

State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

David Martin Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Fernando Martinez, Director Mining and Minerals Division



October 16, 2014

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

RE: Additional Reclamation Required, Old Stope Leach Mine, McKinley County, New Mexico, Permit Number MK009RE

Dear Ms. Ballaine,

In March 2014, the Mining and Minerals Division ("MMD") and the New Mexico Environment Department ("NMED") developed the document entitled <u>Joint Guidance for the Cleanup and</u> <u>Reclamation of Existing Uranium Mining Operations in New Mexico ("Joint Guidance")</u>. This document provides guidelines for the investigation and remediation of existing mines, as defined in the New Mexico Administrative Code ("NMAC" or "Rules"). The Old Stope Leach project, owned by Rio Algom Mining, LLC, is permitted by MMD as an existing mine (permit number MK009RE) under §19.10.5 of the Rules, and is subject to the aforementioned joint guidance document.

In August 2011, the Environmental Protection Agency ("EPA") conducted an aerial radiological survey of the Ambrosia Lake uranium mines revealing elevated gamma radiation levels at the ground surface that had not been documented in the past (reference: <u>Aerial Radiological Surveys Ambrosia Lake Uranium Mines Ambrosia, NM</u>; August 2011; EPA Office of Emergency Management National Decontamination Team; Erlanger, Kentucky 41018). Many of the elevated gamma radiation levels identified by EPA were found to be within the Old Stope Leach permit area. A site inspection conducted by MMD in 2012 revealed elevated gamma radiation levels (measured in micro-Roentgens per hour; " μ R/hr") at the following mine sites within the Old Stope Leach permit area:

- Section 17 (80-220 μR/hr)
- Section 22 Mine (25-110 μR/hr)
- Section 24 Mine (100-380 μR/hr)
- Section 30 Mine (35-130 μR/hr)
- Section 30 West Mine (160-220 μR/hr)
- Section 33 Mine (65-150 μR/hr)
- Section 35 Mine (85-475 μR/hr)

Elevated radiation measurements primarily within T13N, R9W, Section 2, as revealed by the August 2011 EPA aerial survey, have been documented to be the result of past Quivira mining and water discharge operations from the Sections 35 and 36 mines. This section therefore constitutes an "affected area" as defined in §19.10.1.7.A(3) NMAC, along with portions of Sections 3 and 4, which also show elevated radiation levels as documented within several technical studies, including, but not limited to, <u>Evaluation of Impacts from Section 35 and 36</u>

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Mine Dewatering, Ambrosia Lake Valley, New Mexico; October 26, 2007; INTERA Incorporated).

Based on the information available regarding the areas of the Old Stope Leach site that are contaminated with radiological materials, MMD requires the following:

- 1. Inclusion of the affected areas in T13N, R9W, Sections 2, 3 and 4 as part of the cumulative disturbed acreage calculation for the annual report and annual fee starting for the 2014 calendar year, which is due to MMD by April 30, 2015 (see §19.10.1.201.A(6) NMAC).
- 2. Submittal of a characterization work plan as described in Section 5.1 of the Joint Guidance document. The characterization work plan shall include the affected areas in T13N, R9W, Sections 2, 3 and 4, and shall be submitted to MMD within 60-days.
- 3. Submittal of a proposed updated closeout plan and financial assurance cost estimate to adequately reclaim radiological contaminated areas within the Old Stope Leach permit area and the affected areas of T13N, R9W, Sections 2, 3 and 4. The closeout plan should include a reclamation workplan, as described in Section 5.4 of the Joint Guidance. The updated closeout plan and cost estimate shall be submitted to MMD within 90-days.

If you have any questions, please contact me at (505) 476-3434 or by email at david.ennis@state.nm.us.

Sincerely,

David J. (DJ) Ennis, P.G., Permit Lead Senior Reclamation Specialist

cc: Holland Shepherd, Program Manager David Mayerson, NMED Mining Environmental Compliance Section (MECS)