

**OLD STOPE LEACH MINE
REVISION 19-1 TO PERMIT NUMBER MK009RE
REGULAR EXISTING MINING OPERATION**

**MINING AND MINERALS DIVISION
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

Revision 19-1 to Permit No. MK009RE ("Revision 19-1") is issued by the Director of the Mining and Minerals Division ("MMD") of the New Mexico Energy, Minerals and Natural Resources Department to:

Rio Algom Mining, LLC
Whose correct address is: P.O. Box 218
Grants, NM 87020

("Permittee") in order to reclamation associated with the Old Stope Mine, located in McKinley County, New Mexico.

Revision 19-1:

1. Approves an Interim Closure/Closeout Plan for the Old Stope Leaching Mine and for the purpose of calculating Financial Assurance; and
2. Increases the total amount of Financial Assurance to \$89,918,000, based on the Interim Closure/Closeout Plan.

Section 2 (19-1). **STATUTES AND REGULATIONS**

- A. This Permit is issued pursuant to the New Mexico Mining Act, NMSA 1978, §69- 36-1, et seq. (1993, as amended through 2020).
- B. This Permit is subject to all applicable regulations of the New Mexico Mining Act ("Act"), New Mexico Mining Act Rules, Title 19, Chapter 10 of the New Mexico Administrative Code ("NMAC" or "Rules"), and any other regulations which are now or hereafter in force under the Act; and all such regulations are made a part of this Permit by this reference.

Section 3 (19-1). **PERMIT APPLICATION PACKAGE**

- A. The Revision 19-1 Permit Application Package ("PAP") consists of the following:
 1. *Interim Closure/Closeout Plan, New Mexico Mine Permit No. MK009RE and New Mexico Discharge Permits -67, -71, -264, -362, dated June 27, 2019, prepared by Environmental Restoration Group and INTERA Incorporated;*
 2. *Addendum #1 to the PAP, Response to MMD Technical Review and Comments on Revision 19-1 Interim Closure/Closeout Plan, New Mexico Mine Permit No. MK009RE, dated March 18, 2020;*

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3. Addendum #2 to the PAP, *Response to Agencies Technical Review and Comments on Revision 19-1 Interim Closure/Closeout Plan, New Mexico Mine Permit No. MK009RE*, dated May 18, 2020;
4. Addendum #3 to the PAP, *Erratum – RAML Response to MMD Technical Review and Comments on Revision 19-1 Interim Closure/Closeout Plan, New Mexico Mine Permit No. MK009RE*, dated May 18, 2020;
5. Addendum #4 to the PAP, *(Revised) Interim Closure/Closeout Plan, New Mexico Mine Permit No. MK009RE and New Mexico Discharge Permits -67, -71, -264, -362*, dated September 9, 2020, prepared by H3 Environmental, LLC and INTERA Incorporated (“Interim CCP”);
6. Irrevocable Standby Letter of Credit No. LG/MIS/NY-178017, dated September 15, 2020, issued by Sumitomo Mitsui Banking Corporation, 277 Park Avenue, New York, NY 10172, in the amount of twenty two million three hundred and thirty five thousand dollars (\$22,335,000);
7. Third-Party Guarantee, dated September 22, 2020, issued by BHP Billiton Petroleum (Deepwater) Inc., in the amount of sixty seven million and five thousand dollars (\$67,005,000).

Any correspondence subsequently submitted to MMD, by the Permittee or its representatives, can be found at MMD offices within the Division’s files, and is entitled *Old Stope Leach Mine* or similar.

Section 4 (19-1).

PERMIT AREA AND DESIGN LIMITS

- A. The Permit Area for the Old Stope Leaching Mine remains unchanged from that approved in the original MK009RE permit.
- B. As described in Permit No. MK009RE, the Permit Area encompasses portions of:
 1. Township 14 North, Range 9 West:
 - a. Sections 17, 18, 19, 20, 29, 30, 32, 33, 34 and 35
 2. Township 14 North, Range 10 West:

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- a. Sections 13, 15, 22, 23, 24, 25 and 26

Section 4A (19-1). **PROJECT AREA ADDRESSED BY INTERIM CCP**

- A. The geographic Scope of the Closure/Closeout Plan was approved previously by MMD and NMED in a letter dated May 13, 2019. For this purpose of this Revision 19-1 and the Interim CCP, this geographic scope is hereby referred to as the "Interim Project Area."
- B. The Interim Project Area is the area addressed by the Interim CCP. For the purpose of this Revision 19-1 and the Interim CCP, the Interim Project Area differs from the Permit Area and is defined in the Interim CCP as portions of:
1. Township 13 North, Range 9 West:
 - a. Sections 1, 2, 3 and 11
 2. Township 14 North, Range 9 West:
 - a. Sections 17, 20, 29, 30, 32, 33, 34 and 35
 3. Township 14 North, Range 10 West:
 - a. Sections 22, 24, 26
- C. This Revision 19-1 does not waive or release any portion of RAML's Old Stope Leach Permit Area and/or portions of RAML's operation and areas affected by those operations that are or may be subject to MMD jurisdiction. MMD reserves the right to include such areas in a future Closeout Plan.

Section 5 (19-1). **FINDINGS OF FACT**

The Permit Application Package

- A. The Permittee has paid the permit revision fee of \$5,000.00 as required by §19.10.2.201 NMAC.
- B. As required by §19.10.5.505.B NMAC and the requirements for a revision, public notice and an opportunity for public hearing was performed as required by §19.10.9 NMAC.

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- C. The application for permit revision has been reviewed in accordance with §19.10.5.505 NMAC and has been determined to be a revision in accordance with §19.10.5.505.B and §19.10.5.505.B(1) NMAC.
- D. As required by §19.10.5.505.B(2) NMAC, the application for permit revision was accompanied by sufficient information for the Director to determine whether any of the factors listed in §19.10.5.505 NMAC are present.
- E. As required by §19.10.5.505.B(3) the Director has consulted with the applicable state agencies including State Forestry Division, New Mexico Department of Game and Fish, Historic Preservation Division, New Mexico Environment Department, and the Office of the State Engineer.
- F. The Director has consulted with the following tribal entities: Hopi Tribe, Navajo Nation, Pueblo of Acoma, Pueblo of Isleta, Pueblo of Laguna, Pueblo of Tesuque, Pueblo of Zuni, and the White Mountain Apache Tribe.
- G. As required by §19.10.5.505.C NMAC, the application for permit revision was in a format acceptable to the Director.
- H. The Interim CCP for the Interim Project Area will achieve a self-sustaining ecosystem appropriate for the life zone of the surrounding areas following closure unless conflicting with the approved post-mining land use as required by Section 69-36-7(H)(4) of the Act.
- I. The Written Determination from the Secretary of the New Mexico Environment Department is dated November 29, 2020, and was received by MMD on November 30, 2020.

Financial Assurance and Instruments

- J. The financial assurance for reclamation of the Interim Project Area for the Old Stope Leaching Mine is in the form of:
 - 1. Third-Party Guarantee issued by BHP Billiton Petroleum (Deepwater) Inc., 1675 South State Street, Suite B, Dover, Delaware, 19901, U.S.A, on September 22, 2020, in the amount of \$67,005,000.

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2. Irrevocable Standby Letter of Credit No. LG/MIS/NY-178017, issued by Sumitomo Mitsui Banking Corporation (SMBC), 277 Park Avenue, New York, New York, 10172, U.S.A., on September 15, 2020, in the amount of \$22,335,000.
3. Irrevocable Standby Letter of Credit, issued by Canadian Imperial Bank of Commerce, New York Agency, New York, NY, in the amount of \$578,000.

Section 6 (19-1). **COMPLIANCE REQUIREMENTS**

- A. The Permittee shall conduct reclamation operations only as described in the approved PAP, this Permit or any revisions or modifications approved by the Director, as required by §19.10.5.505 NMAC.
- B. This permit revision 19-1 is issued pursuant to NMSA 1978, Section 69-36-1 et. seq. and Title 19, Chapter 10 NMAC. Permittee may be required to comply with other federal, State, county or local laws or ordinances before or while undertaking the activity that is the subject of this permit revision. MMD does not, by issuing this Permit or otherwise, make any comment on Permittee's compliance with such other laws. It is Permittee's sole responsibility to investigate and comply with the requirements of such other laws.
- C. The Permittee shall obtain and maintain all environmental permits required for both the Permit Area and the Project Area including, but not limited to, Discharge Permit(s) issued by the New Mexico Environment Department ("NMED") and any permits required by the State Land Office. Revocation or termination of such a permit or the forfeiture of financial assurance related to such a permit is adequate grounds for the Director to issue a cessation order under authority of §19.10.5 and § 19.10.11 NMAC.

Section 7 (19-1). **AGENCY RIGHT OF ENTRY**

- A. The Permittee shall allow the authorized representatives of the Director, without advanced notice, upon presentation of appropriate credentials, and without delay:
 1. To enter upon, or through, any mining or reclamation operation at any time, as provided for in §19.10.11.1101.E(1) NMAC for the purpose of conducting inspections and to determine if the Permittee is in compliance with the Permit requirements and conditions; and

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2. At reasonable times, and without delay, have access to and copies of any records associated with permitting and compliance required by the Act, §19.10 NMAC or the Permit.

Section 8 (19-1). **PERMIT COVERAGE/ENVIRONMENTAL COVERAGE**

- A. This Permit shall be binding on any person or persons conducting mining, exploration and reclamation operations under this Permit.
- B. The Permittee shall take all necessary steps to minimize any adverse impact to the environment or public health and safety resulting from non-compliance with any term or condition of the Permit, the Rules or the Act.
- C. The Permittee shall maintain this Permit until reclamation is complete at the site.

Surface and Mineral Rights

- D. The Permit does not grant or create any property rights. Nor does MMD, by issuing this Permit or otherwise, make any comment on the surface or mineral rights that the Permittee may or may not have in the area covered by the Permit; only that the Permittee has provided a statement of basis on which the Permittee has a right-to-enter the property to conduct mining and reclamation. Permittee is solely responsible to take whatever steps are necessary to ensure that Permittee has property rights sufficient to support the activities contemplated by the Permit.

Cultural Resources

- E. The Permittee shall comply with all other state and federal requirements and standards as applicable, including without limitation any applicable requirements of the Cultural Properties Act, NMSA 1978, Section 18-6-1 to 27 and the regulations promulgated pursuant thereto.

Section 9 (19-1). **COMPLIANCE WITH THE PERMIT & PAP**

- A. The Permittee shall conduct mining, exploration and reclamation operations only as described in the approved PAP, this Permit, and any other modifications approved by the Director, pursuant to §19.10.5 NMAC. The Permittee shall comply with the statutes and regulations in Section 1 of this Permit, the applicable regulatory and permitting requirements, and any and all conditions that are incorporated into this Permit.

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- B. Where the PAP is ambiguous or in apparent conflict with the provisions outlined in this Permit, the language of this Permit will supersede the PAP.

Section 10 (19-1). **GENERAL OBLIGATIONS AND CONDITIONS**

In accordance with §19.10.5.506.I NMAC, the Director may approve a closeout plan subject to conditions necessary to meet the requirements of the Act and §19.10 NMAC. The conditions outlined in this section are required for the Permittee to meet certain requirements of the Rules.

- A. The Permittee shall notify MMD 30-days prior to performing any permanent closeout/reclamation activities at the mine site.
- B. The conditions specified in this Permit are required to mitigate the disturbance within the Interim Project Area and to ensure stabilization of the Interim Project Area and minimize future impacts to the environment and protect air and water resources. The conditions specified in this Permit are necessary to reclaim the Interim Project Area to the conditions that allow for establishment of the designated PMLUs of wildlife habitat and industrial uses.
- C. The interim CCP is a conceptual plan that was prepared before site characterization has been completed. General objectives and conditions are described below, and technical specifications shall be developed following MARP guidance and in consultation with MMD. Before performing any closeout/reclamation activities require by this permit at the mine site, Permittee shall prepare and submit to MMD documents consistent with the processed described in Generalized Mine Site Reclamation Implementation Guidance described in Section 5 of the Joint Guidance for the Cleanup and Reclamation of Existing Uranium Mining Operations in New Mexico, issued by MMD and NMED, dated March 2016
- D. **Construction Quality Assurance Plan**
1. The Permittee shall submit a Construction Quality Assurance ("CQA") plan to MMD for approval not less than 180 days prior to, or an acceptable time agreeable to MMD, before commencement of any reclamation activities and shall implement the CQA plan only after MMD approval. The design will include detailed engineering designs addressing slopes, surface erosion controls and stormwater management structures for MMD approval. The CQA plan shall include: a description of work to be conducted and identification of borrow areas. Design

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specifications may be modified during the final engineering design with MMD approval. The CQA shall include a reclamation schedule describing how reclamation is to proceed and a timetable for completing the reclamation. The schedule should also address post reclamation maintenance and monitoring and a related timetable.

2. The CQA shall be supplemented to include a final report to be submitted to MMD not more than 180 days after construction completion. The report shall include a summary of work conducted, as-built drawings and final design specifications for slopes, covers and for stormwater management structures. The CQA final report shall describe, at minimum, as-built drawings, a final topographic map with no greater than two-foot contour intervals for the top surfaces and no greater than ten-foot contour intervals for the out slopes, and construction photographs.

General Reclamation Objectives

- E. Reclamation objectives are outlined in Section 5 of the Interim CCP (entitled "Reclamation Design Criteria") and shall be met:
 1. Final surface configurations shall allow for even, unconcentrated drainage and facilitate revegetation.
 2. Slopes shall be graded to no steeper than 3H:1V.
 3. Erosion of reclaimed areas shall be minimized.
 4. Roads not needed for the PMLU shall be reclaimed by ripping to a minimum of 18-inches followed by reseeding.
 5. All vent holes and mine shafts that do not have a PMLU shall be reclaimed to prevent water from flowing into these entrances.
 6. Reclamation of radiological contaminants shall, at a minimum, meet the cleanup criteria of *Joint Guidance for the Cleanup and Reclamation of Existing Uranium Mining Operations in New Mexico*, issued by MMD and NMED, dated March 2016, or equivalent.
 7. For the purpose of this Revision 19-1 and the Interim Project Area, the presumptive soil cleanup criterion is established as 6 pCi/g of radium-226 averaged over the upper 15 cm of soil and an area of 100 square meters as the basis for estimating

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removal volumes. Soil cleanup criteria specified in this Permit may be revised as site characterization progresses.

8. Reclamation shall allow for reestablishment of a self-sustaining ecosystem appropriate for the life zone of the surrounding area following closure. The PMLU is designed as livestock grazing and wildlife habitat.

Repositories

- F. Up to three on-site repositories for disposal of contaminated soil shall be constructed. Final locations of the repositories shall be detailed in the CQA described previously in this Revision 19-1.
- G. Repositories for waste material shall be incised or partially incised to the extent practicable.
- H. Repositories shall have shallow slopes of no steeper than 3H:1V.
- I. Repositories shall incorporate an evaporative cover.
- J. Repositories shall be designed to reduce average radon flux through the cover material to less than 20 pCi m²/s.

Stormwater Management

- K. Reclamation shall be designed and constructed to create positive drainage away from buried materials to prevent re-exposure.
- L. Stormwater control measures such as armored channels, ditches, berms, dikes, contour furrows, shall be designed and constructed to meet the 100-year 24-hour storm event.

Evapotranspiration Cover Design

- M. Cover material shall meet MMD and NMED textural requirements to resist erosion, promote revegetation, and reduce radiation dose through the cover.
- N. Cover material shall meet NMED water holding capacity requirements.

Confirmatory Monitoring and Reporting

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- O. A post-reclamation radiation assessment and sampling program shall be implemented in accordance with *Joint Guidance for the Cleanup and Reclamation of Existing Uranium Mining Operations in New Mexico*, issued by MMD and NMED, dated March 2016, or equivalent.

Revegetation

- P. Reclaimed areas shall be scarified prior to reseeded.
- Q. Roads shall be ripped to at least 18-inches depth.
- R. Revegetation shall include drill seeding where practicable and broadcast seeding in inaccessible areas.
- S. The seed mix and application rate to be used for reclamation shall be pre-approved by MMD prior to implementation of field work.
- T. Certified weed-free mulch shall be applied at a minimum rate of 2 tons/acre and crimped into place.
- U. Revegetation success shall be determined through comparison to a reference area(s) and shall be based on ground cover, abundance, and species diversity. The site shall be considered reclaimed and eligible for release of financial assurance once the following criteria have been met:
1. Canopy cover within the reclaimed area equals at least 75% of canopy cover within the identified reference area(s);
 2. Species diversity within the reclaimed area approximates the species diversity within identified reference area(s) or within the ecological site description provided by the Natural Resources Conservation Service;
 3. Noxious weed species percent cover does not exceed that of the reference area(s);
 4. No significant erosion is evident on reclaimed areas.
- V. The reference area(s) selected should represent various vegetation types across the Permit Area.
- W. Following the re-vegetation and restoration activities, periodic site monitoring shall be

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conducted by the Permittee to ensure the successful establishment of vegetation and stabilization of the site. Re-vegetated areas that do not exhibit satisfactory vegetative growth by the end of the third growing season shall be mitigated by reseeding, mulching, grading, and/or application of best management practices ("BMPs") to prevent erosion and site degradation.

Wildlife Surveys

- X. Wildlife surveys shall be conducted prior to reclamation of the Interim Project Area in accordance with Section 5.7.2 of the Interim CCP.

Cultural Resource Surveys

- Y. Cultural and historical resources shall be researched and surveyed within the Interim Project Area in accordance with Section 5.7.3 of the Interim CCP.

Best Management Practices ("BMPs")

- Z. No storage of fuels or chemicals shall take place within any watercourse.
- AA. The Permittee shall implement best management practices ("BMPs") in a manner that prevents direct impacts to surface water and ephemeral, intermittent, and perennial water courses. The Permittee shall implement erosion control measures that are designed, constructed and maintained using professionally recognized standards.
- BB. The Permittee must contain any water produced from the operation at the site. Discharge of water or any industrial fluids to any watercourse may be a violation of the Clean Water Act. All waste material shall be collected and disposed of properly.
- CC. Travel should be suspended during wet, muddy conditions. Construction or maintenance activities should not be performed during periods when the soil is too wet to adequately support heavy equipment. If such equipment creates ruts in excess of six inches deep, the soil is considered too wet to adequately support equipment.
- DD. Appropriate spill clean-up materials, such as absorbent pads, must be available on-site at all times during mining activities to address potential spills. Spills must be reported immediately to NMED as required by the New Mexico Water Quality Control Commission Regulations (§20.6.2.1203 NMAC). For non-emergencies during normal business hours, call (505) 476-6000. For non-emergencies after hours, call (866) 428-6535 or (505) 428-6535

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(voice mail, twenty-four hours a day). For emergencies only, call (505) 827-9329 twenty-four hours a day (NM Department of Public Safety).

Cultural and Paleontological Resource Preservation Requirements

- EE. The Permittee is obligated to comply with procedures established in Section 18-6-11.2 of the Cultural Properties Act, NMSA and §4.10.11 NMAC to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the Permittee shall immediately halt the disturbance and contact the Office of the Medical Investigator and the local law enforcement agency pursuant to Section 18-6-11.2 of the Cultural Properties Act and the Department of Cultural Affairs within 24 hours for instructions. The Permittee shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the Department of Cultural Affairs in consultation with Indian Tribes.

Changes, Modifications, or Revisions to the Permit

- FF. Any changes, modifications or amendments to the approved Permit must be approved, in writing, prior to implementation.

Financial Assurance

- GG. The Permittee shall maintain financial assurance in the approved total amount of \$89,918,000, using one, or more, approved financial assurance instruments until released, pursuant to Part 12 of the Rules and sufficient to cover third-party costs of surface reclamation of the Interim Project Area.

Annual Report and Fees

- HH. The Permittee shall submit annual reports pursuant to §19.10.5 NMAC, and any fees as required by §19.10.2 NMAC.

Additional Obligations

- II. The Permittee shall maintain this Permit until reclamation is completed at the site.

Section 11 (19-1).

CONCLUSIONS OF LAW

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- A. The PAP is complete and accurate and complies with the requirements of the Act and §19.10.5 NMAC.
- B. The Director has jurisdiction over the Permittee and the subject matter of this Permit and process.
- C. The Permittee is permitted to conduct reclamation operations within the Interim Project Area and Permit Area upon the condition that the Permittee complies with the requirements and conditions of the Act, the Rules, and this Permit, and upon the submission of such annual reports and fees as may be required under §19.10 NMAC and §19.10.2 NMAC.



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CERTIFICATION

I certify that I have read, understand and will comply with the requirements of the Permit. I further certify that I am not in violation of the Act or §19.10 NMAC. I also agree to comply with the performance and reclamation standards and requirements of the Permit, the Rules, and the Act, and allow the Director to enter the Permit Area without delay for the purpose of conducting inspections during exploration and reclamation.

Jessica Floss
Authorized Representative of the Permittee

Manager US Legacy Assets
Title

RAMI
Company

Subscribed and sworn to before me this 15th day of April, 2021

Michaela Gorospe
Notary Public

My Commission Expires

July 13, 2023



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ORDER

NOW THEREFORE, IT IS HEREBY ORDERED that Revision 19-1 to Permit No. MK009RE, which incorporates an updated Interim Closure/Closeout Plan and updated Financial Assurance based on the Interim Closure/Closeout Plan, is approved.

By Order of the Director, Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department, of the State of New Mexico.

By:



Jerry Schoeppner, Director
Mining and Minerals Division
Energy, Minerals and Natural Resources Department

Date:

4/21/2021

