SAFETY EVALUATION REPORT

DATE:	October 9, 2019
DOCKET:	040-08903
LICENSEE:	Homestake Mining Company of California
SITE:	Grants Reclamation Project
PROJECT MANAGER:	Ron Linton
TECHNICAL REVIEWER:	Reginald Augustus
SUBJECT:	2019 Financial Surety Update to License Condition 28 and Parent Company Guarantee Financial Test Certification

BACKGROUND

Homestake Mining Company of California (Homestake), a subsidiary of Barrick Gold Corporation (Barrick), is the holder of U.S. Nuclear Regulatory Commission (NRC) License Number SUA-1471 for its former conventional uranium mill site near Grants, New Mexico, known as the Grants Reclamation Project (Grants Project). Homestake has been a licensee since the late 1950's. The Grants Project site ceased active uranium recovery operations in 1990. The site is currently under U.S. Environmental Protection Agency Superfund status and has a groundwater discharge permit from the state of New Mexico. Upon closure, the site will be transferred to a long-term custodian, likely the U.S. Department of Energy.

By letter dated March 30, 2019, Homestake submitted to the NRC, for review and approval, its 2019 annual financial surety update and parent company guarantee financial test certification for its Grants Project (Homestake, 2019). The NRC staff reviewed the sufficiency of the cost estimate, financial test of the parent company, and appropriateness of the financial instrument used to maintain the surety. This report documents the results of the NRC staff's review of the 2019 financial surety package and amendment to License Condition (LC) 28.

REGULATORY REQUIREMENTS

Homestake's license, SUA-1471, was issued under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 40, Domestic Licensing of Source Material. Part 40 of 10 CFR, Appendix A, Criteria 9, "Financial Criteria" and LC 28 require Homestake to maintain an NRC-approved surety arrangement to cover estimated costs for its decommissioning and decontamination activities. Specifically, 10 CFR Part 40, Appendix A, Criterion 9 requires that the cost estimate contain "[a] detailed cost estimate for decontamination, decommissioning, and reclamation" that reflects "[t]he costs of an independent contractor to perform the decontamination, decommissioning and reclamation activities" and "an adequate contingency factor." Each cost estimate must also contain "[a]n estimate of the amount of radioactive contamination in onsite subsurface material… [i]dentification and justification for using the key assumptions… and [a] description of the method of assuring funds."

Moreover, “the amount of surety liability should be adjusted to recognize any increases or decreases from:” inflation; engineering plan changes; activities that have been performed; spills, leakage, or migration; waste inventory increases; waste disposal cost increases; facility modifications; possession limit changes; actual remediation costs above what was previously estimated; onsite disposal; or any other conditions that could affect costs.

Part 40 of 10 CFR, Appendix A, Criteria 10 requires “[a] minimum charge of $250,000 (1978 dollars) to cover the costs of long-term surveillance must be paid by each mill operator… prior to the termination of a uranium or thorium mill license.” In 2019 dollars, the estimated long-term surveillance fee is $933,650.

Additionally, 10 CFR Section 40.36 allows for the use of a parent company guarantee of funds for decommissioning costs based on a financial test if the guarantee and test are as contained in 10 CFR Part 30, Appendix A. Part 30 to Appendix A requires licensees who use a Parent Company Guarantee (PCG) to demonstrate that the parent company can pass the required annual financial test. Part 30 to Appendix A also requires that the PCG agreement state that the PCG “… will remain in force unless the guarantor sends notice of cancellation. If the licensee fails to provide alternate financial assurance… within 90 days after… notice of cancellation… the guarantor will provide alternative financial assurance that meets the provisions of the Commission’s regulations.”

Furthermore, “… the parent company guarantee and financial test will remain in effect until the Commission has terminated the license, accepted in writing the… alternative financial assurance, or accepted in writing the licensee’s financial assurances. A standby trust… must be established for decommissioning costs before the parent company guarantee agreement is submitted.”

Review Guidance

The NRC staff used NUREG-1620, Rev. 1, “Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act of 1978” (SRP) as guidance in determining elements to be included in a surety review (NRC, 2003). Specifically, the NRC staff used the review procedures and acceptance criteria guidance in Appendix C of the SRP.

DISCUSSION

Sufficiency of the Cost Estimate

The surety calculations in Homestake’s submittal included costs for decommissioning and decontamination, reclamation of sites, structures, and equipment used in conjunction with site operations. The NRC staff finds that the licensee used either guidance consistent with Appendix C of the SRP (when applicable) or actual costs in the development of the cost estimate.

Homestake estimates that the cost to decommission and decontaminate the site by an independent party at $62,442,257. This amount constitutes a decrease of $21,013,567 from the previous NRC approved surety estimate of $83,455,824 (NRC, 2019). HMC’s basis for the significant decrease in the cost estimate amount, specifically for water treatment, has not been clearly identified. The “Major Changes to 2019 Closure Cost Estimate” section of the “Memorandum - Closure Cost Estimate” states that the major scheduling changes to the cost

estimate include, among other things, the removal of year 2019 from the closure cost estimate. There is no additional information provided regarding work performed on site, facility modifications, or any other conditions affecting costs that would support a cost estimate decrease.

The cost estimate is based on costs of a third-party contractor, does not take credit for any salvage value, and includes a 15 percent contingency factor.

The NRC staff reviewed the cost estimate adjustments and finds that the licensee has not provided adequate justification to determine that those adjustments are consistent with proposed changes in the operations and that the licensee has identified all expected changes during the period for which the proposed surety will be in effect. The NRC staff finds that the licensee has not provided an adequate basis to determine that all activities: (1) listed in the reclamation plan or in Appendix C of the SRP; and (2) to be conducted during the period covered by the estimate have been included. The NRC staff finds the licensee has not provided adequate information for the significant reduction in the cost estimate to determine that the assumptions for the financial surety analysis on site conditions, including experiences with generally accepted industry practices, and previous operating experience have been included. The 2019 decommissioning cost is based on completion of decommissioning activities in 2024, however, HMC is currently reevaluating the completion date for decommissioning activities, which will be included in a Corrective Action Plan (CAP) due to the NRC by December 18, 2019. At this time, the NRC does not know how the impending CAP will affect the cost estimate.

Furthermore, the NRC staff reviewed the costs to perform the decommissioning and reclamation of those changes to operations at the Grants Project. The NRC staff finds that the values used in the surety estimate are based on current dollars, however, staff does not have sufficient information to determine that the $21,013,567 reduction in the cost estimate includes reasonable costs for all required reclamation activities.

Criterion 9 does not specify a specific contingency factor to be used in the surety calculations. Guidance in the standard review plan, NUREG-1620, Rev. 1, recommends a minimum 15 percent contingency as an acceptance criterion. The contingency used by the licensee is consistent with that guidance.

Homestake’s estimated long-term surveillance fee of $933,650 meets the minimum charge of $250,000 (1978 dollars) to cover the costs of long-term surveillance.

Therefore, the NRC staff finds that Homestake has not established an acceptable financial assurance cost estimate due to the uncertainties in the cost estimate adjustments based on the requirements in 10 CFR Part 40, Appendix A, Criterion 9.

Sufficiency of the Financial Test

In order for Homestake’s parent company, Barrick, to qualify for use of a PCG, Barrick must satisfy the criteria found in 10 CFR Part 30, Appendix A, Section II.A.1 or A.2. Homestake’s submission intends to demonstrate compliance with 10 CFR Part 30, Appendix A, Section II.A.1 (the “Financial Test”). The Financial Test requires that:

(i) Barrick pass two of the following three tests: a ratio of total liabilities to total net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;

(ii) Net working capital and tangible net worth at least six times the amount of decommissioning funds being assured by the PCG for all nuclear facilities;
(iii) Tangible net worth of at least $21 million; and
(iv) Assets located in the United States amounting to at least 90 percent of the total assets or at least six times current decommissioning cost estimates for the total of all facilities.

The NRC staff finds that because adequate information was not provided to justify the significant reduction in the licensee's cost estimate, the NRC staff cannot determine if Homestake meets one of the required financial tests in 10 CFR Part 30, Appendix A.

Appropriateness of the Financial Instrument

Pursuant to criteria in 10 CFR Part 40, Appendix A, Criterion 9, licensee's financial assurance instruments must be reviewed annually by the NRC to determine that sufficient funds are available for completion of all site reclamation activities in the event work must be performed by an independent third-party contractor.

The financial assurance instrument used by Homestake is a PCG. The PCG submission, which included revised language, states that the most recently approved decommissioning cost estimate amount would remain in force unless cancelled and replaced with alternative financial assurance and that the most recently approved PCG and Financial Test would stay effective until alternative financial assurance was approved by NRC.

In addition, licensees who use a PCG are required to have a Standby Trust Agreement (STA) in place, pursuant to criteria in 10 CFR Part 40, Appendix A, Criterion 9, which states, "[I]f a trust is not used, then a standby trust fund must be set up to receive funds in the event the Commission or State regulatory agency exercises its right to collect the surety." The purpose of an STA is to provide a separate account to hold decommissioning funds in the event of a default. Homestake has provided a draft STA to hold funds in event of a default by the licensee.

The NRC staff finds that because adequate information was not provided to justify the significant reduction in the licensee's cost estimate, the NRC staff is not reviewing the financial assurance instrument and associated STA requirements as required by 10 CFR Part 30, Appendix A. Therefore, pursuant to 10 CFR Part 30, Appendix A, the most recently approved PCG and associated STA approved April 2, 2019 (NRC, 2019), will remain in force.

Environmental Review:

A license amendment to reflect an update in the amount of financial assurance or corrective revisions belongs to a category of actions which the NRC has determined do not have a significant effect on the environment. Such actions qualify for a categorical exclusion under 10 CFR Paragraph 51.22(c) and do not require an environmental assessment. Specifically, the NRC staff has determined that the financial assurance (surety) update is categorically excluded from further environmental review under 10 CFR 51.22(c)(10)(i).

CONCLUSION

Based on the information provided in the application, the review conducted of the surety estimate and financial test, and potential effects of the impending CAP for Homestake's Grants Project site, the NRC staff concludes that it is unable to determine that the Homestake's 2019 cost estimate provides reasonable assurance that sufficient funds are available to cover all

decommissioning and reclamation activities to decommission the site. Since the NRC staff cannot determine the sufficiency of the cost estimate, the NRC staff is not reviewing the financial assurance instrument and associated STA requirements as required by in 10 CFR Part 30, Appendix A. Therefore, the financial surety and financial test submission by Homestake is not accepted and, pursuant to 10 CFR Part 30, Appendix A, the most recently approved financial surety (2018) will remain in force.

REFERENCES

10 CFR Part 40. *Code of Federal Regulations*, Title 10, Energy, Part 40, "Domestic Licensing of Source Material."

10 CFR Part 30, Appendix A. "Criteria Relating to Use of Financial Tests and Parent Company Guarantees for Providing Reasonable Assurance of Funds for Decommissioning."

Homestake, 2019. Letter from B. Bingham, Homestake Mining Company of California, to R. Linton, US NRC, "2019 Financial Surety," March 30, 2019. ADAMS Package Accession Number ML19098B551.

NRC, 2019. Letter from R. Linton, US NRC, to B. Bingham, Homestake Mining Company of California, "2018 Annual Surety Update for the Homestake Mining Company of California Grants Reclamation Project, Amendment Number 53 to Source Materials License SUA14-71, Docket Number 40-8903," April 2, 2019. ADAMS Package Accession Number ML18323A179.

NRC, 2003. U.S. Nuclear Regulatory Commission, "Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act of 1978," NUREG-1620, Rev. 1, June 2003. ADAMS Accession Number ML032250190.