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## LOST CREEK ISR, LLC

April 10, 2015

Document Control Desk  
Nuclear Regulatory Commission  
Washington, D.C. 20555-001

### Re: Spill Report "HH1-8 Trunk" Lost Creek ISR Project SUA-1598

Dear Mr. Saxton,

Pursuant to License Condition 11.6, Lost Creek ISR, LLC ("LCI") hereby provides a written report detailing a release of injection fluid that was reportable to the Wyoming Department of Environmental Quality. Using the spill report webpage, LCI notified WDEQ of the spill on March 11, 2015 (Incident ID 1503116-161137). Additionally, LCI notified WDEQ-LQD (Brian Wood) and NRC (John Saxton and Linda Gersey) of the release via email on the same day it was reported to the WDEQ. Spill volume was estimated to be approximately 915 gallons. The release originated from a break in the injection trunk line to HH1-8 and was located just north of HH1-8 in T25N R92W Section 18, SE qtr-qtr of the SE qtr and is shown on **Figure 1** attached.

The release of injection fluid was discovered immediately by a Wellfield Operator at approximately 0447hrs on March 11, 2015 originating from the trunk line associated with Header House 1-8 (HH1-8). The Operator noticed water surfacing just north of HH1-8 and the water flow was immediately shut off. The determination of cause was a break in the polyethylene (poly) pipeline due to failure of a fusion-welded joint. The release occurred for approximately 3 minutes prior to discovery. The estimate of release volume of 915 gallons was determined by the maximum potential flow rate (183 gpm) and duration of flow (5 min). There was very little infiltration of fluid into the ground due to icy conditions. The concentration of uranium in the injection fluid at the time of release was 1.2 ppm. Soil samples were collected for analysis of uranium and Ra-226 the results of which are pending.

Immediate corrective action included:

- Emergency shutdown of HH1-8 to stop the release.
- The line was excavated and repaired the same day.

Other corrective actions include:

- Tests have been conducted on the fusion equipment and fusion weld procedure in a controlled environment. The equipment and procedures were deemed acceptable.

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- Post weld tests have been conducted on segments of pipe in a controlled environment. The welds have been deemed acceptable.
- It is theorized that environmental conditions in the field at which some welds may have been performed could have contributed to a substandard weld. Procedures will be adjusted to describe the additional measures for performing a fusion weld on polyethylene pipe in extreme temperature conditions in accordance with manufacturers' (for both HDPE pipe and fusion equipment) recommendation. Procedure edits will be incorporated by April 30, 2015.

If you have any questions regarding this letter or require additional information please feel free to contact me at the Casper Office.

Sincerely,



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

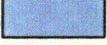


Attachments: **Figure 1: HH1-8 Trunk**

Cc: John Saxton, NRC Project Manager  
U.S. Nuclear Regulatory Commission  
Mail Stop T-8F5  
11545 Rockville Pike  
Rockville, MD 20852  
Linda Gersey, NRC Inspector (via e-mail)  
Brian Wood, WDEQ-LQD (via e-mail)  
Theresa Horne, Ur-Energy, Littleton (via e-mail)

**FIGURE 1:**  
**HH1-8 Trunk**  
**March 11, 2015**



**Lost Creek ISR**  
**Casper, Wyoming**

-  Release Area
-  Section
-  Roads

