Water Resources Division
Resource Management Directorate
Nunavut Regional Office
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Your file - Votre référence
2AM-WTP1830
Our file - Notre référence
GCDocs#100504129

February 2, 2022

Richard Dwyer
Manager of Licensing
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 (CIRNAC's) Reply to Agnico Eagle Mines' (AEM's) Response on 60-Day Notice for Whale Tail Emulsion Plant Construction Proposal for Water Licence 2AM-WTP1830

Dear Mr. Dwyer,

Thank you for your January 25, 2022 invitation to reply to Agnico Eagle Mines' (AEM's) response to CIRNAC's recommendations on the 60-Day Notice for Whale Tail Emulsion Plant Construction proposal for Water Licence 2AM-WTP1830.

CIRNAC-01: SIGNED AND STAMPED ISSUED FOR CONSTRUCTION (IFC)

(R-01) CIRNAC recommends that AEM provide signed and stamped issued for construction (IFC) drawings by a registered engineer, showing anticipated work areas with dimensions, for the Whale Tail Emulsion Plant.

Agnico Eagle's Response: AEM has updated the engineering drawing of the existing and new installations (drawing 61-446-210-002_R2 For construction).

CIRNAC is satisfied with AEM's response.

CIRNAC-02: Detailed Foundation Plan

(R-02) CIRNAC recommended that AEM provide a detailed foundation plan that clearly specifies all the structural items anticipated to support the Emulsion Plant super-structure in addition to an IFC version of the provided grading plan.

Agnico Eagle's Response: Engineering drawings 61-446-230-002 & 61-446-230-003 has been updated with additional information. It's important to point out that the proposed foundation design is similar to the one supporting the existing Meadowbank Emulsion Plant and no issue has been observed over the last 12 years of operation.

Moreover, the building is not anticipated to have any effect on groundwater as it will be built on land. It's expected that the addition of the filling material required to build the foundation would increase the elevation of the active layer. Instead of the active layer being located only into the overburden, this one will be move up into the foundation. As the foundation is a relatively small surface area compared to the size of the hydrogeological modeling domain used for the Whale Tail Expansion Project, it's not expected that the construction of the foundation will result in any change into the groundwater flow regime.

CIRNAC is satisfied with AEM's response.

CIRNAC-03: Quality Control / Quality Assurance (QC/QA) Plan

(R-03) CIRNAC recommended that AEM provide a detailed Quality Control / Quality Assurance (QC/QA) plan / narrative in a detailed report.

Agnico Eagle's Response: All backfill materials visually approved for use by Agnico Eagle Construction prior to placement at the Emulsion Pad extension. Material place is NAG and Non-Metal leaching as per latest Agnico's Operational ARD/ML Sampling and testing Plan. Placement of backfill materials were observed to conform to the specifications (maximum lift heights, compaction) outlined in the design drawings. Work supervision by Agnico Eagle Construction engineer ensure that the placement of backfill conforms to the specifications (maximum lift heights, compaction) outlined in the design drawings.

CIRNAC is satisfied with AEM's response.

CIRNAC-04: Fill Materials plan

(R-04) CIRNAC recommended that AEM provide:

a) A detailed narrative on how it plans to put in place fill materials for berm and anchor trench (i.e. fill materials plan);

Agnico Eagle's Response: Fill materials will be trucked from NAG stockpiles to the Emulsion Pad location and dump. Material is then spread to the required lift thickness, with a bulldozer and compacted with a 10-tonne vibratory roller. A surveyor assists the crew to guide and control the lift thickness. The anchor trench is excavated with an excavator to the required depth and the material is then re-compacted within the trench using hand compaction equipment. As described in response of Recommendation 1, the Emulsion Plant is located on permafrost and no impact to groundwater flow regime is expected.

b) Specifications for engineered fills indicated in the attached drawings to AEM's notification letter to the NWB

Agnico Eagle's Response: Minimum placement specifications for the engineered fills indicated in the drawings are located on 61-446-230-003 "446-Emulsion Plant Pad, 230-General Earthworks Detail and Sections", sealed by WSP July 22, 2021.

CIRNAC is satisfied with AEM's response with regards to recommendations 4a and 4b respectively.

CIRNAC-05: General Layout Site Map

(R-05) CIRNAC recommended that AEM should revise the general layout/site map of the proposed Whale Tail Emulsion Plant construction site showing explosives quantity distances to include setback distance for the new construction from the nearest water body within the Whale Tail Pit project infrastructure footprint.

Agnico Eagle's Response: Agnico Eagle refers CIRNAC to the drawing 61-446-210-006.

CIRNAC is satisfied with AEM's response.

CIRNAC-06: Permafrost Degradation Prevention Plan

(R-06) CIRNAC recommended that AEM:

a) Incorporate best practices to prevent or mitigate against permafrost degradation during the construction phase of the Whale Tail Emulsion Plant into the IFC design (i.e. permafrost degradation prevention plan) and;

Agnico Eagle's Response: The design of the Emulsion Pad extension places a minimum of 1.5 m of thaw-sable rockfill over the existing tundra to support the construction of the new plant facility. This is a typical rockfill depth for various pads and roads across Agnico Eagle sites in Nunavut to prevent degradation of the underlying permafrost.

These practices are aligned with the mitigation measures described in the FEIS (Table 3-C-2) to reduce impacts of the project on the project during construction & operation phases.

Project Activity	Planned Mitigation Measure (FEIS Table 3-C-2)
Mine Site Facilities Construction	Submission of all design drawings to the Nunavut Water Board for approval, prior to construction.
	Where possible, use thaw-stable road fills for construction.
	Road fill material will be placed directly over the existing soil layer without cutting, stripping, or grubbing to avoid disturbing the subgrade soils.
	Placement of the road construction materials during winter will minimize disturbance to the permafrost.
	Thick drifted snow greater than 1 m thick will be removed before the road fills are placed.

Table 1: Extract from 2020 Annual report - Table 12-32

b) Report these best practices in future annual reports.

Agnico Eagle's Response: Agnico Eagle will continue to report the effectiveness of the mitigation measures to reduce impact of the project on permafrost. This project will be discussed in the annual report, in the *Post-Environmental Assessment Monitoring Program (PEAMP) / Soil, Terrain, and Permafrost* section.

CIRNAC is satisfied with AEM's response with regards to recommendations 6a and 6b respectively

CIRNAC appreciates the opportunity to participate in this review. If there are any questions, please contact John Onita at john.onita@rcaanc-cirnac.gc.ca; or (867) 975-3876 or Andrew Keim at (867) 975-4550 or andrew.keim@rcaanc-cirnac.gc.ca

Sincerely,

John Onita
Regional Water Coordinator