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

Water Resources Division
Resource Management Directorate
Nunavut Regional Office
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Your file - Votre référence
2AM-WTP1830
Our file - Notre référence
GCDocs# 93880214

April 30, 2021

Mr. 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 review of responses to comments on the Adaptive Management Plan for the Whale Tail Project, Submitted by Agnico Eagle Limited for Water Licence 2AM-WTP1830

Dear Mr. Dwyer,

Thank you for your April 23, 2021 request for confirmation on whether the response of Agnico Eagle Mines Limited (AEM) addresses the comments made by Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) on the Adaptive Management Plan (AMP) for the Whale Tail Project.

CIRNAC has participated in this review 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*.

On February 22, 2021, CIRNAC provided eight review comments on the AMP and on March 26, 2021, AEM provided responses to those comments. CIRNAC reviewed the responses from AEM, considered comments #2, #3, #5, #6, #7 and #8 resolved, and provided additional remarks regarding comments #1 and #4 in a letter to the Nunavut Water Board (NWB) dated April 9, 2021.

On April 21, 2021, AEM provided responses to address CIRNAC's April 9, 2021 letter.

CIRNAC appreciates the response and the efforts from AEM to address CIRNAC comments #1 and #4. AEM's April 21, 2021 submission included a copy of the Nunavut Planning Commission correspondence, which CIRNAC had requested, and so CIRNAC

considers comment #1 resolved. CIRNAC would like to provide the following rationale for the NWB's consideration regarding why CIRNAC still considers comment #4 unresolved.

In its previous submissions to the NWB on February 22 and on April 9, CIRNAC stated in comment #4 that AEM did not provide an explanation on why two different depths of the thermal active layer have been applied or assumed in different management plans. In both letters CIRNAC recommended that this explanation be provided.

In its April 21, 2021 response, AEM stated that the 7.0 meter thermal active layer depth applied in the AMP is based on predictions made applying the RCP 8.5 Climate Change Model. Given the identified potential significant impacts on the water quality from arsenic-leaching waste rock in this project, CIRNAC understands and emphasizes the importance of keeping all arsenic-leaching waste rock under permafrost condition during all phases of the mining operation, particularly the closure and post-closure phases. Consequently, CIRNAC appreciates and encourages the efforts made by AEM in applying a more conservative approach in predicting and managing potential arsenic-leaching waste rock. Should AEM consider that the RCP 8.5 Climate Change Model be more appropriate for the design of the AMP, CIRNAC is of the opinion that it should also be applied in the design of the WRSF cover so that all potential arsenic-leaching waste rock be kept under frozen conditions.

CIRNAC notes the following statement made by AEM in its April 21, 2021 submission: *"(E)ven if the active layer depth of 7m is reached during the operation, closure or post-closure phase, it is not expected to have adverse effect on the WRSF water quality.*" Before CIRNAC can have confidence in this statement, CIRNAC would require for it to be supported or substantiated by evidences or data.

In its April 21, 2021 response, AEM also stated that the 4.7 meter thermal active layer depth applied in the Waste Rock Storage Facility (WRSF) design plan was reviewed by all interveners, including CIRNAC, and approved by the NWB on March 26, 2020. CIRNAC would like to emphasize that on the WRSF cover design, CIRNAC has recommended it be approved in concept only and recommended it be finalized by incorporating all monitoring data and additional thermal and seepage modelling results prior to full closure. Provided that AEM now considers the RCP 8.5 Climate Change Model more appropriate for its management plan design (i.e., AMP), CIRNAC believes this new thermal modelling approach or result needs to be incorporated in the WRSF design as well. If AEM does not consider the RCP 8.5 Climate Change Model more appropriate, CIRNAC would be satisfied to apply 4.7 meter thermal active layer depth provided that the assumptions used are consistent in the AMP and the WRSF design.

To properly address the underlying concerns related to our comment #4, CIRNAC recommends that AEM either revise its WRSF design plan by applying a 7.0 meter thermal active layer depth, or revise its AMP by applying a 4.7 meter thermal active layer depth, or substantiated the following statement with sufficient evidences or data: *"(E)ven if the active layer depth of 7m is reached during the operation, closure or post-closure phase, it is not expected to have adverse effect on the WRSF water quality.*"

CIRNAC appreciates the opportunity to participate in this review. If there are any questions, please contact me at david.zhong@canada.ca, or Bridget Campbell at bridget.campbell@canada.ca.

Sincerely,

David Zhong
Regulatory and Science Advisor