

28 February 2014

#### DRC-2014-002061

Department of Environmental Quality
Division of Radiation Control
Attention: Ryan Johnson
P O. Box 144850
Salt Lake City, UT 841I4-4850

Dear Mr Johnson.

Re: Radioactive Material License Number UT 0900430: Request for Additional Information for Transfer of Control from Uranium One Americas, Inc. to Black Range Minerals Utah, LLC

Enclosed are responses to questions received by Black Range Minerals Utah, LLC and Uranium One Americas, Inc. from the Utah Division of Radiation Control in a letter dated 5 February 2014. If you have any additional questions or concerns please do not hesitate to contact me.

Sincerely,

Rod Grebb

Vice President of Regulatory Affairs

Cc: Norm Schwab, Uranium One Americas, Inc.

Scott Schierman, Uranium One Americas, Inc.

1. Provide a complete description of the transaction (transfer of stocks or assets, or merger). Indicate whether the name has changed and include the new name. Include the name and telephone number of a licensee contact who DRC may contact if more information is needed.

Provide contact information including the name and telephone numbers of the person(s) responsible for the Mill oversight, engineering, groundwater compliance and Radiation Safety oversight. Also include the address and telephone number of the Mill.

**Response:** Corporate oversight of the Mill will be provided by Mr. Mike Haynes, Managing Member of Black Range Minerals Utah, LLC. Mr. Haynes contact information is:

Black Range Minerals Utah, LLC 110 N. Rubey Drive, Suite 201 Golden, Colorado 80402 Ph: (303) 279-4946

Oversight of engineering and groundwater compliance will be provided by Mr. Rod Grebb, Vice President of Regulatory Affairs, Black Range Minerals Utah, LLC.

Black Range Minerals Utah, LLC 110 N. Rubey Drive, Suite 201 Golden, Colorado 80402 Ph: (303) 279-4946

Radiation Safety oversight will be provided by Ms. Sheryl Garling and Mr. Roger Garling of R and D Enterprises, Inc.

R and D Enterprises, Inc. 4495 Squaw Creek Road (82604) P.O. Box 3321 Casper, Wyoming 82602 Ph: (307) 237-4199/(307) 277-3861

The address and telephone number of the Mill will be:

Shootaring Mill c/o Black Range Minerals Utah, LLC Highway 276, 12 miles north of Bull Frog, UT P O Box 2111 Lake Powell, UT 84533 Ph: (435) 788-2120

Provide the address you would like to use on the License. This can be the corporate office or the Mill address.

**Response:** Black Range Minerals Utah, LLC requests that the Shootaring Mill License address be the corporate office address:

Black Range Minerals Utah, LLC Attn: Licensing and Compliance 110 N. Rubey Drive, Suite 201 Golden, Colorado 80402 Ph: (303) 279-4946 2. Describe any changes in personnel or duties that relate to the licensed program. Include training and experience for new personnel.

Provide information on the personnel assigned to maintain the Mill. Include a brief description of their duties and documentation of their radiation safety training.

Response: Black Range Minerals Utah, LLC will not change the currently approved practices, personnel, or operations stated in the license. Black Range Minerals Utah, LLC personnel maintaining the mill will be trained as stipulated in License Condition 9.10 of Radioactive Materials which states in part "The licensee shall have a training program for all site employees as described in the NRC Regulatory Guide 8.31 "Information Relevant to Ensuring That Occupational Radiation Exposures At Uranium Recovery Facilities Will be As Low As Is Reasonably Achievable", and Section 5.3 of the approved license application." Records for annual refresher training of site personnel are kept at the Mill for Division review upon inspection.

Provide the training documentation for the Corporate Radiation Safety Officer (CRSO) and the Assistant Radiation Safety Officer (ARSO) as required by the existing License Condition 9.10.

**Response:** Technical Qualifications of the Radiation Safety Officer (RSO) are as follows and supplemental information is located in Attachment A:

1. Education: A bachelor's degree in the physical sciences, industrial hygiene, or engineering from an accredited college or university or an equivalent combination of training and relevant experience in UR facility radiation protection. Two years of relevant experience are generally considered equivalent to 1 year of academic study.

Ms. Garling holds a Bachelor of Science Degree in Civil Engineering

2. Health Physics Experience: At least 1 year of work experience relevant to UR operations in applied health physics, radiation protection, industrial hygiene, or similar work. This experience should involve actually working with radiation detection and measurement equipment, not strictly administrative or "desk" work.

From 1979, Ms. Garling has worked in or for the majority of the domestic uranium recovery (UR) facilities in the following areas: baseline sampling, environmental and process analytical chemistry support, radiation safety officer, decommissioning and decontamination, and technical support.

3. Specialized Training: At least 4 weeks of specialized classroom training in health physics specifically applicable to uranium recovery. In addition, the RSO should attend refresher training on UR facility health physics every 2 years.

Ms. Garling attended her first Radiation Safety Officer Training in 1979 at Eberline Inc. in Albuquerque, New Mexico. Recurrent radiation safety training continued through several decades. Ms. Garling will be attending a recurrent training course in February 2014. During her career, Ms. Garling has attended many uranium recovery specific and general radiation safety-training courses. The most current training includes respiratory protection and DOT hazardous material transportation of radioactive materials.

**4. Specialized Knowledge:** A thorough knowledge of the proper application and use of all health physics equipment used in the uranium recovery facility, the chemical and analytical procedures used for radiological sampling and monitoring, methodologies used to

calculate personnel exposure to uranium and its daughters, and a thorough understanding of the uranium recovery process and equipment used in the facility and how the hazards are generated and controlled during the uranium recovery process.

**Response:** Ms. Garling's training and work experience has incorporated a variety of assignments that addressed:

The proper application and use of portable, laboratory and passive monitoring and detection devices and instrumentation to measure and detect alpha, beta and gamma radiation at UR facilities;

Performed field and laboratory analytical measurements, participated in field sampling, process sampling, field and laboratory analytical methods required for properly collecting, handling and preserving samples to support compliance monitoring programs for operational, environmental and occupational exposure;

Performed manual and electronic calculations to assess occupational exposure for total effective dose equivalent using TLD/OSL gamma dosimeters, radon daughters, air particulate and bioassay analytical results;

Ms. Garling's experience has included design, construction, operations, baseline sampling, and decommissioning activities for uranium recovery ISR research and development facilities, commercial ISR and conventional mining operations providing thorough hands on experience to identify radiation exposure hazards, controls and monitoring required for uranium recovery processes.

Technical Qualifications of the Radiation Safety Technician (RST) are as follows and supplemental information is located in Attachment A:

**Education:** An associate degree or 2 or more years of study in the physical sciences, Engineering, or a health-related field;

Mr. Garling excelled in his 3-year study program in support of a pre-medicine accredited program. He tested out of the first year of study due to his advanced HS education curriculum. The course of study included organic and inorganic chemistry, biology, physics, calculus and higher order math classes.

**Training:** At least a total of 4 weeks of generalized training (up to 2 weeks may be onthe-job training) in radiation health protection applicable to UR facilities;

Mr. Garling attended his first Radiation Safety Officer Training in 1979 and has attended numerous general and specialized training courses from radiochemical analytical studies to recurrent radiation safety officer classes. Training segments included radiation detection instrument maintenance, plateau and energy settings and calibration. Mr. Garling provided training in cooperation with USEPA Region VIII for the State of Wyoming municipalities during the 1992 rule change in the Safe Drinking Water Act (SDWA). In 1997, EPA revised the SDWA radionuclide regulation and R.A. Garling provided specific radiochemistry training for the State of Wyoming municipalities. Mr. Garling attended a recurrent training RSO course in February 2014. During his career, Mr. Garling has attended many UR specific and general radiation safety-training courses. Mr. Garling was responsible for setting up the radiochemistry department for a commercial analytical laboratory in 1984. He was able to

promote and expand the department to 25 different radiochemical methods and 15 laboratory radiochemical counting instruments for the analysis of source and byproduct regulated materials, NORM, and manmade isotopes. Mr. Garling was instrumental in developing the analytical analysis method for bioassays using ICPMS.

**Experience:** One year of work experience using sampling and analytical laboratory procedures that involve health physics, industrial hygiene, or industrial safety measures to be applied in a UR facility;

Mr. Garling's experience has included design, construction, operations, baseline sampling, and decommissioning activities for uranium recovery ISR research and development and commercial facilities and conventional mining operations providing thorough hands on experience to identify radiation exposure hazards and controls and monitoring required for UR processes. Mr. Garling was responsible for designing a commercial ISR facility for UNC Teton Exploration Drilling in 1980's in support of a commercial permit.

The request for transfer of control shows that the CRSO and the ARSO will be consultants. Provide answers to the following questions for facilities that have consultant Radiation Safety Officers and personnel.

A. Describe the control over the radiation safety program that will be delegated so that the consultant Radiation Safety Officer (Consultant - RSO) will be able to exercise his/her authority over authorized users when confronted with radiation safety problems that require implementation of corrective actions.

Response: The RSO shall have the responsibility for the development and implementation of the radiation protection program to achieve the goal of maintaining occupational exposures as low as is reasonably achievable (ALARA). The RSO shall have the authority to enforce administrative policies that could affect the radiation protection program and comply with regulatory requirements. The RSO has the primary responsibility for the technical adequacy of the radiation program and the implementation of the ALARA program. The RSO will prescribe adequate equipment and facilities to monitor radiation exposures for the attainment of the ALARA goal. The RSO shall review and approve plans and changes in operating procedures to ensure adequate radiation protection and meet the goals of the ALARA program. The RSO will have the management responsibility for the periodic audit of procedures to meet ALARA objectives.

B. Describe the relationship that will exist between the Consultant - RSO and the licensee's institutional management regarding expenditure of funds to facilitate the objectives of the licensee's radiation safety program and related regulatory requirements.

Response: Black Range Minerals Utah, LLC management commits to financially support the implementation of the radiation protection and ALARA programs to comply with regulatory requirements. Black Range Minerals Utah, LLC shall allocate adequate funds as requested by the RSO for the implementation of these programs. The RSO will submit budgets to Black Range Minerals Utah, LLC management that are adequate for the implementation of the radiation protection program and meet the goals of ALARA. Black Range Minerals Utah, LLC will delegate sufficient authority to the RSO to enable the RSO to recommend and implement suitable practices.

C. Identify other commitments of the Consultant - RSO for other NRC or Agreement State licensed facilities, and describe how the Consultant - RSO will allocate time to permit the performance of the duties of the RSO as described in the regulations or license application. State the Consultant - RSO's minimum amount of onsite time (hours per week).

Response: Approximately 30% of R and D Enterprises, Inc's current commitments encompass technical consultation services for a variety of uranium recovery and 0&G operations. R and D Enterprises, Inc's commitment to other NRC or Agreement State operations includes technical support services for baseline monitoring, generating environment effluent monitoring reports, locating radiation monitoring and analytical instrumentation and equipment, ALARA, environmental and laboratory audits, commercial analytical laboratory consulting, data validation, and radiation safety. R and D Enterprises, Inc will fulfill the duties as RSO and RST in accordance with the current practices approved by the State of Utah for Uranium One Americas, Inc. Black Range Minerals Utah, LLC does not foresee any changes in the current approved practices until, at the earliest, license renewal and modification. The RSO and RST will be able to allocate the necessary time to comply with current license conditions. Black Range Minerals Utah, LLC is committed to providing RSO coverage appropriate to site conditions.

D. Appoint a licensee representative who will serve as the point of contact during the RSO's absence. It may be prudent to appoint a representative of executive management who speaks with authority when interacting with the regulatory agency, has the authority to act on the Consultant's findings, and is allowed to assist the Consultant - RSO who has limited authority.

**Response:** Black Range Minerals Utah, LLC's representative in this capacity is Mr. Rod Grebb. Mr. Grebb's authority is to assist the Consultant RSO to meet license conditions and address worker and public safety issues to which Black Range Minerals Utah, LLC has committed for this license action.

E. Describe the overall availability of the Consultant - RSO to respond to questions or operational issues that arise during the conduct of the licensee's radiation safety program and related regulatory requirements. What is the maximum amount of time that it will take the Consultant - RSO to arrive at the facility in the event of an emergency that requires his/her presence?

Response: Both R and D Enterprise, Inc and the current RSO for Uranium One Americas, Inc. are located in Casper, Wyoming; hence the response time does not change the effectiveness of the contract RSO. Due to the current stand-by mode of operations, the majority of site activities include general maintenance, inspections, and overall site security. Uranium One has not logged any emergency issues since taking ownership. Black Range Minerals Utah, LLC will maintain the current site staff until license commitments change. Black Range Minerals Utah, LLC has staff located in Golden, Colorado, it will take approximately 6-10 hours for either party to arrive on site in the event that they are called upon to do so.

### 3. Describe any changes in the organization, location, facilities, equipment or procedures that relate to the licensed program.

Provide the date when all standard operating procedures, Tailings Reclamation and Decommission plan, and other site plans will be revised with the new owner's name and letter head and submitted to the regulatory agency.

**Response:** Black Range Minerals Utah, LLC estimates that conversion of operating procedures, Tailings Reclamation and Decommission plan and other site plans to Black Range Minerals Utah, LLC letterheads could be accomplished within three (3) months of license transfer.

4. Describe the status of the surveillance program (surveys, wipe tests, quality control) at the present time and the expected status at the time that control is to be transferred.

Information provided in the submittals met these requirements; therefore, no additional information is required.

5. Confirm that all records concerning the safe and effective decommissioning of the facility will be transferred to the transferee or to DRC, as appropriate. These records include documentation of surveys of ambient radiation levels and fixed and/or removable contamination, including methods and sensitivity.

Before licensed activities are transferred or assigned in accordance with Subsection R3l3-19-34(2), licensees shall transfer all records described in Subsections R313-22-35(7)(a) through (d) to the new licensee. In accordance with R3l3-22-35(7), persons licensed under Rule R313-22 shall keep records of information important to the decommissioning of a facility in an identified location until the site is released for unrestricted use. In this case, the new licensee will be responsible for maintaining these records until the license is terminated. Please provide a commitment that the required records will be transferred to the new owners and when this transfer will take place.

The Uranium One Semi-Annual Effluent Monitoring Report for the First Half of 2013, dated July 1, 2013 discusses air monitoring and groundwater monitoring. However, it does not discuss fixed and removable contamination. Provide documentation for the Mill of surveys of ambient radiation levels and fixed and /or removable contamination, including methods and sensitivity. Describe any contamination and confirm that the transferee is knowledgeable of the extent and levels of contamination and applicable decommissioning requirements. Provide a commitment to adopt the currently approved Tailings Reclamation and Decommissioning Plan for the Shootaring Canyon facility.

Response: Uranium One Americas, Inc. has complied with all applicable license and operational requirements and all data will be provided to Black Range Minerals Utah, LLC at the time of license transfer. Documentation of surveys of ambient radiation levels and fixed and /or removable contamination, including methods and sensitivity are located at the site and at the Uranium One Americas, Inc. Casper office, which Uranium One Americas Inc. is committed to transfer to Black Range Minerals Utah, LLC or designated representatives.

Uranium One Americas, Inc. has performed a variety of contamination surveys on and in buildings and on the surface. All relevant information is available at the mill site and at Uranium One Americas, Inc. Casper office. Black Range Minerals Utah, LLC is knowledgeable and aware of the extent and levels of contamination and applicable decommissioning requirements. These contamination levels are listed in the approved Tailing Reclamation and Decommissioning Plan. The current building survey contamination results are included in the 2013 surety update and also in the site records for the maintenance shop, laboratory, warehouse and pump house. Black Range Minerals Utah, LLC commits to adopt the currently approved Tailings Reclamation and Decommissioning Plan for the Shootaring Canyon Mill.

6. Confirm that the transferee will abide by all constraints, conditions, requirements and commitments of the transferor or that the transferee will submit a complete description of the proposed licensed program.

Information provided in the submittals met these requirements; therefore, no additional information is required.

#### 7. Surety requirements including financial surety arrangements.

Provide legal documentation and/or the date of the surety instrument being funded.

Response: Black Range Minerals Utah, LLC has provided a draft surety agreement (instrument) assigning U.S. Bank National Association, 950 17th Street, Denver, Colorado 80202 as the "Trustee" in the application dated 14 January 2014. This instrument will be executed and funded by Black Range Minerals Utah, LLC after change of control is approved by the Division. With the Divisions approval of the transfer of control and renewal extension of the license, the asset purchase transaction will be closed by Black Range Minerals Utah, LLC and Uranium One Americas, Inc. The Black Range Minerals Utah, LLC surety agreement will be executed and funded within five (5) business days after closing of the asset purchase. At that time the Uranium One Americas, Inc surety will be replaced by Black Range Minerals Utah, LLC's fully funded and executed surety.

If your request for transfer of control is approved, the following changes will be done to the RML.

License Condition 1: The licensee name will be changed from Uranium One Americas Inc. to Black Range Minerals Utah, LLC.

Basis for change: The transfer of control will require a name change.

License Condition 2: New address

Basis for change: Black Range Minerals Utah, LLC has different offices than Uranium One.

License Condition 3: If approved the license amendment will be amendment #7
Basis for change: To document which RML amendment the change of control was done under.

License Condition 4: Need to grant an extension to the expiration date. Basis for change: The current expiration date is April 30, 2014. According the State rule the new owner will need to submit a renewal application by March 31, 2014. The transfer of control will likely not be completed by March 31, 2014. Therefore, the new owner will need time to complete the renewal application.

Black Range also requested a 36-month extension in the January 14 and 20, 2014 letters. Also in the information provided in the January 20, 2014 letter, Black Range officials indicated that they want to have the Mill operational by 2016. In an email dated January 23, 2014, the DRC informed both Uranium One and Black Range that the renewal extension cannot go beyond 2016. If your request for transfer of control is approved, the following will be added as a new license condition:

**New License Condition 9.12:** Black Range Minerals Utah, LLC will be able to renew the Shootaring Canyon Uranium Mill's RML. The renewal application will need to be submitted on or before January 1, 2015.

A. The renewal application will need to include an operational feasibility study to be performed on the Shootaring Canyon Uranium Mill to demonstrate that the Mill can be renovated and operated for an extended period of time. The licensee shall use IAEA document "Guidebook on the development of projects for uranium mining and ore processing" (IAEA-TECDOC-595) to perform this analysis.

- B. The renewal application shall have a complete description of all renovations and improvements to the Shootaring Canyon Mill that will be needed to return the Mill to operational status.
  - 1) All renovations and improvements shall be constructed with Best Available Technology and shall be approved by the DRC prior to the Mill becoming operational as per R313-22-33. Financial surety must be adjusted and approved accordingly for the renovations before operations commence, per 10 CFR 40 Appendix A Criterion 9(f).
  - 2) The RML renewal application shall be submitted and approved prior to operational status of the Mill is approved.

C. The renewal application shall complete an environmental analysis as per UAC R313-24-3 to include all renovations, improvements and estimated activities to be done at the Shootaring Canyon Mill.

Basis for new License Condition: To document that Black Range Minerals Utah, LLC will be allowed to renew the Shootaring Canyon Uranium Mill and to document the expectations of the DRC for that renewal.

Response: The draft of License Condition 9.12 has a submission date for license renewal of January 1, 2015. Given the license transfer is unlikely to be completed until mid-2014, leaving little time for Black Range Minerals Utah, LLC to complete a license renewal application. Black Range Minerals Utah, LLC requests that the renewal application be submitted within 24 months of license transfer. This request will allow Black Range Minerals Utah, LLC to submit an application and with timely review, allow Black Range Minerals Utah, LLC to meet the targeted timeframe for mill restart.

### Attachment A



## Clarkson College of Technology

BE IT KNOWN THAT

THE BOARD OF TRUSTEES ON THE NOMINATION AND APPROVAL OF THE FACULTY

HEREBY CONFERS UPON

#### SHERYL A. SWARTZ

WHO HAS SATISFACTORILY COMPLETED THE REQUIRED COURSE OF STUDY APPROPRIATE FOR THIS DISTINCTION THE DEGREE OF

#### BACHELOR OF SCIENCE

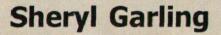
TOGETHER WITH ALL THE RIGHTS, PRIVILEGES AND HONORS WHICH APPERTAIN THERETO.
GIVEN UNDER THE SEAL OF THE COLLEGE AT POTSDAM, NEW YORK,

MAY 22, 1977

Robert A. Plane



CHAIRMAN, BOARD OF TRUSTEES



Has successfully completed the 40 hour technical short course entitled

**Radiation Safety Officer** 

January 19 - 23, 2009

This certificate presented in Orlando, Florida, January 23, 2009

By Nevada Technical Associates, Inc.

Approval codes for C.E. units are: ASRT 30.5 units: NVZ0146001, AAHP 32 units: 2008-00-005, ABIH 4.5 units: 08-1362

Robert Holloway, Ph.D.

Course Coordinator

# N.S. Aepartment of Transportation

## Transportation Safety Institute Certificate Sheryl Garling

has successfully completed the

### Transportation of Hazardous Materials Course

Conducted in Oklahoma City, OK

April 20-24, 2009

Pele Kramer, Division Manager Multi-Modal Safety Division

John Phillips, Director Transportation Safety Institute

# N.S. Pepartment of Transportation

## Transportation Safety Institute Certificate

## Sheryl Garling

has successfully completed the

## TRANSPORTATION OF HAZARDOUS MATERIALS (RECURRENT) COURSE

Conducted in: Oklahoma City, OK

January 10-12, 2012

Steven U. Villingham

Peter Kramer / Division Manager Multi-Modal Safety Division Steven D. Dillingham, Director Transportation Safety Institute

## Certificate of Completion

This certifies that
SHERYL GARLING

has successfully completed the course entitled

## Occupational Respiratory Protection #134

(40 hours)

Awarded this date of March 16, 2012, in Casper, Wyoming

4.0 Continuing Education Units



Bevis Respirator Consultants

Darell A. Bevia

Darell A. Bevis
Instructor

# N.S. Pepartment of Transportation

## Transportation Safety Institute Certificate Sheryl Garling

has successfully completed the

### Specialized Hazardous Materials; Radioactive Materials Course

Conducted in Oklahoma City, OK

May 19-21, 2009

Pell Kramer, Division Manager Multi-Modal Safety Division

John Phillips, Director Transportation Safety Institute

# N.S. Aepartment of Transportation

## Transportation Safety Institute Certificate Sheryl Garling

has successfully completed the

### Instructor Training; Hazardous Materials Transportation Modules Course

Conducted in Oklahoma City, OK

May 5-7, 2009

Pele Kramer, Division Manager Multi-Modal Safety Division

John Phillips, Director Transportation Safety Institute

