

Hope Bay Project

Proponent's Response to Comments Received on the Hope Bay Care and Maintenance Plan, April 2022 Version 1

Submitted to:

Nunavut Water Board

Submitted by:

Agnico Eagle Mines Limited

July 29, 2022



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ENVIRONMENT AND CLIMATE CHANGE CANADA (!	ECCC)
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ECCC-1

Subject

Changes to Water Management - Tailings Impoundment Area

References

- Section 3.3 Tailings Impoundment Area, Hope Bay Care and Maintenance Plan Version 1
- Section 3.1.3 Mine Water, Hope Bay Project Doris and Madrid Water Management Plan

Comment

As described in the Care and Maintenance (C&M) Plan and the Water Management Plan (WMP), there are minimal changes proposed for overall water management during the period of care and maintenance. One exception is that the C&M Plan proposes an "alternative water management strategy for mine water and for the TIA water to remain in regulatory compliance for discharge to the receiving environment". The C&M Plan indicates that water management will require a new spillway and internal berms to address this strategy. This change in water management strategy is only briefly mentioned within the WMP, where the plan states, "management of underground water at the TIA may include segregation from reclaim within the footprint of the TIA either upstream of the internal dam or within a cell at the tailings beach." However, the Proponent has not provided details on the rationale for the change, the timeline, or the predicted outcomes because of the change in water management strategy.

Recommendation Made by Interested Party:

ECCC recommends that the Proponent provide the following information in relation to the proposed new water management strategy at the tailings impoundment area:

- 1. Describe the existing issue that the new water management strategy is intended to mitigate
- 2. Provide a timeline for the implementation of the new water management strategy
- 3. Describe the predicted changes to discharge water quality with the implementation of the proposed water management strategy.

If you need more information, please contact Stephinie Mallon at Stephinie.Mallon@ec.gc.ca.

Agnico Eagle's Response to Recommendation:

- The Tailings Impoundment Area (TIA) revised water management strategy is required to meet
 the toxicity criteria for Arcatia tonsa required by the Metal and Diamond Mining Effluent
 Regulations. The revised strategy is expected to reduce the salinity of the effluent and allow
 discharge of compliant effluent.
- 2. The new water management strategy will be implemented throughout the Care and Maintenance period.
- 3. There will be no change to the predicted discharge water quality (i.e., the saline underground water will be kept separate within the TIA and a water treatment plant will be installed North of the TIA to address potential exceedance of discharged effluent. Water quality of effluent to be discharged will meet compliance requirements.



CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS CANADA (CIRNAC)



CIRNAC-1

Subject

Water Treatment Plant Construction Omission in the Schedule

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

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 Made by Interested Party:

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 WTFP north of the TIA.

Agnico Eagle's Response to Recommendation:

Figure 5-1 will be revised to indicate that the Water Treatment Plant (WTP) will be constructed and installed in the fourth quarter of 2022. The WTP commissioning is now anticipated to occur prior to freshet 2023.



CIRNAC-2

Subject

Care and Maintenance Status Project Certificate and Water Licence Requirements

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

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 Made by Interested Party:

CIRNAC (R-02) 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.

Agnico Eagle's Response to Recommendation:

Table 1-2 and Table 1-3 will be revised to indicate dates of completion and/or dates to be completed and/or actions to address the requirement.

Table 1-2: Water Licence Requirements for Care and Maintenance (Revised)

Condition	Timeframe	Requirement	Status
Part J Item 4 (Type A Water Licence 2AM- DOH1335)	At least sixty (60) days prior to, or as soon as practically possible.	Notify in writing Agnico Eagle's intention to enter into a Care and Maintenance Phase.	Completed March 30, 2022
Part J Item 5 (Type A Water Licence 2AM- DOH1335)	Within thirty (30) days of Agnico Eagle providing notice of intent to enter into Care and Maintenance.	Submit a Care and Maintenance Plan that details Agnico Eagle's plans for maintaining compliance with the Terms and Conditions of applicable water licenses.	Completed with this submission

Condition	Timeframe	Requirement	Status
Part J Item 6 (Type A Water Licence 2AM- DOH1335)	Within twelve (12) months of Agnico Eagle providing notice of intent to enter into Care and Maintenance.	Should the Project remain, or be in Care and Maintenance, submit the NWB an updated estimate of total mine closure restoration liability, and continue to do so every three (3) years thereafter.	To be provided with the Hope Bay Project Doris and Madrid Closure Plan in February 2023
Part H Item 6 (Type A Water Licence 2AM- DOH1335)	Within ninety (90) days of providing notice of intent to enter into Care and Maintenance.	Agnico Eagle will submit to the NWB for approval in writing, an addendum to the Emergency Response Plans and Spill Contingency Plan, detailing the changes in operations, personnel, responsibilities, availability of equipment and access to the site for assistance.	The Hope Bay Project Spill Contingency Plan and Emergency Response Plan were revised to reflect the Care and Maintenance phase of the project. The revised plans were submitted to the Nunavut Water Board on June 28, 2022.
Part C Item 4 (Type B Water Licence 2BB- MAE1727)	Within six (6) months of entering into Care and Maintenance.	Upon the Project entering into or being in Care and Maintenance, the Licensee shall submit to the Board for approval in writing, an updated estimate of total mine closure restoration liability, as above, and every three (3) years thereafter.	A letter indicating changes to the total mine closure restoration liability occurring during the Care and Maintenance period, if applicable, will be submitted September 2022.

Table 1-3: Project Certificate Requirements – Care and Maintenance (Revised)

Condition	Timeframe	Requirement	Status
Term and Condition No. 35	Within six (6) months of Agnico Eagle providing notice of intent to enter into Care and Maintenance.	In collaboration with the Hope Bay Socio-Economic Working Group submit an updated Hope Bay Socio-Economic Monitoring Plan to the Kitikmeot Socio-Economic Monitoring Committee that will also include detail regarding specific measures that may mitigate the potential for negative effects as a result of the Project's temporary or permanent closure.	The Hope Bay Project Socio- Economic Monitoring Plan will be revised to address effects as result of the care and maintenance period. The revised plan will be provided in September 2022.
Term and Condition No. 36	Within six (6) months of Agnico Eagle providing notice of intent to enter into Care and Maintenance.	Agnico Eagle shall, submit an updated Human Resources Plan and Wellness Strategy for the Project that includes a Workforce Transition Strategy designed to mitigate the potential negative effects of Project closure on the affected communities of Nunavut.	The Hope Bay Project Human Resources Plan and Wellness Strategy will be revised to address effects as a result of the care and maintenance period. The revised plan will be provide in September 2022.



CIRNAC-3

Subject

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

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

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 Made by Interested Party:

CIRNAC (R-03) 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.

Agnico Eagle's Response to Recommendation:

With submission of the *Hope Bay Project 2022 Annual Report* (in April 2023) the following will be provided:

- An update to Section 3.6 of the Operations, Maintenance, and Surveillance Manual: Hope Bay
 Doris Tailings Impoundment Area to include the spillway an interim dike as discussed in the Care
 and Maintenance Plan
- An updated Operations, Maintenance, and Surveillance Manual: Hope Bay Doris Tailings
 Impoundment Area to include the water treatment plant installed North of the Tailings
 Impoundment Area and commissioned for use in 2023.



CIRNAC-4

Subject

Management Plan Updates

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

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 Made by Interested Party:

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

Agnico Eagle's Response to Recommendation:

Management plans that were updated in relation to the care and maintenance status of the site detail the changes made since the last iteration and are summarized below.

Hope Bay Project Emergency Response Plan (June 28, 2022): The entire plan was revised to reflect Hope Bay's 2022 exploration focus and alignment with look and feel of Nunavut division sites.

Hope Bay Project Spill Contingency Plan (June 28, 2022): The entire plan was revised to reflect the decision made by Agnico Eagle Mines Limited to place Doris Mill into Care and Maintenance and suspend production of the Project. Section 1.5.1 details activities to be implemented during Care and Maintenance.

Hope Bay Project Doris-Madrid Water Management Plan (April 29, 2022): The following sections were updated with respect to water management with the initiation of care and maintenance: Section 3.1.3 (Mine Water), Section 3.2.7 (Water Treatment Plant), Section 4.1.1 (Non-Contact Water), Section 4.1.3 (Mine Water), and Section 4.2.2 (Madrid Contact Water Pond Sumps).



Hope Bay Project, Phase2 Doris Tailings Impoundment Area – Operations, Maintenance, and Surveillance Manual (April 29, 2022): Section 3.6 was updated to include the interim dike (i.e., alternative use of a water retaining dam used to segregate waste streams and managing water quality within the Tailings Impoundment Area) and the construction of the spillway with updates to the inflow design flood requirements.

Hope Bay Project Explosives Management Plan (April 29, 2022): The plan was revised to incorporate activities implemented by Agnico Eagle Mines Limited through Care and Maintenance. There were no major changes to explosive management.



KITIKMEOT INUIT ASSOCIATION (KIA)



Subject

Update to closure cost estimate Doris-Madrid Project

References

 Hope Bay – Care and Maintenance Plan. April 2022 Version 1. Page 12. Table 1-2: Water License Requirements for Care and Maintenance.

Summary

Part J, Item 6 (Type A Water License 2AM-DOH1335) notes that within twelve months of AEM providing notice of intent to enter into C&M, AEM must submit to the Nunavut Water Board (NWB) an updated estimate of total mine closure liability and continue to do so every 3 years thereafter. The referenced table notes this task is 'To be completed'.

Detailed Review Comment

A closure plan and associated closure cost estimate was previously prepared for the project by TMAC Resources (subsequently acquired by AEM) as part of the Final Environmental Impact Assessment (FEIS). Based on this estimate, financial security was posted by the proponent and this security was split between KIA and CIRNAC. Any changes to the mine plan that occur during the C&M period may have an impact on both the closure plan and associated closure cost/security amounts.

Recommendation Made by Interested Party:

It is requested that AEM confirm the schedule for this update to be complete and to confirm the update will be provided in a level of detail consistent with the original closure cost estimated provided in the FEIS. AEM should also confirm if an update to the associated closure plan document will also be submitted.

Importance

Low

Agnico Eagle's Response to Recommendation:

An updated Hope Bay Closure Plan based on changes to the mine plan and associated closure cost/security amounts will be submitted in February 2023 in accordance with Part J, Item 6 of the Type A Water Licence 2AM-DOH1335.



Subject

Update to closure cost estimate Madrid Advance Exploration Project (MAEP)

References

 Hope Bay – Care and Maintenance Plan. April 2022 Version 1. Page 12. Table 1-2: Water License Requirements for Care and Maintenance.

Summary

Part C, Item 4 (Type B Water License 2BB-MAE1727) notes that within six months of AEM providing notice of intent to enter in C&M, AEM must submit to the NWB an updated estimate of total mine closure liability and continue to do so every 3 years thereafter. The referenced table notes this task is 'To be completed'.

Detailed Review Comment

A closure plan and associated closure cost estimate was previously prepared for the project by TMAC Resources (subsequently acquired by AEM) as part of the Final Environmental Impact Assessment. Based on this estimate, financial security was posted by the proponent and this security was split between KIA and CIRNAC. Any changes to the mine plan that occur during the C&M period may have an impact on both the closure plan and associated closure cost/security amounts.

Recommendation Made by Interested Party:

It is requested that AEM confirm the schedule for this update to be complete and to confirm the update will be provided in a level of detail consistent with the original closure cost estimated provided in the FEIS. AEM should also confirm if an update to the associated closure plan document will also be submitted.

Importance

Low

Agnico Eagle's Response to Recommendation:

A letter indicating changes to the total mine closure restoration liability occurring during the Care and Maintenance period, if applicable, will be submitted September 2022 in accordance with Part C, Item 4 of the Type B Water Licence 2BB-MAE1727.



Subject

Madrid Naartok East Crown Pillar excavation/portal

References

Hope Bay – Care and Maintenance Plan. April 2022 Version 1. Page 21.

Summary

Surface contact water in the Naartok East Crown Pillar (NECP) area will be directed to a sump at the bottom of the NECP pit. Contact water collected in the sump will eventually be conveyed via truck or via the approved waterline to the TIA at Doris.

Surface contact water from the Madrid NECP portal area will be directed into a contact water pond (CWP). Water is discharged to the tundra if water quality is lower than permit limits or conveyed by truck or via the approved water line to the TIA at Doris, when water quality does not meet permit limits.

Detailed Review Comment

The information regarding the sump and CWP located at the NECP area is limited in the referenced documentation and insufficient for review.

Recommendation Made by Interested Party:

It is requested that AEM address the following questions:

- Are the sump and contact water pond referenced above are the same facility?
- What are the design details of the CWP?
- Is contact water from the pad and portal area to be kept separate? If not, what is the reasoning for the different management plans described above and in the reference document?
- What is the maximum allowed water level of the sump/contact water pond during the C&M period?
- Will the closure of the NECP be detailed in the updated closure plan to be submitted by AEM?

Importance

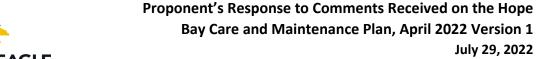
Medium

Agnico Eagle's Response to Recommendation:

- RE: Are the sump and contact water pond referenced above are the same facility?
 - The sump and contact water pond are distinct water management facilities. A new contact water pond is proposed for the purpose of the expanded Madrid North Waste Rock Pad.



- RE: What are the design details of the CWP?
 - Detailed designs of the new contact water pond will be provided as part of the 60 days notice prior to commencement of construction in accordance to Type A Water Licence 2AM-DOH1335 Part D Items 1 & 2.
- RE: Is contact water from the pad and portal area to be kept separate? If not, what is the reasoning for the different management plans described above and in the reference document?
 - The Agnico Eagle Mines Limited ocean discharge strategy requires keeping contact water from the portal and pad separate. Contact water from the portal area will be conveyed to the tailings impoundment area and stored with underground water from the Doris Mine.
- RE: What is the maximum allowed water level of the sump/contact water pond during the C&M period?
 - The full water level of the contact water pond is unchanged during Care and Maintenance and is 69.7 m. Trigger Action Response Plans are initiated when the water level is greater than 68.0 m. The pond is to be maintained empty with a maximum 2-week residence time.
 - The Naartok Portal sump design is in progress and if required, will be submitted as part of the 60 days notice prior to commencement of construction in accordance to Type A Water Licence 2AM-DOH1335 Part D Items 1 & 2.
- RE: Will the closure of the NECP be detailed in the updated closure plan to be submitted by AEM?
 - The closure of the Naartok East Crown Pillar will be detailed in the next iteration of the Hope Bay Closure Plan (February 2023) in accordance with Part J, Item 2 of the Type A Water Licence 2AM-DOH1335.





Subject

Madrid North Portal – permanent closure

References

 Hope Bay – Care and Maintenance Plan. April 2022 Version 1. Section 3.1 Underground Mine workings. Page 23.

Summary

Development of the Madrid North portal has been stopped by AEM due to encountering challenging ground conditions. The portal for the Madrid North deposit is being relocated to the NECP. Temporary measures such as barricades and water management facilities (diversion berms, sumps, pumps) have been or will be constructed to manage the surface water in the portal area in the short term. No information has been provided with respect to the permanent closure of the abandoned Madrid North Portal.

Detailed Review Comment

No information has been provided with respect to the permanent closure of the abandoned Madrid North Portal.

Recommendation Made by Interested Party:

It is requested that AEM provide a permanent closure plan for the Madrid North portal and a schedule to complete the work.

Importance

Medium

Agnico Eagle's Response to Recommendation:

The closure of the Madrid North portal will be detailed in the next iteration of the Hope Bay Closure Plan (February 2023) in accordance with Part J, Item 2 of the Type A Water Licence 2AM-DOH1335. The portal is currently being backfilled.



Subject

Waste rock stockpile management

References

• Hope Bay – Care and Maintenance Plan. April 2022 Version 1. Section 3.2 Waste Rock Stockpiles, Ore stockpiles and Overburden piles. Page 23/24.

Summary

Waste rock is temporarily stored at surface at both the Doris and Madrid North sites prior to placement as backfill in the underground mine workings during normal mine operations. Ore is also temporarily stockpiled on rockfill pads prior to processing. AEM also notes that a new surface waste rock stockpile within the approved project footprint at Doris, is required for temporary storage of rockfill associated with underground activities at Doris.

Detailed Review Comment

The plan for continued transport of backfill from surface to the underground workings is unclear in the C&M plan. It is also unclear if any ore will continue to be stockpiled during the C&M period or it will be processed during the early stage of the C&M period.

Recommendation Made by Interested Party:

It is requested that AEM address the following questions:

- What is the amount of waste rock estimated to be stored at surface at the time of the site being placed into C&M? What additional amount of waste rock is expected to be stockpiled during the C&M period?
- What is the amount of ore stockpiled at surface as of the site being placed into C&M and will this ore all be processed during the initial stage of the C&M period? If ore is to remain stockpiled during the C&M period what is the plan for water management, what water quality impacts are expected and what additional management strategies are proposed to mitigate this impact?
- What are the details regarding the new surface waste rock pile proposed for the Doris site?

Importance

Medium

Agnico Eagle's Response to Recommendation:

- RE: What is the amount of waste rock estimated to be stored at surface at the time of the site being placed into C&M? What additional amount of waste rock is expected to be stockpiled during the C&M period?
 - The waste rock at surface at the end of February 2022 was 736,479 tonnes. The expected waste rock to be hauled to surface during 2022 and 2023 mining activities is 221,000 tonnes.
- RE: What is the amount of ore stockpiled at surface as of the site being placed into C&M and will this ore all be processed during the initial stage of the C&M period? If ore is to remain stockpiled during the C&M period what is the plan for water management, what water quality impacts are expected and what additional management strategies are proposed to mitigate this impact?
 - There is approximately 93,000 tonnes of ore remaining at surface and was not processed prior to the mill closure. Water management for the ore stockpile remains consistent with the Hope Bay Water Management Plan and no changes to water management or monitoring are proposed. Contact water from the pads is directed towards the Contact Water Ponds and discharged to the TIA.
- RE: What are the details regarding the new surface waste rock pile proposed for the Doris site?
 - To be provided as a 60-day notice for existing approved footprint prior to commencement of construction in accordance to Type A Water Licence 2AM-DOH1335 Part D Items 1 & 2.



Subject

Water Management at the Doris Tailings Impoundment Area (TIA)

References

 Hope Bay – Care and Maintenance Plan. April 2022 Version 1. Section 3.3 Tailings Impoundment Area. Page 24.

Summary

During C&M there will be no active deposition of tailings in the Doris TIA thus activities will be limited to water management for discharge to the receiving environment. The reference notes "water management will require a new spillway and internal berms at the TIA to address an alternatives water management strategy for mine water and for the TIA water to remain in regulatory compliance for discharge to the receiving environment.

Detailed Review Comment

Management of water in the TIA is critical to maintaining safe operation of the TIA during the C&M period. It was also noted in the annual geotechnical inspection report of the TIA (reviewed by KIA under separate cover) that transfer of water from the TIA to Roberts Bay was suspended in late 2021 due to the new water quality guidelines.

Recommendation Made by Interested Party:

It is requested that AEM provide a schedule for when the alternative water management strategy, including the details on the proposed spillway and internal berms, will be submitted for review and comment.

Given dewatering of the TIA to Roberts Bay via the Roberts Bay Discharge System (RBDS) pumphouse was suspended in November 2021, how will water management during C&M be undertaken to achieve the goal of maintaining the water level at the "lowest possible levels" as noted in the reference?

Importance

High

Agnico Eagle's Response to Recommendation:

Discharge to Roberts Bay was restarted in accordance with Metal and Diamond Mines Effluent Regulations in June 2022. On May 27, 2022 Agnico Eagle Mines Limited submitted a modification request to the Nunavut Water Board (NWB) for the installation of a temporary water filled portable dam within the approved Tailings Impoundment Area (TIA). The permanent TIA dike is proposed to be built in the next 12 months. Final design construction drawings for the permanent TIA dike infrastructure will be



provided to the NWB at least 60 days prior to commencement of construction in accordance with the Type A Water Licence 2AM-DOH1335 Part D Items 1 & 2. The purpose of the portable dam is to segregate underground water and to isolate the construction area for the permanent dike that will be built in the next 12 months.

Construction of the Emergency Overflow Channel (spillway) is anticipated to occur late 2022. Detailed design drawings will be prepared and submitted to the NWB as part of the Notice of Construction at least 60 days prior to construction prior to commencement of construction in accordance with the Type A Water Licence 2AM-DOH1335 Part D Items 1 & 2.



Subject

Water Management in Contact Water Ponds during C&M

References

 Hope Bay – Care and Maintenance Plan. April 2022 Version 1. Section 3.7.1 Pipelines, Ponds and Collection Sumps. Page 28.

Summary

During C&M sedimentation ponds, pollution control ponds, contact water ponds and groundwater interceptor sumps will continue to operate. Water collected in these facilities will be directed to the TIA at Doris.

Detailed Review Comment

The contact water ponds were design as unlined facilities and depend on permafrost conditions in the subsurface and foundation of the containment berms for water retention. The design documents submitted during the FEIS note a maximum retention period for any water to limit the impact on the permafrost conditions in the subsurface. These operational controls will need to be maintained during the C&M period to preserve the long-term integrity of the facilities.

Recommendation Made by Interested Party:

It is requested that AE confirm that the facilities will be operated as designed during C&M including limiting the retention period during which water is to be stored in CWPs, as per the FEIS design documents.

Importance

Low

Agnico Eagle's Response to Recommendation:

No changes to the operating controls are expected during Care and Maintenance. Agnico Eagle Mines Limited can confirm that the ponds will be operated with limited retention time as per the original design considerations.



Subject

Surface waste rock stockpile impacts

References

- Care and Maintenance Plan
 - Section 3: Care and Maintenance Activities

Summary

The new surface waste rock stockpile at Doris was stated to have no impact on Nunavut waters, but the rationale supporting this statement is not provided.

Consideration of any/all potential impacts of waste rock stockpile storage is necessary to ensure that potential groundwater/surface water impacts near Doris infrastructure are protected.

Detailed Review Comment

The Care and Maintenance Plan states that "A new surface waste rock stockpile within the approved project footprint at Doris, which will not impact any Nunavut waters, is required for temporary storage or rock fill associated with underground activities at Doris." The supporting rationale for this statement was not provided. Further evidence that the new waste rock stockpile will not impact Nunavut waters either through surface or subsurface interactions should be provided.

Recommendation Made by Interested Party:

Evidence is required within the Care and Maintenance plan to provide reviewers with confidence that the new storage of surface waste rock at Doris will not result in the degradation of the receiving environment.

Importance

Moderate

Agnico Eagle's Response to Recommendation:

Detailed design of a new waste rock stockpile within the approved project footprint at Doris will be submitted to the Nunavut Water Board at least 60 days prior to commencement of construction as per Water Licence Part D Items 1 &2. As part of this design package, drainage and water management details will be outlined that provide protection of the receiving environment consistent with Agnico Mines Limited water management strategy detailed in the *Hope Bay Project Doris and Madrid Water Management Plan*.



Subject

Tailings Impoundment Area Water Quality and Non-Compliance Waters

References

- Care and Maintenance
 - Section 3: Care and Maintenance
 - Section 3.7: Water Management Systems
- Hope Bay Project Doris and Madrid Water Management Plan
 - Section 4: Madrid Water Management.

Summary

It is unclear whether the TIA will be sufficient to manage noncompliant contact water in an extended Care and Maintenance situation.

Additional information is needed to provide confidence that Agnico Eagle can manage contact water in the TIA during Care and Maintenance.

Detailed Review Comment

The Care and Maintenance document states in Section 3.7: "During Care and Maintenance underground mine water will be pumped to the surface and sent to the TIA at Doris. The mine water will be segregated within the TIA. Compliant TIA water will be discharged to Roberts Bay via the RBDS Pumphouse located at the TIA."

Section 3.2.5 (Tailings Impoundment Area):

"In the event of effluent non-compliance, discharge pipeline malfunction or excessive mine water inflows, the TIA has the capacity to contain water without discharging."

"The TIA is operated to maintain sufficient water to supply the mill, while not exceeding the full supply level of 33.5 m and allowing for contingency water holding capacity. The current water management strategy is to convey all mine surface contact water to the TIA."

It is understood that any non-compliant water will be transported to the TIA, but no timeframes/formal plans are provided. Additional information should be provided to clarify how Agnico Eagle will be able to manage non-compliant water given there will be a reduced site presence during Care and Maintenance. Specifically, Agnico Eagle should outline the duration water can be stored within the TIA and strategies that may be implemented to prevent noncompliant discharges.



Recommendation Made by Interested Party:

Agnico Eagle should provide more information within the Care and Maintenance plan outlining the TIA's capacity to store noncompliant water and what approaches may be considered if that capacity is reached given a reduced site presence during Care and Maintenance.

Importance

High

Agnico Eagle's Response to Recommendation:

There will be no changes to the environment site personnel or management and monitoring of the Tailings Impoundment Area through Care and Maintenance. Agnico Eagle Mines Limited will continue to implement the monitoring outlined in the *Hope Bay Project, Phase 2 Doris Tailings Impoundment Area – Operations, Maintenance, and Surveillance Manual.*



Subject

Additional wastewater treatment plant installation

References

- Hope Bay Project Doris and Madrid Water Management Plan
 - o Section 3: Doris Water Management
- 3.2.7 Water Treatment Plant
- Care and Maintenance Plan Figure 5.1

Summary

The reason and timeframe for the installation of an additional water treatment plant to treat water prior to discharge to Roberts Bay has not been provided.

Sufficient treatment of mine/process water cannot be evaluated without understanding capacity limits on current/future water treatment plants.

Detailed Review Comment

"Agnico plans to install an additional water treatment plant to treat TSS, in the vicinity of the reclaim pond at the TIA, that utilizes the Veolia Actiflo® technology. The water treatment plant will have the capacity to treat both underground and reclaim water streams prior to discharge to Roberts Bay. The water treatment plant will also have capability to be expanded to treat metals and ammonia when required."

Agnico Eagle has not outlined a timeline in Figure 5.1 of the Care and Maintenance Plan for when this additional treatment plant will be completed. It is unclear whether this treatment plant is needed to support Care and Maintenance activities or whether the existing on-site treatment approaches will be sufficient.

Recommendation Made by Interested Party:

The timeframe associated with the installation of the additional water treatment plant should be provided. Agnico Eagle should also clarify whether the additional water treatment plant is required to support Care and Maintenance or whether it is supplemental until such time as operations recommence.

Importance

Moderate



Agnico Eagle's Response to Recommendation:

The Veolia Water Treatment Plant is anticipated to be commissioned by Freshet 2023. No changes to environment support personnel are planned for the Care and Maintenance Period. Additional water treatment plant support may be required and will be assessed as part of Agnico Eagle Mines Limited Operational Readiness Plan. Relief water treatment operators have been a part of the existing Hope Bay TSS Treatment Plant and have been sourced from companies such as BQE and StormTec.