

# Rio Algom Mining LLC

February 27, 2020

**ATTN: Mr. Thomas Lancaster**  
U.S. Nuclear Regulatory Commission  
Mail Drop T5-A10  
Washington, DC 20555-0001

Re: **License SUA-1473, Docket No. 40-8905**  
**Temporary Storage Facility for ACL Investigation Derived Waste at the**  
**Ambrosia Lake West Facility**

Dear Mr. Lancaster,

This letter has been prepared to inform the Nuclear Regulatory Commission (NRC) of Rio Algom Mining, LLC (RAML)'s plan to manage and temporarily store investigation-derived waste (IDW) generated from the Alternate Concentration Limit (ACL) field program at the Ambrosia Lake West Facility (Site). A description of the ACL field program can be found in Section 4 of the *Data Collection Work Plan in Support of Additional Alternate Concentration Limits* [the plan (ML17340A826)]. The plan was submitted to NRC staff on November 27, 2017 (ML17340A824) for review. NRC staff provided comments on the plan, to which RAML responded with additional information (ML18192C139). These responses resolved NRC staff questions regarding the proposed program (ML18197A087). The ACL field program was completed in the Fall of 2019.

Implementation of the plan generated between 300 and 400 cubic yards of IDW that consists of drill cuttings and mud, grout from well construction, and well development water. The ACL IDW is containerized in plastic lined, 20-yard roll off containers provided by a waste management contractor. Given RAML's process knowledge of the Site and the new well locations, RAML intends to manage the ACL IDW as licensed 11 e (2) byproduct material.

As stated above, the ACL IDW is currently containerized in 20-yard roll-off bins. RAML plans to remove the ACL IDW from the 20-yard roll-off bins and consolidate the IDW in a temporary storage facility. The ACL IDW will remain in the temporary facility until a new permanent disposal cell is designed, licensed, and built. RAML believes that the disposal cell will become available in approximately three years, at which point the ACL IDW will be placed within the permanent disposal cell for final disposition.

On January 30, 2020 NRC and RAML staff participated in a teleconference to discuss the licensing basis for the temporary storage of ACL IDW. During this call, NRC staff observed

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that RAML's radioactive materials license, SUA-1473, license conditions (LC) 12 and 14, permit the temporary storage of IDW, provided the following license conditions are met, as described below:

1. LC 12 authorizes RAML to "to possess byproduct material in the form of uranium process tailings and other byproduct wastes generated by the licensee's uranium processing operations",
2. LC 14 requires that written standard operating procedures (SOPs) be established for all activities related to the closure of the facility involving radioactive materials that are handled, disposed or stored. As required by LC14, RAML's SOP are reviewed and updated annually.

The ACL IDW is byproduct waste generated from an activity related to the closure of the facility. RAML plans to possess the ACL IDW until a new permanent disposal cell is licensed. Consistent with the requirements of LC 14, RAML intends to establish an SOP describing how the ACL IDW will be handled and stored. This new SOP will also describe radiation protection requirements for the handling and storage of the ACL IDW. The Radiation Safety Officer will approve the SOP and the SOP will be available for NRC inspection.

Please let me know if you have questions or concerns regarding RAML's plans for handling and storing the ACL IDW.

Sincerely,



Sandra L. Ross, P.G.  
Manager US Legacy Assets  
Technical Centre of Excellence and Legacy Assets  
Rio Algom Mining, LLC

cc: Document Control