



NIRB File No.: 11MN034
NWB File No.: 2AM-MEL1631
NPC File No.: 149337

September 22, 2020

To: Meliadine Distribution List

Sent via email

Re: Finalized scope of Agnico Eagle's "Saline Effluent Discharge to Marine Environment" Project Proposal related to the Meliadine Gold Mine Project

Dear Parties:

On September 9, 2020 the Nunavut Impact Review Board (NIRB or Board) requested clarification from Agnico Eagle Mines Limited (Agnico Eagle or Proponent) regarding several aspects of the scope of activities proposed as part of its' "Saline Effluent Discharge to Marine Environment" Project Proposal (the Project Proposal). The NIRB acknowledges receipt on September 16, 2020 of the requested clarification from the Proponent in response to the NIRB's request.¹ Based on the Proponent's revised Impact Statement Addendum (IS Addendum) and Agnico Eagle's additional clarification, the NIRB has developed a finalized scope of the "Saline Effluent Discharge to Marine Environment" Project Proposal which is provided below for the information of all parties.

PROJECT OVERVIEW AND SCOPE

The Meliadine Gold Mine Project is located approximately 25 kilometres (km) north of Rankin Inlet, with Phase 1 focusing on both open pit and underground mining at the Tiriganiaq deposit. The underground mine extends below the permafrost and experiences inflow of saline groundwater. In January 2018, Agnico Eagle applied to modify the way it would manage saline groundwater flowing into the underground mine because a higher volume of saline groundwater was contacted than previously predicted. Agnico Eagle's "2018 Saline Effluent Discharge Proposal" involved the discharge of excess saline groundwater into the marine environment at Itivia Harbour, Melvin Bay and was assessed by the Board as a reconsideration of the terms and conditions of Project Certificate No. 006, with an amendment to the Project Certificate issued on February 26, 2019. The approved proposal allowed Agnico Eagle to truck treated saline effluent from the mine site to the Itivia facility, where it is placed in a holding tank prior to being discharged

¹ NIRB Public Registry: www.nirb.ca/project/125515; Document ID No.: 331546

through a waterline and engineered diffuser into Melvin Bay. Discharge occurs during the open water season only, in addition to continued management of saline effluent at the mine site.

Agnico Eagle's current "Saline Effluent Discharge to Marine Environment" Project Proposal proposes to develop a waterline to convey saline effluent from the Meliadine mine site to the existing facility at Itivia Harbour, for discharge of an increased volume of saline effluent to the marine environment, replacing the currently approved trucking method.

Construction of the infrastructure is proposed to begin in 2021 and would be used for the discharge of saline effluent as early as May 2021, remain in place for the life of the mine, and according to the proposal, the scope of the project involves the following undertakings, works or activities:

- Construction and operation of a waterline pipe from the Meliadine mine site to the Itivia facility along the all-weather access road (AWAR) and by-pass road specifically:
 - Installation of two (2) lines of 16-inch diameter pipe, running alongside the existing roads and within the easement of the existing roads;
 - Approximately 80 to 90 percent of the waterline's length to be buried with remainder to be above ground;
 - Connection of waterlines to a modified pump house/sampling station at the Itivia facility;
- Installation, operation and decommissioning of a new pipeline extending from the pump house at the existing Itivia facility to a discharge location in Melvin Bay:
 - Discharge location approximately 250 metres (m) northwest of the existing approved pipeline;
 - Use of horizontal directional drilling (HDD) method to construct an underground corridor for the pipeline;
 - Pipeline would extend underground from the pump house to approximately seven (7) m depth below the water surface, and continue on the sea floor to an engineered diffuser at 20 m depth;
 - Pipeline would remain in place following decommissioning of the facility; and
- Discharge of treated saline effluent into Melvin Bay at a rate of 6,000 cubic metres (m³) to a maximum of 12,000 m³ per day during the open water season:
 - Potential alternative option to also divert on-site treated surface contact water for discharge to the marine environment via the pipeline to reduce volume being discharged to Meliadine Lake. Maximum volume of 8,000 m³ per day to be discharged of on-site treated surface contact water, should it be required for a total maximum volume of 20,000 m³ water discharged per day to the marine environment.

All documentation and materials related to the NIRB's assessment of the "Saline Effluent Discharge to Marine Environment" Project Proposal can be found on the NIRB's public registry at www.nirb.ca/project/125515. If you have any questions or require additional clarification regarding this matter, please contact the undersigned directly at (867) 983-4617 or kmorrison@nirb.ca or contact Erin Reimer, Technical Advisor I, at ereimer@nirb.ca.

Sincerely,



Keith Morrison
Manager, Impact Assessment
Nunavut Impact Review Board

cc: Jamie Quesnel, Agnico Eagle Mines Limited
Michel Groleau, Agnico Eagle Mines Limited