609

Hazmat Registration Number (if not already provided):

E-mail Address: mike.gaither@ur-energy.com

Date: _____

Preparer is:

☐ Carrier

☒ Shipper

☐ Facility

☐ Other _____

SUBMIT