Water Resources Division
Resource Management Directorate
Nunavut Regional Office
P.O. Box 100
Iqaluit, NU, X0A 0H0

Your file - Votre référence
2AM-MEL1631
Our file - Notre référence
GCDocs#100446050

January 27, 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) Reply to Agnico Eagle Mines' (AEM's) Response on Meliadine Mine Design Reports For Water Licence 2AM-MEL1631

Dear Mr. Dwyer,

Thank you for your January 20, 2022 invitation to reply to Agnico Eagle Mines' (AEM's) response to CIRNAC's comments on the Meliadine Mine Design Reports for Water Licence 2AM-MEL1631.

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

(R-01) CIRNAC recommends that AEM should provide signed and stamped issued for construction (IFC) drawings by a registered engineer, for:

a) Waste Rock Storage Facility 3 (WRSF3) Design Report and Drawings (Version 2) 6515-686-163-REP-002;

b) Design Report for CP2, CP2 Thermal Berm, Channel 9, and Channel 10.

Agnico Eagle Response:

Please see Appendix A of, Waste Rock Storage Facility 3 (WRSF3) Design Report and Drawings (Version 2) 6515-686-163-REP-002 for the signed and stamped IFC drawings. Please see Appendix B of, Design Report for CP2, CP2 Thermal Berm, Channel 9, and Channel 10 for the requested signed and stamped IFC drawings.

CIRNAC is satisfied with AEM's response.

CIRNAC-02: SLOPE STABILITY ANALYSES FOR WRSF3

(R-02) CIRNAC recommends that AEM should provide additional slope stability analyses to assure that the stability of WRSF3 is adequate everywhere.

Agnico Eagle Response

The WRSF3 presented in the detailed design report (Version 2) is an expansion of the original approved WRSF3 in March 2020 with the footprint extending toward east. The geometry and overall slope along the north, south, west sides of WRSF3 are similar to the original approved WRSF3. Two sections along north and west sides of the original approved WRSF3 were evaluated for the slope stability analysis. More details on the stability analysis along these two sections can be found in Appendix C of Waste Rock Storage Facility (WRSF3) Design Report and Drawings 6515-686-163-REP-002 (March 2020). Given the similar geometry and overall slope along the north and west sides of WRSF3, the findings from the slope stability analysis along the two sections are still valid. Comparisons on geotechnical conditions (Table 1 in Appendix C of Waste Rock Storage Facility (WRSF3) Design Report and Drawings (Version 2) 6515-686-163-REP-002, November 2021), consequence of failure, and original ground surface slope between the WRSF3 extension area and the original WRSF3 indicate that the selected section along east side of WRSF3 is critical for stability analysis. It is deemed that the stability of WRSF3 is adequate considering these three typical sections analyzed.

The freezing point depression was considered in the thermal analysis (Appendix B of Design Report) by assigning pore water salinity to the foundation soils, overburden waste, and waste rock. The thermal analysis results feed into the slope stability analysis for WRSF3 design update.

CIRNAC is satisfied with AEM's response.

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