Crown-Indigenous Relations and Northern Affairs Canada
Relations Couronne-Autochtones et Affaires du Nord Canada

Water Resources Division
Resource Management Directorate
Nunavut Regional Office
918 Nunavut Drive
Iqaluit, NU, X0A 3H0

Your file - Votre référence
2AM-DOH1335
Our file - Notre référence
GCDocs#151123766

October 29, 2026

Robert Hunter
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0
E-mail: licensing@nwb-oen.ca

Re: Crown-Indigenous Relations and Northern Affairs Canada's Review of the Emulsion Plant Design Report for the Hope Bay Project, Type A Water Licence No. 2AM-DOH1335

Dear Robert,

Thank you for the October 7, 2026 invitation to review the referenced licence Design Report, submitted by Agnico Eagle Mines Limited, for Type A Water Licence No. 2AM-DOH1335.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined the application pursuant to its mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Crown-Indigenous Relations and Northern Affairs Act* and provides the following Technical Review Memorandum for the Board's consideration.

If there are any questions or concerns, please contact me at (873) 800-5240 or Pauline.Firmin@rcaanc-cirnac.gc.ca or Andrew Keim at (867) 975-4550 or Andrew.Keim@rcaanc-cirnac.gc.ca.

Sincerely,

Pauline Firmin

Pauline Firmin, M. Sc,
Regional Coordinator

Canada

Technical Review Memorandum

Date: October 29, 2026

To: Robert Hunter – Licensing Administrator, Nunavut Water Board

From: Pauline Firmin – Regional Coordinator, CIRNAC

Subject: **Crown-Indigenous Relations and Northern Affairs Canada's Review of the Emulsion Plant Design Report for the Hope Bay Project, Type A Water Licence No. 2AM-DOH1335**

Region: ☒ Kitikmeot ☐ Kivalliq ☐ Qikiqtani

A. BACKGROUND

The Doris-Madrid Project, operated by Agnico Eagle Mines Limited (formerly licensed under TMAC Resources Inc.), is located in the Kitikmeot Region of Nunavut, approximately 125 km southwest of Cambridge Bay. The project encompasses the Doris, Madrid, and Boston gold deposits within the Hope Bay greenstone belt and is currently regulated under Water Licence No. 2AM-DOH1335 issued by the Nunavut Water Board.

This Design Report proposed an expansion of the existing explosives manufacturing and storage infrastructure at the Hope Bay Mine. The project involves construction and operation of a new emulsion plant, associated storage tanks, truck wash bay, garage, and supporting infrastructure to improve on-site explosives production capacity. The facility is to be constructed within the existing mine site and is subject to the terms and conditions of Water Licence 2AM-DOH1335. The submitted design report presents the proposed foundation, containment, permafrost protection, drainage, and operational components of the emulsion plant facility for regulatory review.

CIRNAC provides the following comments and recommendations pertaining to the application package. A summary of the subjects of recommendations can be found in Table 1. Documents reviewed as part of this submission can be found in Table 2 of Section B. Detailed technical review comments can be found in Section C.

Table 1: Summary of Recommendations

Recommendation Number	Subject
R-01	Permafrost Monitoring

B. DOCUMENTS REVIEWED AND REFERENCED

The following table (Table 2) provides a list of the documents reviewed under the submission and reference during the review.

Table 2: Documents Reviewed and Referenced

Document Title	Author, File No., Rev., Date
Design Report Hope Bay – Emulsion Plant Site	AtkinsRéalis

C. RESULTS OF REVIEW

1. Permafrost Monitoring

Comment:

CIRNAC notes that the proposed foundation will be supported by a Flat Loop Thermosyphon System and that sub-grade temperatures will be monitored through five years of satellite-based remote temperature monitoring. However, the design report does not explain the basis for limiting thermal performance monitoring to five years, nor does it discuss whether additional monitoring may be required if the facility remains in operation beyond that period, or if thermal monitoring indicate permafrost degradation (Design Report, Section 3.2).

Given the reliance on permafrost stability to maintain foundation integrity and prevent potential changes to surface and groundwater flow pathways, further information would assist in understanding the long-term performance strategy for the system.

Recommendation:

(R-01) CIRNAC recommends that the Proponent clarify the rationale for the proposed five-year monitoring period and describe any plans, contingencies, performance criteria, or adaptive management measures that would be implemented should thermal monitoring indicate permafrost degradation. This information would assist in confirming the long-term protection of permafrost and associated water resources.