



Water Resources Division
Resource Management Directorate
Nunavut Regional Office
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Your file - Votre référence
2AM-DOH1335
Our file - Notre référence
GCdocs # 97592202

September 3, 2021

Mr. Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0
sent via e-mail: licensing@nwb-oen.ca

Re: Crown-Indigenous Relations and Northern Affairs Canada's reply to Agnico Eagles Mines Limited's response to comments on the 2020 Annual Report for Type A Water licences 2AM- DOH1335 and 2AM-BOS1835, and Type B Water Licences 2BB-MAE1727, 2BB-BOS1727, and 2BE-HOP1222, for the – Hope Bay Project

Dear Mr. Dwyer,

Thank you for your August 30, 2021 invitation for reply to Agnico Eagle Mine Limited's (AEM) August, 2021 response to Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC) June 25, 2021 comments on the 2020 Annual Report.

CIRNAC examined AEM responses in 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*.

AEM addressed all comments with a commitment to include the requested flow units in comment 6, and provide all updated management plans, comment 8 in the future annual reports. CIRNAC has no further concerns.

Below are CIRNAC's reply to AEM's response to CIRNAC comments:

- 1. Management of Cyanide Concentrations** - CIRNAC recommended that AEM clarify if holding water in the Doris TIA until cyanide degrades is part of their cyanide management plans.

In response, AEM stated that: *"Holding of water in the Tailings Impoundment Area (TIA) is not an active management strategy for reduction of cyanide at this time.*



However it is recognize that natural degradation does occur with retention time and that this strategy is effective for other operators. We are monitoring levels of cyanide to inform if future treatment is required and the inherent retention time in the TIA could assist with the overall management objectives in future years.”

CIRNAC concerns were addressed.

2. Quantity of Detoxified Tailing Filtrate - CIRNAC recommended that AEM clarify the quantity of detoxified tailings filtrate that was placed in the TIA in 2020.

AEM in its response, acknowledged that 34,994 m³ of detoxified tailings filtrate in TIA in 2020.

CIRNAC concerns were addressed.

3. Hydrocarbon Contaminated Materials Generated at Boston Under Type B Water Licence 2BB-BOS1727 – CIRNAC recommended that AEM clarify:

- If hydrocarbon contaminated materials was generated at the Boston site in 2020; and
- The quantity of the hydrocarbon materials transported to the Doris site for disposal or remediation if it was generated in 2020 activities.

In response, AEM stated that no hydrocarbon contaminated material was generated at Boston or transported from Bostom in 2020.

CIRNAC concerns were addressed.

4. Water Volume Transferred from Sediment Control Pond (ST1) to TIA – CIRNAC recommended that AEM clarify:

- The discrepancy in water volumes in the appendix documents D and E; and
- The effect the lower site contact water volume used for the water and load balance has on its result.

In response, AEM stated that: “The volumes presented in the Table 3 of the Doris Mine – Annual Water and Load Balance Assessment –2020 Calendar Year (SRK 2021) represent the volumes pumped from the Sediment Control Pond to the Doris TIA and are rounded to two significant figures. However, the value presented for June 2020 was incorrectly reported in the Annual Water and Load Balance Assessment and should have read 26,000 m³ to align with the 26,457 m³ correctly presented in Table D1-2 of Appendix D, representing a discrepancy of 12,000 m³.”



AEM performed a Water and Load Balance Assessment Analysis to understand the impact of the incorrect June 2020 Sediment Control Pond (SCP) volume. The result of the analysis show that the projected percent change is all under 1.5%, compared to the model projected concentrations for June 2020.

AEM, further stated: *"Therefore, this error in SCP inflows for June 2020 does not change the analysis and overall conclusions or trends presented in the Doris Mine – Annual Water and Load Balance Assessment – 2020 Calendar Year (SRK 2021) and will be updated in the 2021 assessment."*

CIRNAC concerns were addressed.

- 5. Phosphorous concentrations in the TIA -** CIRNAC recommended that TMAC clarify how they concluded phosphorous is a conservative parameter when measured concentrations plot above modelled ones.

In response, AEM stated that: *"The data contains a number of values above the model prediction that are below the method detection limit. Detectable data is generally less than 0.2 mg/L total phosphorous with values close to or below 0.1 mg/L in 2019 and 2020. Phosphorous is added as a reagent to the flotation process and the data trend suggest that the consumption rate in 2019 and 2020 was consistent and low compared to previous years. Since detectable data has been observed below the model projections in recent years (i.e., in 2019 and 2020), total phosphorous was classified as Conservative."*

AEM went further to state that: *"The method detection limit for dissolved phosphorus is consistently greater than the model projections, and a direct comparison is not valid. In the absence of detectable dissolved data, total data was used as a conservative analog and for 2019 and 2020 total phosphorous remained below the model predictions for dissolved phosphorous. For this reason, the calibration of dissolved phosphorous was also classified as Conservative."*

CIRNAC concerns were addressed.

- 6. The Flow (m³/day) at Monitoring Station TL-2 –** CIRNAC recommended that AEM presents the daily flow summary at Doris Creek station TL-2 in cubic meter per day (m³/day) in the next year Annual Report.

In response, AEM thanked CIRNAC for the comment and committed to making the change in the 2021 Annual Report.

CIRNAC concerns were addressed.



7. Estimate of Current Volume of Waste Rock and Ore Stockpiled at Boston Site Under Type B Water Licence 2BB-BOS1727 – CIRNAC recommended that AEM clarify:

- If additional volume of waste rock was generated at Boston site from 2020 activities; and
- The current estimated volume of waste rock and ore stockpiled at Boston site in 2020.

AEM in its response stated: *“No mining has occurred at Boston in 2020 or since BHP had exploration activities at Boston. Therefore no additional ore or waste rock has been generated. Hope Bay is in the process of validating volumes currently stockpiled at Boston and this information will be available in the next annual report.”*

CIRNAC concerns were addressed.

8. Management Plans Updated in 2021 - CIRNAC recommended that AEM attach updated management plans to the Annual Report document or provide links to the updated management plans in their subsequent submissions.

AEM thanked CIRNAC and committed to include all updated plans in future annual reports.

CIRNAC concerns were addressed.

CIRNAC appreciates the opportunity to participate in this review. If there are any questions, please contact me at (867) 975-4738 or vincent.okonkwo@canada.ca

Sincerely,

Vincent Okonkwo
A/Manager Water Resources