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LOST CREEK ISR, LLC

WYOMING OFFICE
5880 ENTERPRISE DR., STE. 200
CASPER, WY 82609
TEL: (307) 265-2373
FAX: (307) 265-2801

February 27, 2017

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, MD 20852

**Re: Submittal of KM and LC East Amendments
NRC License SUA-1598, Docket 040-09068, BLM WYW-166318**

To Whom It May Concern:

With this letter, Lost Creek ISR, LLC is submitting two applications, referred to as the KM Amendment and the LC East Amendment, to amend the Lost Creek NRC License for the Lost Creek in situ uranium facility in Sweetwater County, Wyoming.

The KM Amendment application seeks approval to recover uranium via the in situ technique from the KM Horizon and increase the aerial extent of mining in the HJ Horizon all while remaining in the footprint of the previously approved Lost Creek area. Since the area is not changing, much of the environmental baseline data collected in 2006 and 2007 to support the original license application is still valid and can be relied upon for this application. When inclusion of previously reviewed and approved baseline data is duplicative, the KM Amendment simply references the original application. The KM Amendment document focuses mainly on the hydrology and geology of the KM Horizon since it was not fully characterized in previous submittals. The Operations and Reclamation Plans, required by BLM, are included in the LC East Amendment since these plans must consider all activities as a whole.

The main objective of the LC East Amendment application is to seek approval to recover uranium via the in situ technique from both the KM and HJ Horizons within the LC East area. The application also has secondary objectives as follow:

Lost Creek ISR, LLC is a wholly-owned subsidiary of Ur-Energy Inc.
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NMSSDI

Re: Submittal of LC East and KM Amendments

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1. Increase the overall wellfield production rate to 1.2 million pounds U_3O_8 per year (measured as dried U_3O_8 without contaminants). The total production from the facility plant would not exceed 2.2 million pounds of U_3O_8 per year (facility wellfields plus toll processing of slurry and/or resins).
2. Present Operations and Reclamation Plans for the entire project; inclusive of the previously approved Lost Creek application, KM Amendment and LC East Amendment.

Neither of these amendment requests seek to conform the state approved and NRC approved methods for calculating upper control limits.

If you have any questions regarding this submittal, please feel free to call me at our Casper office.

Sincerely,



John W. Cash, Vice President

Attachments: *KM Amendment Technical Report consisting of one volume*
KM Amendment Environmental Report consisting of one volume
LC East Amendment Technical Report consisting of five volumes
LC East Amendment Environmental Report consisting of two volumes
Form 313

Cc: Mrs. Theresa Horne, Ur-Energy Littleton Office, electronic copy
Mr. John Saxton, NRC
Mrs. Annette Treat, BLM Rawlins Field Office

Lost Creek ISR, LLC is a wholly-owned subsidiary of Ur-Energy Inc.

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(06-2016)
10 CFR 30, 32, 33, 34
35, 36, 37, 39, and 40



APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the FOIA, Privacy, and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

INSTRUCTIONS: SEE THE CURRENT VOLUMES OF THE NUREG-1556 TECHNICAL REPORT SERIES ("CONSOLIDATED GUIDANCE ABOUT MATERIALS LICENSES") FOR DETAILED INSTRUCTIONS FOR COMPLETING THIS FORM: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/>. SEND TWO COPIES OF THE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

MATERIALS SAFETY LICENSING BRANCH
DIVISION OF MATERIAL SAFETY, STATE, TRIBAL AND RULEMAKING PROGRAMS
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,

SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PA 19406-2713

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING,

SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
1600 E. LAMAR BOULEVARD
ARLINGTON, TX 76011-4511

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- A. NEW LICENSE
- B. AMENDMENT TO LICENSE NUMBER SUA-1598
- C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

Lost Creek ISR, LLC,
5880 Enterprise Drive, Suite 200
Casper, WY 82609

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

3424 Wamsutter Crooks Gap Rd, Bairoil, WY 82322

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

John Cash

BUSINESS TELEPHONE NUMBER

(307) 265-2373

BUSINESS CELLULAR TELEPHONE NUMBER

(307) 267-7003

BUSINESS EMAIL ADDRESS

john.cash@ur-energy.com

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

- a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

10. RADIATION SAFETY PROGRAM.

9. FACILITIES AND EQUIPMENT.

11. WASTE MANAGEMENT.

12. LICENSE FEES (Fees required only for new applications, with few exceptions*)

(See 10 CFR 170 and Section 170.31)

*Amendments/Renewals that increase the scope of the existing license to a new or higher fee category will require a fee.

FEE CATEGORY

n/a

AMOUNT ENCLOSED \$

0.00

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 37, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER -- TYPED/PRINTED NAME AND TITLE

John W. Cash

SIGNATURE

DATE

2/27/17

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

ATTACHMENT TO NRC FORM 313, "APPLICATION FOR MATERIAL LICENSE"

LOST CREEK ISR, LLC APPLICATION

February 27, 2017

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

The Project location includes portions or the entirety of Sections 13 and 23 to 26 of Township 25 North, Range 93 West, and Sections 1 to 3, 10 to 12, 14 to 23 and 27 to 31 of Township 25 North, Range 92 West; see also Plate OP-2a and 2b of the attached Operations Plan. The physical address used by emergency responders is 3424 Wamsutter Crooks Gap Rd. Approximately 15 miles southwest of Bairoil, Wyoming in Sweetwater County.

5. RADIOACTIVE MATERIAL

- a. Natural Uranium (U-238, 235 and 234) in any chemical or physical form and in unlimited quantities.
- b. Byproduct material as defined in 10 CFR 40.4 in unspecified form and in quantities generated under operations by the license.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED

See Sections 1.0 and 1.1 of the Technical Report submitted March 2008, as amended.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE

See Sections 5.1.5, 5.1.5.1, 5.4.3 and 5.4.3.1 of the Technical Report submitted March 2008, as amended.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

See Section 5.5 of the Technical Report submitted March 2008, as amended.

9. FACILITIES AND EQUIPMENT

See the attached Operations Plan as well as the Technical Report submitted March 2008, as amended.

10. RADIATION SAFETY PROGRAM

See Section 5 in its entirety in the Technical Report submitted March 2008, as amended.

11. WASTE MANAGEMENT

See Sections 4.2 thru 4.3.2 in the Technical Report submitted March 2008, as amended.

12. LICENSE FEES

The Fee Category is 2A(2) in accordance with 10 CFR 170.31. Since 2A(2) is a Full Cost Category, the NRC will invoice Lost Creek ISR, LLC to recover the cost of reviewing the amendment application.