

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

> Your file - Votre référence 2AM-DOH1335 Our file - Notre référence GCDocs # 103976903

July 11, 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 Comments on Agnico Eagle Mine Ltd.'s. Updated management Plans for Care and Maintenance Activities Under Type A Water Licences 2AM- DOH1335 for the Doris and Hope Bay Belt Project.

Dear Mr. Dwyer,

Thank you for your May 2, 2022 invitation to review the referenced updated management plans for care and maintenance activities for the Doris North Project.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined the Report and its attachments 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 for the Nunavut Water Board's (NWB) consideration.

If there are any questions or concerns, please contact me at (867) 975-4738 or by e-mail at vincent.okonkwo@canada.ca or Andrew Keim at (867) 975-4550 or by e-mail at andrew.keim@rcaanc-cirnac.gc.ca

Sincerely,

Vincent Okonkwo

Sr. Environmental Assessment Specialist



Technical Review Memorandum

Date: July 11, 2021

To: Richard Dwyer, Manager of Licensing, Nunavut Water Board

From: Vincent Okonkwo, Senior Environmental Assessment Specialist, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada Comments on Agnico Eagle Mine Ltd.'s. Updated management Plans for Care and Maintenance Activities Under Type A Water Licences 2AM- DOH1335 for the Doris and Hope Bay Belt Project.

| Region: | ☐ Kivalliq | ☐ Qikiqtani |
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A. BACKGROUND

Hope Bay gold mine project is located on a property approximately 20km x 80km along the south shore of Melville Sound in the Kitikmeot region of Nunavut, and continued to be operated by TMAC Resources Inc. (TMAC) in 2021. TMAC was acquired by Agnico Eagles Mines (AEM) on February 2, 2021 and is now a wholly owned subsidiary of AEM. On January 1st, 2022, AEM and TMAC amalgamated and continued to exist under the name AEM. Accordingly, by operation of law and without any further acts or steps necessary, TMAC ceased to exist and continued as Agnico Eagle, and Agnico Eagle possessed all of the property, rights, privileges and franchises and is subject to all liabilities, including civil, criminal and quasi-criminal, and all contracts, disabilities and debts of TMAC.

The Project includes four gold mines with activities covered under AEM Type A Water Licences 2AM-DOH1335 (Doris, Madrid North, and Madrid South) and 2AM-BOS1835 (Boston), two advanced exploration sites covered under Type B Water Licences 2BB-MAE1727 (Madrid) and 2BB-BOS1727 (Boston), and surface exploration covered under the Type B Water Licence 2BE-HOP1222 for 2018 (Hope Bay Region).

On February 18, 2022, AEM announced its decision to place the Doris – Madrid ore extraction and Doris mill into Care and Maintenance and temporarily suspend production on the project. AEM provided a formal written notice of production suspension and the site assuming Care and Maintenance status for the Doris-Madrid operation as required under Part Jn Item 4 of the Water Licence 2AM-DOH1335 to the NWB on March 30, 2022.



The Care and Maintenance at Doris and Madrid includes the temporary suspension of ore extraction at Doris and Madrid and milling operation at the Doris Mine.

These documents are listed in Table 2 under Section B. A summary of CIRNAC recommendations can be found in Table 1. Review comments for the Care and Maintenance Plan and updated management plans are provided in Section C and References are in Section D.

Table 1: Summary of Recommendations

| Recommendation Number | Subject |
|-----------------------|--|
| R-01 | Water Treatment Plant Construction Omission in the Schedule |
| R-02 | Care and Maintenance status Project Certificate and Water Licence Requirements |
| R-03 | Care and Maintenance Plan and Tailings Impoundment Area Operation, Maintenance and Surveillance Manual Inconsistency |
| R-04 | Management Plan Updates |

B. DOCUMENTS REVIEWED

The following table (Table 2) provides a summary of the documents reviewed under the submission.

Table 2: Documents Reviewed

| Document Title | Author, File No., Rev., Date |
|--|--------------------------------------|
| 220429 2AM-DOH1335 Care and Maintenance Plan-ILAE | Agnico Eagle, April, 2022 |
| 220429 2AM-DOH1335 Hope Bay Project Explosives Management Plan-C and M-ILAE | Agnico Eagle, April, 2022 |
| 220429 2AM-DOH1335 O and M and Surveillance Manual-Hope Bay Doris Tailings Impoundment Area-ILAE | Agnico Eagle, April, 2022 |
| 220429 2AM-DOH1335 Hope Bay Project Doris and Madrid Water Management Plan-ILAE | Agnico Eagle, April, 2022 |
| Cover Letter – Doris-Madrid Care and Maintenance Plan | Agnico Eagle, April 2022 |
| Patch Lake Abandonment and Restoration Management Plan | Miramar Hope Bay Limited, March 2005 |



C. RESULTS OF REVIEW

CIRNAC reviewed the Care and Maintenance management plans to confirm that environmental management practices associated with the Hope Bay Project will continue to be protective of the environment. While no significant concerns were identified by CIRNAC, additional information is required in some areas.

The following comments and recommendations are provided for the NWB's consideration.

1. Water Treatment Plant Construction Omission in the Schedule

Comment

In section 3.3 of the Care and Maintenance Plan (C&MP), AEM states that during care and maintenance:

"Water management will require a new spillway and internal berm(s) at the TIA to address an alternative water management strategy for mine water and for the TIA water to remain in regulatory compliance for discharge to the receiving environment." and that "A water treatment plant (WTP) will be installed North of the TIA to address exceedance of authorized discharge criteria prior to discharge."

Figure 5.1 indicates that general civil works at Doris will include construction of a road to, and commissioning of a WTP, but the schedule does not include an item for construction of the WTP. It in unclear if this is a terminology issue or an oversight in the schedule.

Recommendation

(R-01) CIRNAC recommends that AEM clarify Whether the scheduled timeline for the installation of the WTP needs to be extended to include for construction of the WTP or if the scheduled "commissioning" period as shown in Figure 5.1 includes the construction/installation of the WTP north of the TIA.

2. Care and Maintenance Status Project Certificate and Water Licence Requirements

Comment

The Water Licence and Project Certificate requirements for Care and Maintenance are respectively presented in Tables 1-2 and 1-3 of the C&MP. Aside from noting the various requirements and submittal timelines, the Plan does not describe the actions AEM is taking to fulfill the requirements.



The brief descriptions of those actions would assist CIRNAC and other interested parties to better understand how the requirements will be met by AEM.

Recommendation

(R-02) CIRNAC recommends that AEM provide brief descriptions of actions to be undertaken to address the requirements outlined in Tables 1-2 and 1-3 of the C&MP that are yet to be completed.

3. Care and Maintenance Plan and Tailings Impoundment Area (TIA) Operation, Maintenance and Surveillance Manual Inconsistency

Comment

In section 3.6 of the Tailings Impoundment Area Operation, Maintenance and Surveillance Manual (TIA OMS), AEM states that the text on the Spillway and Interim Dike was updated for the activities as described in the C&MP.

However, on review of the C&MP, no reference to the Interim Dike was found, and the submitted TIA plan in section 3.6 found no specific reference to care and maintenance activities for these features.

Furthermore, the submitted TIA plan did not discuss the requirement for the installation of a WTP north of the TIA as outlined in Section 3.3 of the C&MP.

Recommendation

(R-03) CIRNAC recommends that AEM:

- Revise Section 3.6 of the Operations, Maintenance and Surveillance Manual;
- Revise Hope Bay Doris Tailings Impoundment Area Manual to clearly reflect the actions related to the TIA as outlined in the Care and Maintenance; and
- Review the C&MP and TIA plan to ensure that they are consistent in all aspects for activities related to the care and maintenance period.

4. Management Plan Updates

Comment

Most of the management plans updates provided as required when going into Care and Maintenance appeared to be identical to the previous versions. For example, with the exception of noting the Care and Maintenance phase, there were no material changes to the updated Explosives Management Plan and Water Management Plan.

It is unclear to CIRNAC what changes were made to the management plans with regard to the care and maintenance status of the site.



Recommendation

(R-04) CIRNAC recommends that AEM clarify the changes made to the management plans in relation to the care and maintenance status of the site.

D. REFERENCES

Department of Crown-Indigenous Relations and Northern Affairs Act (2020)

Nunavut Waters and Nunavut Surface Rights Tribunal Act (2019)

Nunavut Water Board, February 2020: Amended and Renewed Type A Water Licence No: 2AM-DOH1335 Pg. 26

