

December 3, 2011

Attn: Document Control Desk
Mr. Charles L. Miller, Director
Office of Federal and State Materials and
Environmental Management Programs
U.S. Nuclear Regulatory Commission
Two White Flint North, Mailstop T8F5
11545 Rockville Pike
Rockville, MD 20852

RE: Submittal of Amendment Application to Source Material License SUA-1341 and
Supporting Technical and Environmental Reports for the Ludeman Uranium
Project

Dear Mr. Miller:

Uranium One Americas is hereby submitting an amendment application to Source Materials License SUA-1341 to construct and operate the Ludeman Project in Converse County, Wyoming. Mining at the proposed Ludeman Project will be conducted utilizing in situ recovery (ISR) processes. Enclosed in support of this amendment application are a Technical Report prepared in accordance with NUREG-1569 and an Environmental Report prepared in accordance with NUREG-1748.

This License Amendment Application, Technical Report, and Environmental Report were prepared and submitted by Uranium One Americas, Inc., a Nevada corporation. The immediate parent company of Uranium One Americas, Inc. is Uranium One Investments Inc., a Canadian Corporation. The ultimate parent company of Uranium One Americas, Inc is Uranium One Inc., located in Toronto, Ontario, Canada.

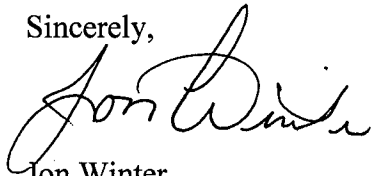
The Technical Report and Environmental Report have been sent directly to the Document Control Desk to be docketed and scanned for insertion in to the Agencywide Documents Access and Management System (ADAMS). Accompanying this submittal is a Form 313 – amendment to Source Materials License SUA-1341.

Uranium One Americas, Inc.
A Member of the Uranium One Inc. Group of Companies
tel +1 307-234-8235 • fax +1 307-237-8235
907 N. Poplar Street, Suite 260
Casper, Wyoming 82601
www.uranium1.com

FSME20

Uranium One Americas looks forward to working with your staff on the timely review and issuance of the amendment to Source Materials License SUA-1341 for the Ludeman Project. If you or your staff should have any questions regarding this amendment application, please contact me at (307) 234-8235 ext. 331.

Sincerely,



Jon Winter
Manager- Environmental and Regulatory Affairs, Wyoming

Enclosures:

NRC Form 313 and attachments
Ludeman Project, License Application, Technical Report
Ludeman Project, License Application, Environmental Report.

NRC FORM 313

(3-2009)
10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3160-0120

EXPIRES: 3/31/2012

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 Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet 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 APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND
ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
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
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

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
612 E. LAMAR BOULEVARD, SUITE 400
ARLINGTON, TX 76011-4125

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-1341
☐ C. RENEWAL OF LICENSE NUMBER _____

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

Uranium One Americas
907 N Poplar Street, Suite 260
Casper Wyoming 82601

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Ludeman Uranium Project
Converse County, Wyoming
13.5 miles North East of Glenrock, WY, Highway 95
Glenrock Wyoming 82637

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Donna L. Wichers

TELEPHONE NUMBER

(307) 234-8235

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.

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

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

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY **2.A.(b)** 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, 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

Donna L. Wichers Senior Vice President, Americas

SIGNATURE



DATE

12/02/2011

FOR NRC USE ONLY

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

**LUDEMAN URANIUM PROJECT
SOURCE MATERIALS LICENSE SUA-1341 AMENDMENT APPLICATION**

**NRC Form 313 Attachment
Items 5 Through 11**

Applicant

Uranium One Americas
907 N Poplar Street, Suite 260
Casper, WY 82601

5. Radioactive Material:

a) Element and Mass Number:

Uranium- Unat (U_{238} , U_{234} , and U_{235})

b) Chemical and/or Physical Form:

Unat - Unspecified
In Solution and adsorbed on resin

c) Maximum Amount Which will be possessed at any one time:

Unlimited

6. PURPOSE FOR WHICH LICENSED MATERIAL WILL BE USED:

Fuel for electricity generation from nuclear power plants.

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

Individual: Bill Kearney
Director of Safety, Health & Environmental
Uranium One Americas

Training: 15 years radiation safety experience at uranium recovery facilities
and 10 years as RSO and Manager of Health, Safety and
Environmental Programs for a uranium recovery facility.

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

This information is provided in detail in Section 5 of the Ludeman Uranium Project, Source Material License SUA-1341 Amendment Application, Technical Report.

9. FACILITIES AND EQUIPMENT:

This information is provided in detail in Section 3 of the Ludeman Uranium Project, Source Material License SUA-1341 Amendment Application, Technical Report.

10. RADIATION SAFETY PROGRAM:

This information is provided in detail in Section 5 of the Ludeman Uranium Project, Source Material License SUA-1341 Amendment Application, Technical Report.

11. WASTE MANAGEMENT:

This information is provided in detail in Section 4 of the Ludeman Uranium Project, Source Material License SUA-1341 Amendment Application, Technical Report.