



Water Resources Division
Resource Management Directorate
Nunavut Regional Office
P.O. Box 100
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Your file - Votre référence

Our file - Notre référence
GCDOCS# 96266695

July 14, 2021

Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0

Re: Crown-Indigenous Relations and Northern Affairs Canada Review of the Licence Modification Application for IVR and Whale Tail open pit mines, Type A Water Licence No. 2AM-WTP1830

Dear Richard Dwyer,

Thank you for the June 14, 2021 invitation to review the referenced licence modification application, submitted by Agnico Eagle Mines, for Type A Water Licence No. 2AM-WTP1830.

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*. Please find CIRNAC comments and recommendations in the attached Technical Memorandum.

If there are any questions or concerns, please contact me at (306) 501-4047 or Andrew.Keim@canada.ca.

Sincerely,

Andrew Keim,
Industrial Coordinator
Water Resources, Nunavut Regional Office
Crown-Indigenous Relations and Northern Affairs Canada
Andrew.Keim@Canada.ca / Tel : (306) 501-4047



Crown-Indigenous Relations
and Northern Affairs Canada

Relations Couronne-Autochtones
et Affaires du Nord Canada



Technical Review Memorandum

Date: July 14, 2021

To: Richard Dwyer, Manager of Licensing Nunavut Water Board

From: Andrew Keim, Industrial coordinator, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada Review of the Licence Modification Application for IVR and Whale Tail Open Pit Mines, Type A Water Licence No. 2AM-WTP1830

Region: Kitikmeot Kivalliq Qikiqtani

A. BACKGROUND

The Whale Tail (Amaruq) satellite deposit is located northwest of the Meadowbank mine and 150 Kilometers north of the hamlet of Bake Lake Nunavut. The project was first licensed by the Nunavut Water Board (NWB) in 2018 following a full environmental review completed by the Nunavut Impact Review Board on March 15th, 2018. The project involves the construction, operation, maintenance, reclamation, closure and monitoring of an open pit gold mine.

Following licensing, additional infrastructure to support the Whale Tail and IVR pits were built at the Amaruq site including, truck shop/warehouse, fuel storage and an additional camp facilities. In 2018, Agnico Eagle Mines Ltd. (AEM) proposed an expansion project to increase gold production from the original Whale Tail Pit Project by expanding mining activities at the Whale Tail Pit and development of the IVR open pit and Underground pit.

The NWB Water License amendment process for the Whale Tail Pit Expansion Project was completed on 12 May 2020 and Water License Amendment No. 2AM-WTP1830 was issued. Commercial production under the Whale Tail Pit Expansion Project began December 2020.

The current modification request submitted by AEM under the Type A Water Licence 2AM-WTP1830 includes the following two activities:

- IVR Pushback - located in the southwest portion of the IVR Pit, under the east portion of the Whale Tail Waste Rock Storage Facility (WRSF), and;
- Whale Tail Pushback - located in the northeast portion of the Whale Tail Pit

A '**Pushback**' represents an area that can be mined in a single continuous operation.¹

¹ [https://www.vastplc.com › uploads › 2019/03 › the -open-pit-mining-process-at-pickstone-peerless-27.05.15 \(1\).pdf](https://www.vastplc.com/uploads/2019/03/the-open-pit-mining-process-at-pickstone-peerless-27.05.15(1).pdf)



CIRNAC provides the following comments and recommendations pertaining to the application package.

Documents reviewed as part of this submission can be found in Table 1 of Section B. Detailed technical review comments can be found in Section C.



B. DOCUMENTS REVIEWED AND REFERENCED

The following table (Table 1) provides a summary of the documents reviewed and referenced under the submission.

Table 1: Documents Reviewed and Referenced

Document Title	Author, File No., Rev., Date
The Water Management Plan V7_NWB	Agnico Eagle Mines Limited – Meadowbank Division, June 2021
The Waste Rock Management Plan V8_NWB	Agnico Eagle Mines Limited – Meadowbank Division, June 2021
NWB 60 day Notification of Modification – Correspondence	Jamie Quesnel, Director, Permitting & Regulatory Affairs, Agnico Eagle Mines Limited, June 11, 2021
NPC Confirmation of Screening Exemption – Correspondence	Goump Djalogue, Senior Planner, Nunavut Planning Commission, April 20,2021
NIRB Acknowledgment of Modification – Correspondence	Karen Costello, Executive Director Nunavut Impact Review Board, May 19, 2021



C. RESULTS OF REVIEW

1. Water Management structures

Comment:

While conducting a review of the submitted documents by Agnico Eagle Mines Ltd. including the Water Management Plan (V7), the proponent states the following on Page 2, Paragraph 2 of the Executive Summary:

“During operations, site water quality is predicted to exceed established criteria (i.e. under the Whale Tail Water Licence(2AM-WTP1830) for arsenic and total dissolved solids in the Whale Tail Waste Rock Storage Facility (WRSF) Pond and in the Whale Tail Pit sump. Therefore, this water is controlled by Whale Tail WRSF Dike and the Whale Tail WRSF Pond”.

With specific reference to the Whale Tail Pit Sump, a search for the location of the sump in relation to the proposed Pushback in Whale tail could not be located.

Recommendation:

(R-01) CIRNAC recommends that Agnico Eagle Mines Ltd provide an engineered drawing that details the locations of the Whale Tail and IVR sumps and any other water management structures located within the footprint of the two pits in relation to the proposed locations of the Pushback activities currently under review.

2. Waste Rock Storage

Comment:

While conducting a review of the submitted documents by Agnico Eagle Mines Ltd. including the Waste Rock Management Plan, on Page 1 of Section 1 – Introduction, Paragraph 6 the following statement was found:

“Waste rock and overburden will be stored in the Waste Rock Storage Facility (Whale Tail WRSF and IVR WRSF) and ore stockpiled on the ore pads. Some NPAG-NML material will also be stored in the IVR pit pushback. The waste rock storage footprint, water management infrastructure and camp have been designed and considers up to eight years to allow for expected resource growth. The underground WRSF (AP-5 location) that was permitted under the Type B will be expanded and became a facility regulated under the Type A Water Licence (2AM-WTP1830). Agnico Eagle will increase the footprint of the underground area to the north to accommodate additional waste storage”.



However, On Page two, Paragraph 2 of the Executive Summary of the Waste Rock Management Plan submitted with the modification application states the following:

“The Underground WRSF, located east of the Whale Tail Pit, is a temporary facility as all mine waste rock from underground operations will be temporarily stored there before being returned underground as backfill material”.

Recommendation:

(R-02) CIRNAC recommends that Agnico Eagle Mines Ltd provide clarity on their plans in relation to the Underground WRSF. It is not clear if that WRSF was to be considered for a larger footprint to accommodate waste rock from the operations of the pushbacks and thus a more long term use during this modification request, or if will be reviewed separately in a further request.