



Grants Reclamation Project

Homestake Mining Company of California

David W. Pierce
Closure Manager

August 12, 2020

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Mr. Ron Linton, Project Manager
U.S. Nuclear Regulatory Commission
Materials Decommissioning Branch
Decommissioning, Uranium Recovery & Waste Programs
Office of Nuclear Materials Safety and Safeguards
MS T-5A10, 11545 Rockville Pike
Rockville, MD 20852

RE: Homestake Mining Company of California - Grants Reclamation Project - Request for Amendment to License No. SUA-1471: Modification of License Condition 32 regarding RST Qualifications

Dear Mr. Linton:

Homestake Mining Company of California (HMC) is submitting this request to amend NRC License SUA-1471 for the Grants Reclamation Project (Site) in part, in response to corrective action #6 from Section 4.3.1 of HMC's Self-Assessment Report dated August 31, 2018 (ML18248A260), which states:

6. *"Barrick shall determine and establish the site staffing levels necessary for safe and effective implementation of key functions based on experience; training, certifications; knowledge-management needs; and timing of expected retirements, resignations and reassignments."*

The recent COVID-19 pandemic and public health emergency (PHE) has highlighted an ongoing staffing concern with respect to the Radiation Safety Technician (RST) role at the Site. The RST is a key position for implementation of the Radiation Protection Program (RPP) as required by 10 CFR 20.1101 for licensed facilities, yet the qualifications for this position under license condition (LC) LC-32 are very difficult to meet due to a generic reference to U.S. Nuclear Regulatory Commission (NRC) Regulatory Guide (RG) 8.31 (NRC, 2002). The guidance in RG 8.31 recommends appropriate levels of education, experience, and training for a full-time RST at a full-scale operational uranium recovery facility.

Because milling facilities at the HMC Site were demolished and impacted soils cleaned up nearly 30 years ago, and given the demonstrated low potential for occupational exposures at the Site (Table 1), well below the 500 mrem/yr threshold that requires occupational dose monitoring under 10 CFR 20.1502(a)(1), RG 8.31 specifications for RST qualifications are overly conservative and inconsistent with 10 CFR 20.1101 requirements that the RPP should be *"...commensurate with the scope and extent of licensed activities*

and sufficient to ensure compliance with the provisions of this part”, which includes an objective to “...achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA)”. Under these circumstances, RG 8.31 criteria for RST qualifications are not appropriate or necessary to ensure compliance with the ALARA objectives of 10 CFR 20.1101, the occupational dose limits in 10 CFR 20.1201, and the public dose limits in 10 CFR 20.1301.

Table 1: Estimated maximum potential occupational doses based on monitoring Study results [from ERG, 2018 (ML19154A582)].

Dose Pathway	Source	Exposure Type	Dosimetric Quantity	Maximum Annual Dose (mrem)
Inhalation	Air Particulates	Routine Operations	CEDE	1
Inhalation	Air Particulates	Non-Routine RWPs	CEDE	29
Inhalation	Radon Progeny	Routine Operations	CEDE	10*
External Exposure	Gamma Radiation	Routine Operations	EDE	13*

Total Effective Dose Equivalent (TEDE):

53

*Estimated net (above-background) value attributable to Site operations.

Specifically, this LAR proposes that LC-32 be modified with the addition of the following sub-part:

- D. An exception to the specifications in NRC Regulatory Guide 8.31 is permitted with respect to qualifications and training requirements for the Radiation Safety Technician (RST), subject to the following specifications: The Radiation Safety Technician (RST) shall successfully complete at least 40 hours of health physics training relevant to uranium recovery facilities, including basic radiation science, radiation protection principles and basic regulations, and at least two weeks of on-the-job training with respect to RST duties. This training must be documented. During the on-the-job training period, the RST must demonstrate to the satisfaction of the RSO an adequate working knowledge of the Radiation Protection Program (RPP) and associated Standard Operating Procedures (SOPs), including proficiency in the operation of radiological instruments used at the facility, surveying and sampling techniques, and associated records keeping requirements. Previous applied experience with the principles and implementation of RPPs at facilities with a radioactive materials license may be substituted for a portion of the on-the-job training at the discretion of the RSO. Experience with uranium recovery facilities is preferred but not mandatory. The RST must also attend annual radiation protection refresher training given to regular employees by the RSO.

Attachment 1 to this submittal provides NRC Form 313. HMC understands that this proposed licensing action is eligible for a Categorical Exclusion to the requirements of 10 CFR 51 per the criteria in §51.22(c)(3)(iv). Therefore, no Environmental Report is provided as identified in Criterion 9 of 10 CFR 40 Appendix A.

Thank you for your time and attention on this matter. If you have any questions, please contact me via e-mail at dpierce@barrick.com or via phone at 505.238.9701.

Respectfully,



David W. Pierce

Closure Manager
Homestake Mining Company of California
Office: 505.287.4456 x34 | Cell: 505.238.9701

Copy To:

M. McCarthy, Barrick, Salt Lake City, Utah (electronic copy)
G. George, Davis, Wright and Tremaine, San Francisco, California (electronic copy)
D. Lattin, Barrick, Elko, Nevada (electronic copy)
R. Whicker, Environmental Restoration Group, Albuquerque, New Mexico (electronic copy)

Enclosures: Attachment 1 – NRC Form 313

REFERENCES

Environmental Restoration Group, Inc. (ERG). 2018. Occupational Radiation Exposure Study - HMC Grants Reclamation Project. Revision 0. August 20, 2018. [ADAMS Accession No. ML19154A582]

U.S. Nuclear Regulatory Commission (NRC). 2002. Information relevant to ensuring that occupational radiation exposures at uranium recovery facilities will be as low as reasonably achievable. NRC Regulatory Guide 8.31. Revision 1, May 2002.

ATTACHMENT 1

NRC Form 313

NRC FORM 313 (10-2017) 10 CFR 30, 32, 33, 34, 35, 36, 37, 39, and 40	 U.S. NUCLEAR REGULATORY COMMISSION APPLICATION FOR MATERIALS LICENSE	APPROVED BY OMB: NO. 3150-0120 EXPIRES: 06/30/2019 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 Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollections.Resource@nrc.gov , and to the Desk Officer, Office of Information and Regulatory Affairs, NE08-10202, (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/sc1556/ . 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 IF YOU ARE LOCATED IN: 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) <input type="checkbox"/> A. NEW LICENSE <input checked="" type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER <u>SUA-1471</u> <input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____		2. NAME AND MAILING ADDRESS OF APPLICANT (include zip code) Homestake Mining Company of California P.O. Box 98 Grants, NM 82070			
3. ADDRESS WHERE LICENSED MATERIALS WILL BE USED OR POSSESSED Homestake Mining Company of California 560 Anaconda Road Route 605 Milan, NM 87021		4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION David W. Pierce BUSINESS TELEPHONE NUMBER (505) 287-4456 ext. 34 BUSINESS CELLULAR TELEPHONE NUMBER (505) 238-9701 BUSINESS E-MAIL ADDRESS dpierce@homestakeminingcoca.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. 8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS. 10. RADIATION SAFETY PROGRAM.		6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. 7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE. 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.					
PER THE DEBT COLLECTION IMPROVEMENT ACT OF 1996 (PUBLIC LAW 104-134), YOU ARE REQUIRED TO PROVIDE YOUR TAXPAYER IDENTIFICATION NUMBER. PROVIDE THIS INFORMATION BY COMPLETING NRC FORM 531: https://www.nrc.gov/reading-rm/doc-collections/forms/nrc531info.html .					
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 David W. Pierce Closure Manager		SIGNATURE  DATE 12 AUG 2020			
FOR NRC USE ONLY					
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

NRC FORM 313 (10-2017)