



State of New Mexico  
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT  
and the  
ENVIRONMENT DEPARTMENT

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February 13, 2018

Ms. Teresa Ballaine  
Rio Algom Mining LLC  
P.O. Box 218  
Grants, NM 87020

**RE: Proposed Permit Area, Old Stope Leach Mine, McKinley County, New Mexico, Permit No. MK009RE**

Dear Ms. Ballaine,

The Mining and Minerals Division ("MMD") has reviewed the submittal from Rio Algom Mining LLC ("RAML") dated November 17, 2017 that proposes the redefinition of the Old Stope Leach Permit Area. The New Mexico Environment Department ("NMED") also regulates impacts from Rio Algom mining operations pursuant to the Water Quality Act. Due to the joint jurisdiction by MMD and NMED ("Agencies"), a joint Closure/Closeout Plan may represent the most appropriate mechanism to address reclamation of all areas impacted by operations of RAML and its predecessors in the Ambrosia Lake area.

The Agencies have the following comments on the proposed Old Stope Permit Area:

**T14N, R9W Section 35 Mine**

1. MMD has jurisdiction at the Section 35 Mine, and MMD agrees that Section 35 should remain within the Permit Area. MMD also has jurisdiction over the impacted surface south of the Section 35 Mine as an "affected area." The affected area south of Section 35 is due to overland discharge of impacted water during conventional mining operations. "Reclamation," as defined in §19.10.1.7.R(1) NMAC:

*"means the employment during and after a mining operation of measures designed to mitigate the disturbance of affected areas and permit areas and to the extent practicable, provide for the stabilization of the permit area following closure that will minimize future impact to the environment from the mining operation and protect air and water resources."*

2. The purpose of the Closeout Plan is to describe how reclamation will be achieved; therefore, the Closeout Plan shall include both the Permit Area and any affected areas. Affected areas, however, do not have to be included within the Permit Area. Financial assurance will be

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required to address reclamation in both the Permit Area and affected areas. As stated previously, NMED also has jurisdiction over mining affected areas, therefore, a joint Closure/Closeout Plan to address reclamation of all areas impacted by operations of Rio Algom and its predecessors in the Ambrosia Lake area may be submitted to satisfy the regulatory requirements of both state agencies.

**T14N, R9W, Section 32 and Section 33 Mine**

3. MMD has jurisdiction at the Section 33 Mine. Data indicate that this mine may have impacted the NE and SE quarter of T14N, R9W Section 32 that extends beyond the Permit Area. Surface contamination within T14N, R9W, Section 32 from the Section 33 mine may be co-mingled with a non-RAML mine in the northern portion of Section 32. As stated previously, affected areas are required to be addressed in the Closure/Closeout Plan.

**T14N, R9W, Sections 17, 18, 19, 20, 29, and 30**

4. Three mine sites within the Permit Area were released under MMD's prior reclamation rules (§19.10.5.511 NMAC): Section 19 mine, Section 30 mine and Section 30W mine. MMD released only the reclaimed mining disturbance related to the actual mine sites themselves; i.e. MMD did not release the entire section in which these mines are located. These prior reclamation sites represent reclaimed "islands" within the larger Permit Area. Radiological data show that surface contamination associated with these mines exists in Sections 17, 19, 20, 29, and 30 due to RAML's conventional mining operations and are required to be addressed in a Closeout Plan. While the "islands" were released by MMD under Prior Reclamation rules, NMED retains jurisdiction over these areas which can be addressed in the joint Closure/Closeout Plan.

**T14N, R10W, Section 13**

5. MMD agrees that T14N, R10W, Section 13 can be excluded in its entirety from the Old Stope Permit Area. MMD finds no evidence of surface impacts related to RAML operations in this section.

**T14N, R10W, Sections 15, 22, 23, 24, 25 and 26**

6. The RAML Section 22 Mine is subject to MMD jurisdiction and data shows that there is likely affected areas in the SE quarter of Section 15 to the north and Section 23 to the east, both of which may be co-mingled with non-RAML mines in these sections. Section 15, 22, and 23 shall remain within the Permit Area. Similarly, the RAML Section 24 Mine shows surface disturbance and affected areas in Section 25 and 26. Contamination from the non-

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RAML mine in Section 25 may be co-mingled with prior RAML operations in Sections 22 and/or 24. Section 24, 25, and 26 shall remain within the Permit Area.

### **General Comments**

7. Property inside the Long-Term Surveillance and Maintenance (“LTSM”) boundary for long-term care by the U.S. Department of Energy should be excluded from the Old Stope Permit Area because it is exempt from MMD and NMED’s regulatory requirements.
8. As previously stated, NMED has joint regulatory authority with MMD over the surface contamination associated with the RAML mines within the Old Stope Leach Permit Area, including off-site affected areas and the “prior reclamation islands” released under the Mining Act (e.g., Section 19 Mine, Section 30 Mine, Section 30W Mine). In order to satisfy the joint regulatory requirements of MMD and NMED, submittal of a comprehensive Closure/Closeout Plan (“CCP”) for review and approval by both agencies is the anticipated path forward.
9. Any known leach boreholes/wells that have not been previously plugged and abandoned should be properly addressed in a joint CCP, in addition to any unknown boreholes identified during future investigations related to the CCP.
10. RAML is required, within 180 days of this letter, to submit an updated comprehensive CCP to MMD and NMED for review and approval. The CCP shall include an updated cost estimate and related financial assurance. The CCP will include a schedule for implementation as required by 19.10.5.506.B.1 NMAC.

MMD recommends a technical meeting with RAML and NMED to discuss the redefinition of the Old Stope Permit Area as well as the requirements of a future joint CCP, reclamation schedule, and financial assurance to address reclamation of the site. As already stated in previous communication with RAML, the Joint Guidance for the Cleanup and Reclamation of Existing Uranium Mining Operations in New Mexico (“Joint Guidance”) on MMD’s website provides information for the investigation/characterization and remediation of existing mining operations.

The guidance document can be downloaded from MMD’s website at:

<http://www.emnrd.state.nm.us/mmd/MARP/documents/March2016JointGuidelinesforExistingMinesandRadiationCleanup.pdf>

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If you have any questions, please contact Holland Shepherd at (505) 476-3437 or Kurt  
Vollbrecht at (505) 827-0195.

Sincerely,



Holland Shepherd  
Program Manager, MARP



Kurt Vollbrecht  
Program Manager, NMED MECS

cc: David J. (DJ) Ennis, P.G. Senior Reclamation Specialist, Permit Lead  
Gabriel Wade, Assistant General Counsel, MMD  
Bill Pearson, NMED Permit Lead  
Warren Zehner, EPA Region 6