



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

September 11, 2024

EA-16-114

Brad Bingham, Closure Manager
Homestake Mining Company of California
P.O. Box 98, Hwy 605
Grants, NM 87020

SUBJECT: HOMESTAKE MINING COMPANY OF CALIFORNIA - NRC INSPECTION
REPORT 040-08903/2024-002

Dear Brad Bingham:

This letter refers to the U.S. Nuclear Regulatory Commission (NRC) team inspection conducted from August 19-21, 2024, at the Grants Reclamation Project in Cibola County, New Mexico. This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of tours of the site, examinations of selected procedures and representative records, independent measurements of site radiation levels, and interviews with personnel.

The results of the inspection were presented to you and your staff at the conclusion of the onsite inspection on August 21, 2024. The enclosed report presents the results of the team inspection. No violations were identified, and no response to this letter is required.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter, its enclosure, and your response if you choose to provide one will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the public without redaction.

Should you have any questions concerning this inspection, please contact Dr. Robert Evans at 817-200-1234 or the undersigned at 817-200-1249.

Sincerely,



Signed by Warnick, Gregory
on 09/11/24

Gregory G. Warnick, Chief
Decommissioning, ISFSI and Operating
Reactor Branch
Division of Radiological Safety and Security

Docket No. 040-08903
License No. SUA-1471

Enclosure:
NRC Inspection Report 040-08903/2024-002

cc w/enclosure:
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040-08903/2024-002 - DATED SEPTEMBER 11, 2024

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DOCUMENT NAME: HOMESTAKE MINING COMPANY OF CALIFORNIA - NRC INSPECTION REPORT
40-08903/2024-002

ADAMS ACCESSION NUMBER: **ML24249A176**

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**U.S. NUCLEAR REGULATORY COMMISSION
Region IV**

Docket No. 040-08903

License No. SUA-1471

Report No. 040-08903/2024-002

Licensee: Homestake Mining Company of California

Facility: Grants Reclamation Project

Location: Cibola County, New Mexico

Dates: August 19-21, 2024

Inspectors: Robert J. Evans, Senior Health Physicist
Decommissioning, ISFSI, and Operating Reactor Branch
Division of Radiological Safety and Security
Region IV

George W. Alexander, Risk Analyst
Risk and Technical Analysis Branch
Division of Decommissioning, Uranium Recovery, and Waste Programs
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Ron C. Linton, Senior Project Manager
Uranium Recovery and Materials Decommissioning Branch
Division of Decommissioning, Uranium Recovery, and Waste Programs
Office of Nuclear Material Safety and Safeguards

Approved by: Gregory G. Warnick, Chief
Decommissioning, ISFSI, and Operating Reactor Branch
Division of Radiological Safety and Security
Region IV

Attachment: Supplemental Inspection Information

Enclosure

EXECUTIVE SUMMARY

Homestake Mining Company of California
NRC Inspection Report 040-08903/2024-002

This inspection was a routine, announced U.S. Nuclear Regulatory Commission (NRC) team inspection of decommissioning activities being conducted at the Grants Reclamation Project, Homestake Mining Company's former mill in Cibola County, New Mexico. In summary, the licensee was conducting decommissioning activities in accordance with license and regulatory requirements.

Observation of Decommissioning Activities

- The licensee continued to conduct construction work in evaporation pond EP-1 using approved work instructions and procedures for controlling site activities. Site radiation exposure rates were generally low across the site. (Section 1.2)

Occupational Radiation Protection

- The licensee continued to implement its radiation protection program, including radiation work permits, as required by the license. (Section 2.2)

Security and Control of Radioactive Materials

- The licensee continued to maintain security and control of licensed material in accordance with regulatory requirements. Management of site structures and land areas was being maintained through daily observation and physical controls. (Section 3.2)

Waste Generation, Storage and Transportation

- The licensee maintained the evaporation ponds in accordance with site instructions. The licensee continued to conduct periodic embankment inspections in accordance with license requirements. The licensee experienced a spill of pond water but took immediate corrective actions in response to the event and reported the event to the NRC as required by the license. (Section 4.2)

Public Dose, Effluent Releases, and Environmental Monitoring

- The licensee continued to implement the groundwater corrective action and groundwater monitoring programs as required by the license. A spill of mineral oil from an onsite electrical transformer was reported to the NRC in accordance with license requirements. The licensee continued to conduct a land use survey as required by the license. The licensee updated its background monitoring station procedure as needed to implement a previous settlement agreement with the NRC. (Section 5.2)

Management Organization and Control

- The licensee approved two changes using its performance-based license since the last inspection. Both changes were documented in accordance with license requirements. (Section 6.2)

Follow-up of Confirmatory Action Letters or Orders

- The inspectors reviewed the status of Confirmatory Order EA-16-114. Order Conditions 1, 2, 3, 8, 9, 11, 13, 14, and 15 were previously evaluated and were determined to be satisfied. Order Conditions 4, 7, 10, and 12 were previously evaluated and determined to be satisfied but may have future actions, thus, these conditions are subject to review in future inspections. During this inspection, Order Conditions 10 and 12 were reviewed and continue to be satisfied but have future actions and may be subject to review during future inspections. In addition, Order Conditions 5, 6, and 16 remain open. (Section 7.2)

Report Details

Site Status

The Homestake Mining facility was a conventional uranium mill that operated from 1958-1990. Tailings generated from milling operations were placed in two onsite impoundments, the large tailings pile (LTP) and the small tailings pile (STP). The mill was decommissioned in 1993-1994, and cleanup of wind-blown tailings was completed in 1995. The side slopes of the LTP have been covered with the final radon barrier and erosion protection layer. An interim cover is being maintained on top of the LTP. The STP remains in service for occasional disposal of 11e.(2) byproduct material.

Site features include three evaporation ponds and two collection ponds. Evaporation pond EP-1 was dry during the inspection, while ponds EP-2 and EP-3 were in service. Since the previous inspection, conducted in February 2024 (Agencywide Documents Access and Management System Accession No. ML24068A258), the licensee continued to add soil in the interior of pond EP-1, to cover the dried salts and sediment in the pond.

Prior to the onsite inspection, on August 2, 2024, the reverse osmosis (RO) system was shut down to allow for routine cleaning of scale from system tanks. Prior to the shutdown, the licensee had been operating the groundwater corrective action program (GCAP) systems at levels consistent with the evaporative capacity of the two operating evaporation ponds. The licensee had also discontinued the use of fresh water from the San Andres Glorieta (SAG) aquifer to supplement the RO system discharge to the injection wells. The licensee's cessation of the use of SAG water and the discontinuation of EP-1 has subsequently decreased the groundwater treatment rate.

At the time of the inspection, the RO system was still out of service due to a leaking electrical transformer. Remediation of the leak and replacement of the transformer were in progress during the inspection. The licensee plans to restart the RO system after replacement of the transformer.

1 Observation of Decommissioning Activities (Inspection Procedure 87654)

1.1 Inspection Scope

Observe several work activities to verify written procedures, license commitments, and regulatory requirements are being followed.

1.2 Observations and Findings

The inspectors observed the licensee's continued construction work on pond EP-1. The licensee's work on EP-1 began in 2023 with placement of additional cover material on the inside banks of the pond to protect the pond liner. The licensee also installed raised access roads inside the dry pond to allow for worker access to the evaporative sprayers in the ponds. The justification for this work was documented in Safety and Environmental Review Panel (SERP) report, "EP-1 Liner Interim Cover and Enhanced Evaporation Unit Utilization," dated June 13, 2023.

Pond EP-1 contains sediment material that consists of lime from the onsite collection ponds and salts from the evaporation of groundwater. During the February 2024 inspection, the inspectors noted that sediment material was being blown out of the pond by high winds. Based on a 2019 analysis of the material by the licensee's radiation safety officer, the pond media contained varying amounts of natural uranium with lesser amounts of thorium-230, radium-226, and radium-228. The 2019 study concluded that the material posed a low radiation dose risk to the site workers, and a lesser risk to members of the public.

The licensee subsequently experienced high wind events in April-May 2024, resulting in additional deposition of pond material in the downwind area. On May 22, 2024, the licensee commenced with covering the pond sediments with a minimum of six inches of soil material to prevent further blowing of material from the pond. As a precaution, the licensee convened a SERP panel to review and approve the placement of the interim cover over the EP-1 sediment material. The SERP report was approved June 24, 2024. The work was almost complete at the time of this inspection.

The inspectors conducted walkdowns of both the borrow area, the location where borrow soil was being excavated, and the pond itself, where the soil was being placed. The borrow area was located onsite but outside of the radiologically restricted area. The soil was being excavated in a controlled manner using heavy equipment. Based on previous sampling records, the soil contained predominately silty sand, clay, and clayey sand. The material was being placed into EP-1 with a thickness of approximately 18-inches, well above the minimum thickness of six inches. Although there were no compaction requirements, the soil was being placed in a manner to avoid future wind-blown removal. The work was being performed with an emphasis on industrial and radiological safety.

The inspectors reviewed the licensee's assessment of the radiological risks associated with the windblown pond sediment. The radiation safety officer conducted the assessment and documented the results in a technical memorandum dated July 16, 2024. The assessment included soil/sediment samples collected within and downwind of pond EP-1. In summary, the assessment determined that the radiological risks to workers were low. Based on sample results, the windblown material was found to be essentially at background levels at the Route 605 highway east of the site.

Although the windblown event was not reportable to the NRC, in accordance with license condition 41, the event was classified as an unplanned release that required documentation and corrective action. The technical memorandum estimated the size of the affected area and noted that corrective actions were being taken in accordance with the June 2024 SERP decision.

The inspectors conducted independent radiological surveys during site tours using a Ludlum Model 2401-P survey meter (serial number 197217, calibration due date of 3/28/25, calibrated to cesium-137). The background exposure rates ranged from 10-15 micro-rem per hour ($\mu\text{R/hr}$). The top of the LTP ranged from 15-30 $\mu\text{R/hr}$, depending on location. The top of the LTP has an interim cover pending construction of the final cover. Pond EP-1, located on top of the STP and where construction activities were in progress, ranged from 20-40 $\mu\text{R/hr}$. The southwestern corner of EP-1, where elevated exposure rates were previously measured, was noted to be approximately 30 $\mu\text{R/hr}$. This area was covered with interim soil to protect the liner which subsequently reduced the ambient gamma radiation levels in the area. The southeastern corner of EP-1 ranged

from approximately 20 up to 150 $\mu\text{R/hr}$, since that area had not been completely covered with soil. No area was identified that met the definition of a radiation area (5,000 $\mu\text{R/hr}$).

1.3 Conclusions

The licensee continued to conduct construction work in evaporation pond EP-1 using approved work instructions and procedures for controlling site activities. Site radiation exposure rates were generally low across the site.

2 Occupational Radiation Protection

2.1 Inspection Scope

Assess trends in radiation protection performance and verify that the licensee implemented its radiation protection program in accordance with license commitments, procedures, and regulatory requirements.

2.2 Observations and Findings

License condition 24 states that a radiation work permit (RWP) will be used for all work or nonroutine maintenance jobs where the potential for significant exposure to radioactive material exists and for which no standard written procedure already exists. The inspectors reviewed two RWPs for work recently completed or in progress during the inspection. The first RWP was issued for the EP-1 construction work (see Section 1.2), and the second RWP was issued in response to a spill of pond water between ponds EP-1 and EP-2 (see Section 4.2).

RWP 6-2024 was issued to support the placement of borrow material in pond EP-1. The RWP implemented controls for personnel contamination, gamma exposure rates, and equipment release surveys. The work commenced in May 2024 and was still in progress at the time of the inspection. Thus, the RWP was still open at the time of the inspection.

RWP 4-2024 was issued to support cleanup of the area of the April 2024 spill between ponds EP-1 and EP-2. The work included earthwork, disposal of excess soil in onsite disposal pits, and follow up radiological surveys. The radiological controls included personnel protective equipment if handling tailings material, personnel contamination surveys, gamma exposure rate surveys, and equipment release surveys. The records attached to the RWP included equipment release surveys and decontamination of equipment. The work started just after the April 17, 2024, spill and was completed on April 29, 2024. The RWP was subsequently closed by the licensee.

2.3 Conclusions

The licensee's staff continued to implement its radiation protection program, including RWPs, as required by the license.

3 Security and Control of Radioactive Material (Inspection Procedure 87654)

3.1 Inspection Scope

Observe the licensee's security and control of radioactive material to verify compliance with license and regulatory requirements.

3.2 Observations and Findings

During site tours, the inspectors observed the status of site security, in part, to confirm compliance with 10 CFR 20.1801 and 1802 requirements. Site fences, gates, and perimeter postings were being maintained. Licensee staff conducted daily routine site tours, in part, to ensure that gates were closed, and fences were in good condition. The inspectors noted that the perimeter gates and fences were posted with the appropriate caution signs. The licensee also maintained control over site structures with the use of security cameras and alarms.

3.3 Conclusions

The licensee continued to maintain security and control of licensed material in accordance with regulatory requirements. Management of site structures and land areas was being maintained through daily observation and physical controls.

4 Waste Generation, Storage, and Transportation (Inspection Procedure 87654)

4.1 Inspection Scope

Observe site features to ensure that the licensee was managing wastes in accordance with license and procedural requirements. Since the licensee had not recently shipped radioactive wastes, this program area was not reviewed.

4.2 Observations and Findings

a. Status of Evaporation Ponds

The inspectors observed the status of the three evaporation ponds. Pond EP-1 was out of service, while ponds EP-2 and EP-3 were in service. As noted earlier, cover material was being added to EP-1. The sprayers were in service in the two operating ponds. The pond levels appeared lower than normal in the two operating ponds, in preparation for reduced evaporative capacity of the ponds during the fall and winter months.

License Condition 36B states, in part, that reclamation shall be completed as expeditiously as is reasonably achievable. Dating back to 2012, the evaporative capacity of the site ranged from 153 gallons per minute (gpm) to 225 gpm with all three evaporation ponds in service. Without the use of EP-1, the current evaporative capacity of the site is approximately two-thirds of the previous capacity (i.e., approximately 100 to 150 gpm). The groundwater treatment capacity at the site decreased commensurately to approximately 420 gpm, as the RO system operates at approximately 75% efficiency (i.e., approximately 105 gpm of brine wastewater goes to the evaporation ponds). Based on the recent treatment flowrate with no SAG water usage, the evaporative capacity of the site should not be exceeded.

b. Annual Inspection of Impoundments and Ponds

License condition 12 requires an annual inspection of the tailing's impoundments and evaporation ponds. The most recent annual report was attached as Appendix D to the annual monitoring report dated March 29, 2024 (ML24092A405). The annual inspection concluded that the two tailings' impoundments and three evaporation ponds were found to be in generally stable condition.

Eleven recommendations were included in the annual inspection report, including two priority recommendations. The first priority recommendation was that pond EP-1 remain inoperable, or if returned to service, the pond should operate at a reduced capacity. The second priority recommendation was to conduct daily inspections of the LTP crest to monitor for disturbances on the surface, based on past observations of disturbances that were subsequently corrected. The licensee continues to implement a routine site inspection program that includes oversight of the surface areas of the ponds and impoundments.

b. Onsite Spill of Evaporation Pond Water

On April 17, 2024, during routine transfer of pond water from EP-2 to EP-3, the licensee's staff noted that water was spilling onto the area between ponds EP-1 and EP-2. The transfer was immediately secured upon discovery of the spill. The spill resulted in washout of the soil between the ponds, exposing the tailings material in the STP. The licensee conservatively estimated that approximately 8,400 gallons of EP-2 pond water was spilled onto the restricted area surface.

Immediate corrective actions included a radiological survey of the area. Other corrective actions included cleanup of the area and placement of soil over the exposed tailings material. The initial investigation revealed that the discharge occurred due to a faulty valve. A blank flange was placed on that section of piping to prevent future releases through that portion of the inactive line. The event was reported to the NRC in accordance with license condition 41 requirements (ML24116A255).

The licensee's radiation safety officer conducted a review of the event from a radiological perspective. The event was documented in a technical memorandum dated June 24, 2024. The assessment included an estimate of the radioactive tailings material that was released as well as the pre- and post-radiological survey results. The report noted that the spill had remained within the restricted area. Most of the spilled liquid flowed into pond EP-2, downgradient from EP-1, and most of the contaminated soil remained in the area between the two ponds. As noted in Section 2.2, a RWP was issued to support the cleanup work.

4.3 Conclusions

The licensee maintained the evaporation ponds in accordance with site instructions. The licensee continued to conduct periodic embankment inspections in accordance with license requirements. The licensee experienced a spill of pond water but took immediate corrective actions in response to the event and reported the event to the NRC as required by the license.

5 Public Dose, Effluent Releases, and Environmental Monitoring (Inspection Procedure 87654)

5.1 Inspection Scope

Verify that the licensee is implementing the environmental monitoring program in accordance with license and regulatory requirements. Review the licensee's groundwater corrective action program to verify compliance with license and regulatory requirements.

5.2 Observations and Findings

a. Groundwater Monitoring and Corrective Action Program

At the time of inspection, the RO plant remained shut down due to an electrical transformer oil leak and associated soil clean-up activities in response to the leak. Accordingly, the collection and injection wells were not in operation. Prior to the shut down for the soil clean up and annual scale removal, the licensee was operating the RO system at 470 gpm with approximately 80 gpm coming from offsite wells and 390 gpm from onsite wells. At a 75% efficiency rate for the RO system, this would equate to approximately 118 gpm of brine being sent to the evaporation ponds. This flow rate is consistent with the licensee's stated current evaporative capacity of operating evaporation ponds EP-2 and EP-3 (i.e., 100-150 gpm). The licensee previously ceased injection of fresh water from the SAG aquifer into the post treatment tank and subsequently the injection well field.

Review of the groundwater monitoring data, as presented in the 2023 Annual Monitoring Report (ML24092A405), indicates increasing contaminant concentrations in wells M3 and B11, which are located at the downgradient edge of the LTP in the areas of highest alluvial contamination. This observation is consistent with decreased collection rates, due to the loss of the evaporative capacity of pond EP-1 and the cessation of SAG water injection. Monitoring data show that the hydraulic barrier is being maintained, as shown by the water table elevations in reversal well pair S5-S2. Monitoring wells S4 and D1, which are located between M3 and B11 and the injection wells and lines, have stable or decreasing contaminant concentrations demonstrating that contaminants are not migrating downgradient of this area. The NRC inspectors will continue to monitor the contaminant plume and hydraulic barrier to verify the licensee's effectiveness in implementing the GCAP.

The licensee stated that they are not collecting totalizer data on the volume of groundwater pumped from each collection well for each year. The licensee also stated that they do not have a formalized procedure for determining which wells to pump from; however, there is a process for determining pumping rates and proposed collection well pumping rates each month. The inspectors reviewed daily collection well pumping reports and the proposed collection well pumping rates. However, the NRC inspectors noted that it would be more effective to verify compliance with license condition 36B if the licensee reported the volumetric flowrates for each of the collection wells.

Although the inspectors noted that the licensee was complying with its approved GCAP and groundwater monitoring plan, the inspectors noted that the licensee decreased the number of monitoring wells being sampled in the areas of highest contaminant concentrations. The licensee stated that other than normal environmental variability, the

additional monitoring wells do not provide significant additional information on the contaminant plume. However, based on the risk significance of the contaminant concentrations and the changing groundwater corrective action pumping and injection rates, the inspectors discussed that additional monitoring data was, at a minimum, a best practice. The licensee agreed to collect this additional monitoring data and present the data in the 2024 Annual Monitoring Report.

b. Spill of Mineral Oil from Onsite Transformer

On August 2, 2024, the licensee became aware that the electrical transformer for the RO water treatment plant was leaking mineral oil. The oil was observed on the ground around the transformer. The licensee notified the electrical provider who isolated the transformer. The licensee subsequently secured the leak.

The non-radioactive leak was reported to the State of New Mexico, and in accordance with license condition 41 requirements, the event was also reportable to the NRC. The licensee notified the NRC by email dated August 6, 2024 (ML24235A191). At the time of the inspection, the licensee continued to work with the State with regards to cleanup of the spilled oil. As noted earlier, the soil must be remediated, and the transformer repaired or replaced before the RO units can be restarted.

c. Land Use Survey

The inspectors reviewed the Land Use Survey contained in the 2023 Annual Monitoring Report (ML24092A405). The survey included a comprehensive description of the Village of Milan water use and hookups for 2022 and 2023. Approximately 70 locations are hooked up to Milan public water for 2023. The licensee reported that most of these locations are licensee-owned and former owners who are still living in the homes, or the licensee was renting out the homes.

The survey included a general description of the land uses, but not licensee ownership of individual parcels. The survey concluded that, "field review of the subdivisions areas, along with follow-up inquiries as required to confirm the status of water use at each property, indicates that occupied residential sites in, or immediately adjacent to the Felice Acres, Broadview Acres, Murray Acres, Pleasant Valley and Valle Verde subdivisions are on metered water service with the Village of Milan."

The inspectors determined the survey was performed and reported to the NRC in compliance with license condition 42 requirements.

d. Change in Background Monitoring Stations

License condition 10 authorizes only the possession of residual uranium and byproduct material in the form of uranium waste tailings and other byproduct waste generated by the licensee's past milling operations in accordance with Tables 1 and 3. These license requirements include the locations of the background monitoring stations.

The inspectors reviewed SOP-20, "Environmental Monitoring Program Except Groundwater (EM-2)," revision 22, dated August 20, 2024, to ensure the procedure included the recent changes in background monitoring locations. The inspectors confirmed that procedure SOP-20 contained an updated Table 1, as agreed to in the

NRC and Homestake Mining Company settlement dated April 11, 2024 (ML24106A215). The updated Table 1 has an effective date of July 1, 2024, to coincide with the next semi-annual monitoring dates.

5.3 Conclusions

The licensee continued to implement the GCAP, and groundwater monitoring program as required by the license. A spill of mineral oil from an onsite electrical transformer was reported to the NRC in accordance with license requirements. The licensee continued to conduct a land use survey as required by the license. The licensee updated its background monitoring station procedure as needed to implement a previous settlement agreement with the NRC.

6 Management Organization and Control (Inspection Procedure 87654)

6.1 Inspection Scope

Review facility changes, tests and experiments authorized by the Safety and Environmental Review Panel (SERP). Verify that the licensee has implemented the appropriate programs for management oversight and control of decommissioning activities.

6.2 Observations and Findings

License condition 16 authorizes the licensee to make changes to their programs under the review of a SERP if certain conditions are met. The inspectors reviewed two SERP decisions made since the previous inspection.

The inspectors reviewed SERP Report, "EP1 Sediments Interim Cover," dated June 24, 2024. The proposed action was to place an interim cover over the EP-1 pond sediments with borrow material to prevent mobilization of 11e.(2) byproduct material from the pond footprint. The work that was authorized under this SERP decision started May 22, 2024. The inspectors noted that this SERP decision was a continuation of the previous decision that was documented in the SERP decision entitled, "EP1 Liner Interim Cover and Enhanced Evaporation Unit Utilization," dated June 13, 2023. The borrow material came from an onsite location outside of the radiologically restricted area. The soil was being placed into pond EP-1 in a thickness greater than the minimum thickness of 6 inches. The SERP decision concluded that the work did not have a negative impact on the environment or cultural resources. The SERP report referenced a 2018 cultural resources study to confirm that the impacted areas did not contain cultural resources.

The inspectors also reviewed the SERP report entitled, "LTP and STP Supplementary Tails Investigation," dated August 14, 2024. The proposed action was approval of a supplemental characterization field program to gather additional data regarding saturation and tailings material properties. The proposed action would include cone penetration testing on the LTP and STP at various locations. The cone penetration test may come into contact with radioactive tailings material which requires the use of an RWP. The RWP is not currently developed since the work has not started, but the licensee will develop the RWP before testing begins. The SERP concluded that "the proposed supplementary tailings investigation does not affect existing license conditions, associated amendment requests, and respective NRC licensing decisions." The

proposed change is consistent with license condition 37 reclamation requirements and the Decommissioning and Reclamation Plan for the approved closure plan of the LTP and STP. The use of a SERP is required as stated in license condition 16. The inspectors concluded that the August 14, 2024, SERP was performed in compliance with license condition 16.

The inspectors did not identify any negative environmental, radiological safety, or environmental impacts from either proposed action.

6.3 Conclusions

The licensee approved two changes using its performance-based license since the last inspection. Both changes were documented in accordance with license requirements.

7 **Follow-up of Confirmatory Action Letters or Orders (Inspection Procedure 92703)**

7.1 Inspection Scope

On March 28, 2017, the licensee agreed to, and was issued, Order EA-16-114 (ML17060A752) as a result of alternative dispute resolution mediation. Section V of the Order includes 16 conditions with actions the licensee was required to implement. The NRC reviewed the status of the Order Conditions during this inspection. The Order requirements are referenced in license condition 44.

7.2 Observations and Findings

a. Condition 5

Condition 5 of the Order, requires, in part, that any changes or additions to the license or procedures resulting from this Order will be submitted to the NRC as a license amendment request for NRC approval or an update to the appropriate licensee procedure after notification to the NRC. The licensee's requirement to submit a revised GCAP is contained in condition 6.

By letter dated September 13, 2023 (ML23233A105), the NRC relaxed Confirmatory Order condition 6 to allow for the submittal of a crosswalk by March 29, 2024, in lieu of a revised GCAP submittal. The crosswalk was submitted on March 29, 2024 (ML24092A406). Condition 5 of the Order will remain open until the NRC has reviewed the licensee's crosswalk submittal.

b. Condition 6

Condition 6 of the Order requires, in part, the licensee to submit a revised GCAP to the NRC by the end of calendar year 2018, including amendments to the license approved by that date. By letter dated September 13, 2023 (ML23233A105), the NRC relaxed Confirmatory Order condition 6 to allow the submittal of a crosswalk, in lieu of a revised GCAP submittal. The crosswalk was submitted on March 29, 2024 (ML24092A406). Condition 6 of the Order will remain open until the NRC has reviewed the licensee's crosswalk submittal.

c. Condition 7

Condition 7 of the Order requires, in part, that the licensee conduct annual refresher training for all individuals (employees and vendors, commensurate with their duties) engaged in licensed activities. Section (a) of this condition required initial and annual training to address awareness and understanding of regulatory and license requirements, including but not limited to informing licensee employees of the jurisdiction of the NRC, the U.S. Environmental Protection Agency, and the New Mexico Environment Department over the Grants Reclamation Project. Section (b) of this condition required the licensee to maintain documentation for each training session conducted.

The inspectors did not review condition 7 as the licensee generally provides its annual training in the latter months of the year. The annual training was last performed in December 2023 as documented in IR 2024-001. Condition 7 will be reviewed during the next inspection.

d. Condition 10

Condition 10 of the Order requires that in the event of a future non-compliance related to the groundwater protection standards, the licensee will perform a similar assessment of the impacts of the non-compliance. The licensee will report the incident to the NRC in accordance with license condition 40 within 30 days of receipt of initial and confirmatory laboratory results. Order condition 10 is determined to be satisfied but has ongoing actions and may be subject to future inspections. The licensee reported no exceedances since the last inspection and therefore did not need to perform a similar assessment. The NRC determined that the licensee continues to comply with the requirements of condition 10.

e. Condition 12

Condition 12 of the Order requires that the licensee develop written procedures to ensure that the licensee will sample all required composite samples from sample point 2 (SP2) monthly and will report the results of those sample results in the semi-annual and annual reports required by license conditions 15 and 42.

The licensee uses written procedure SOP-15 for Post-Treatment Tank Water Sampling, Analysis and Reporting Requirements. The procedure outlines the monthly and weekly sampling process and reporting requirements. The inspectors reviewed the licensee's draft semi-annual report that includes SP2 results for data from January through June 2024. The inspectors subsequently reviewed the 1st Half 2024 Semi-Annual Environmental Monitoring Report for Period January - June 2024 dated August 29, 2024, (ML24247A150) that contained the same data. The licensee did not have any exceedances for SP2 since the last inspection. The NRC determined that the licensee continues to comply with the requirements of condition 12.

f. Condition 16

Condition 16 of the Order requires the licensee to provide an integrated table that sets forth all actions taken pursuant to the Order. An updated integrated table will be provided semi-annually, until all license and procedure changes under the Order are completed. The last two integrated tables were provided to the NRC by letters dated October 31, 2023 (ML23304A251) and April 30, 2024 (ML24128A081). Condition 16 of the Order will remain open until all license and procedure changes under the Order are satisfied. The NRC determined that the licensee continues to comply with the requirements of Order condition 16.

7.3 Conclusions

The inspectors reviewed the status of Confirmatory Order EA-16-114. Order conditions 1, 2, 3, 8, 9, 11, 13, 14, and 15 were previously evaluated and were determined to be satisfied. Order conditions 4, 7, 10, and 12 were previously evaluated and determined to be satisfied but may have future actions, thus, these conditions are subject to review in future inspections. During this inspection, Order conditions 10 and 12 were reviewed and continue to be satisfied but have future actions and may be subject to review during future inspections. In addition, Order conditions 5, 6, and 16 remain open.

8 **Exit Meeting Summary**

The inspectors presented the inspection results to the licensee's representatives at the conclusion of the onsite inspection on August 21, 2024. During the inspection, the licensee did not identify any information reviewed by the inspectors as proprietary.

SUPPLEMENTAL INSPECTION INFORMATION

Partial List of Persons Contacted

Licensee

A. Arguello, Closure Manager
B. Bingham, Closure Manager
A. Brown, Reclamation Closure Director
E. Burch, Project Manager
C. Farr, Radiological Support, Environmental Restoration Group, Inc.
B. Fox, Environmental Specialist
D. Lattin, Program Manager, Barrick
K. Martinez, Safety Superintendent
R. Whicker, Radiation Safety Officer

New Mexico Environment Department

C. Dimond, Water Resource Professional III

U.S. Department of Energy

J. Graham, UMTRCA Title II Site Lead/Scientist
N. Olin, Site Manager

Inspection Procedures (IPs) Used

IP 87654	Uranium Mill, In-Situ Recovery, and 11e.(2) Byproduct Material Disposal Site Decommissioning Inspection
IP 92703	Follow-up of Confirmatory Action Letters or Orders

Items Opened, Closed and Discussed

Opened

None

Closed

None

Discussed

None

List of Acronyms Used

ADAMS	Agencywide Documents Access and Management System
CFR	Code of Federal Regulations
EA	Enforcement Action
EP	evaporation pond
GCAP	Groundwater Corrective Action Program
gpm	gallons per minute
IP	Inspection Procedures
LTP	large tailings pile
μR/hr	micro-rem per hour
NRC	U.S. Nuclear Regulatory Commission
RO	reverse osmosis
RWP	radiation work permit
SAG	San Andres Glorieta
SERP	Safety and Environmental Review Panel
SP2	sample point 2
STP	small tailings pile