Water Resources Division
Resource Management Directorate
Nunavut Regional Office
918 Federal Road
Iqaluit, NU, X0A 3H0

Your file - Votre référence
2AM-MEA1530/2AM-WTP1830
Our file - Notre référence
GCDocs#139265780

July 23, 2025

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 Review of the 2024 Annual Report for Meadowbank and Whale Tail Gold Mine Projects, Type A Water Licence Nos. 2AM-MEA1530 and 2AM-WTP1830.

Dear Mr. Dwyer,

Thank you for your April 17, 2025, invitation to review the 2024 Annual Report for the Meadowbank and Whale Tail Gold Mine Projects, submitted by Agnico Eagle Mines Limited, for Type A Water Licence Nos. 2AM-MEA1530 and 2AM-WTP1830.

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 consideration.

If there are any questions or concerns, please contact me at Aminul.Haque@rcaanc-cirnac.gc.ca or (867) 975-4282 or Andrew Keim at (867) 975-4550 or Andrew.Keim@rcaanc-cirnac.gc.ca.

Sincerely,

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Aminul Haque
Senior Environmental Assessment Specialist

Technical Review Memorandum

Date: July 23, 2025

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

From: Aminul Haque, Senior Environmental Assessment Specialist, CIRNAC

Subject: **Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC's) Review of the 2024 Annual Report for Meadowbank and Whale Tail Gold Mine Projects, Type A Water Licence Nos. 2AM-MEA1530 and 2AM-WTP1830.**

Region: ☐ Kitikmeot ☒ Kivalliq ☐ Qikiqtani

A. BACKGROUND

Meadowbank Gold Mine Project

The Meadowbank Gold Mine (the Project) is located approximately 110 kilometres by road north of Baker Lake in the Kivalliq region of Nunavut, Canada. The complex consists of the Meadowbank mine and mill and the Whale Tail (Amaruq) satellite deposit, which is located 50 kilometres northwest of the Meadowbank mine.

The Nunavut Water Board (NWB) first licensed the project in 2008, and the processing plant achieved commercial production in March 2010. The Project involved the construction, operation, maintenance, reclamation, closure and monitoring of an open pit gold mine and milling facility. The original licence was subsequently renewed by the Board in August 2015 and was amended in July 2018 to reflect changes to the Project to allow for additional tailings deposition and associated ore processing at the Meadowbank mine site from Agnico Eagle Mines (Agnico Eagle) mining operations at the Whale Tail Pit site.

The Project is governed by the current Type A Water Licence No. 2AM-MEA1530 (the Licence). At present, the Project components included in the scope of the Meadowbank Gold Mine include a Marshalling Facility at Baker Lake and a 110-kilometre All-Weather Access Road (AWAR) between Baker Lake and the Meadowbank Gold Mine site. There are also water retention dikes constructed from mined waste rock to allow for the mining of ore beneath shallow dewatered lakes and a tailings storage facility (Second Portage Lake's northwest dewatered arm), where tailings have been deposited sub-aerially as slurry and water from the ponds reclaimed during operation. No mining at Meadowbank occurred in 2023 since the mineral reserves were exhausted in 2019. Amaruq ore continued to be processed at the Meadowbank mill in 2023. As approved by the Water License, in-pit tailings disposal began in Goose Pit on July 05, 2019, and in Portage Pit E on August 20, 2020.

On August 22, 2024, Agnico Eagle Mines Limited submitted an Operational Notice to the NWB under Water Licence 2AM-MEA1530, proposing the development of a Site-Specific Water Quality Objective (SSWQO) for Total Dissolved Solids (TDS) at the Meadowbank Gold Mine. This initiative was triggered by measured TDS concentrations in Pit E and Goose Pit exceeding model predictions by over 20%. The NWB facilitated a comprehensive review process, including multiple rounds of comments from stakeholders. CIRNAC raised concerns about the premature development of a Site-Specific Water Quality Objective (SSWQO) for TDS, emphasizing the need to prioritize mitigation measures over altering regulatory criteria, and cautioning against setting a precedent that could undermine long-term environmental protection.

In its final submission dated April 02, 2025, CIRNAC maintained that the proposed SSWQO should be considered exclusively within the broader closure planning process, emphasizing that it is premature to approve such criteria without fully exploring and implementing available mitigation and treatment options. CIRNAC also expressed concerns about significant exceedances of predicted TDS levels—by an average of 275%—and highlighted unresolved uncertainties in water quality forecasting. Despite these reservations, the NWB approved the proposed SSWQO for TDS on May 28, 2025, determining that the Notice was consistent with the Licence and protective of the receiving environment, while acknowledging that the objective may need to be re-evaluated during final closure planning if new information emerges.

Whale Tail Pit Project

In 2016, Agnico Eagle proposed to develop the Whale Tail Pit Project to continue mine operations and milling at the Meadowbank mine. Agnico Eagle initially requested that the Whale Tail Pit Project be regulated as an amendment to the Meadowbank Gold Mine Project. However, the Nunavut Impact Review Board (NIRB) determined that the proposed Whale Tail Pit Project proposal had not been assessed as part of the original Meadowbank Gold Mine Project and, due to its location outside of the original Meadowbank Gold Mine Project footprint, it would require a separate screening assessment. Upon completing the screening assessment, the NIRB determined that the Whale Tail Pit Project required further assessment, best facilitated through a full environmental review. The environmental review concluded on March 15, 2018, with Project Certificate No. 008 issuance.

Additional infrastructure to support the Whale Tail Pit Project was built at the Amaruq site (truck shop/warehouse, fuel storage and an additional camp facility), and the Amaruq satellite deposit was mined as an open pit with commercial production beginning in September 2019. Amaruq ore is transported using long-haul off-road type trucks to the mill at the Meadowbank site for processing. All tailings generated from Amaruq ore are also deposited at the Meadowbank site.

The Amaruq Phase 2 expansion started in October 2018 with an application to the Nunavut Planning Commission (NPC). Following public hearings on the proposed expansion in August 2019, the NIRB concluded that the proposed Whale Tail Pit Project amendment could proceed to the Type A Water License amendment phase with the NWB. The Minister

of Northern Affairs approved the amended Project Certificate Report from the NIRB on January 20, 2020, completing the NIRB process. NIRB issued the Project Certificate 008 amendment No. 1 on February 19, 2020 to reflect significant modifications to the Whale Tail Pit Project as proposed in the Whale Tail Pit Expansion Project (i.e., revisions to Terms and Conditions #1, 27, 28, 30, 46 and 51; new Terms and Conditions #65 to 68).

As existing gold processing and accommodations infrastructure at the Meadowbank Gold Mine site are required to support mining operations at the Whale Tail Pit, NIRB identified existing terms and conditions in the amended Project Certificate No. 004 that will continue to apply to the Whale Tail Pit project infrastructure associated with the Meadowbank Gold Mine site, even after the closure and reclamation of the developed pits at the Meadowbank Gold Mine site. The NWB Water License amendment process for the Whale Tail Pit Expansion Project was completed on May 12, 2020, and the Water License Amendment No. 2AM-WTP1830 was issued. Commercial production under the Whale Tail Pit Expansion Project was achieved on 31 December 2020.

In 2021, Agnico Eagle proposed a modification to the Whale Tail Pit Project, specifically, the IVR Pushback and Whale Tail Pushback. On April 20, 2021, the NPC determined that the proposed Modification was exempt from screening by the NIRB, as the Whale Tail and IVR Pushbacks did not change the general scope or previously amended activities. The NWB approved the Whale Tail and IVR Pushbacks modification on August 3, 2021, indicating the proposed modification is consistent with the scope of activities considered under Type A Water Licence 2AM-WTP1830.

On April 04, 2024, a proposal was submitted to the NPC for a Modification requesting a pushback of the IVR Pit, continuation of the Whale Tail underground, and expansion of the approved Whale Tail Ore Stockpile No. 3 (collectively referred to as the 2024 Modification). The NPC concluded on April 19, 2024, that the proposed changes were exempt from NIRB screening, and the NWB approved the Modification on August 06, 2024.

CIRNAC provides the following comments and recommendations pertaining to the 2024 Meadowbank and Whale Tail Gold Mine Projects' Annual Report. A summary of the recommendations' subjects can be found in Table 1. Documents reviewed as part of this submission can be found in Table 2 of Section B. Detailed technical review comments can be found in Section C.

Table 1: Summary of Recommendations

Recommendation Number	Subject
R-01	Closure Planning
R-02	Approval of Major Project Changes and Revised Management Plans
R-03	Water Quality Predictions of Unapproved Activities
R-04	Model Prediction Accuracy and Decision Making
R-05	Duration of Modelling Predictions
R-06	Waterline to Vault
R-07	Meromixis Stability in Vault Pit
R-08	Revised Criterion for Total Dissolved Solids (TDS)
R-09	Water Treatment of Reclaim Water
R-10	Recontamination of Goose and Portage Pit Lakes
R-11	Meadowbank TSF Cover Design
R-12	Progressive Reclamation Documentation
R-13	Groundwater Migration of TSF Reclaim Water

B. DOCUMENTS REVIEWED AND REFERENCED

The following table (Table 2) lists the documents reviewed under the submission and references during the review.

Table 2: Documents Reviewed and Referenced

Document Title	Author, File No., Rev., Date
Agnico Eagle 2024 Annual Report & Appendices	
Meadowbank Complex - 2024 Annual Report	Agnico Eagle, 31 March 2025
Appendix 1: Meadowbank Update on Implementation of Commitments	Agnico Eagle, 31 March 2025
Appendix 2: Whale Tail Update on Implementation of Commitments	Agnico Eagle, 31 March 2025
Appendix 3: NWB 2023 Annual Report Commitments	Agnico Eagle, 31 March 2025
Appendix 4: NIRB 2023 Annual Report Commitments	Agnico Eagle, 31 March 2025
Appendix 5: Addendum 2024 Annual Report NIRB Screening Decision 11EN010	Agnico Eagle, 10 March 2025
Appendix 6: Baker Lake 2024 Bathymetric Survey	Agnico Eagle, 31 March 2025
Appendix 7: Meadowbank and Whale Tail 2024 Annual Geotechnical Inspection	WSP, 24 February 2025
Appendix 8: Meadowbank 2024 Annual Open Pit Geomechanical Inspection	Knight Piésold, 13 February 2025
Appendix 9: Whale Tail 2024 Annual Open Pit Geomechanical Inspection	Knight Piésold, 3 February 2025
Appendix 10: Meadowbank & Whale Tail 2024 Geotechnical Recommendation Implementation Plan	Agnico Eagle, 31 March 2025
Appendix 11: Meadowbank 2024 Geomechanical Inspection Implementation Plan	Agnico Eagle, 31 March 2025
Appendix 12: Whale Tail 2024 Geomechanical Inspection Implementation Plan	Agnico Eagle, 31 March 2025
Appendix 13: Meadowbank Water Management Plan Version 14	Agnico Eagle, March 2025
Appendix 14: Whale Tail Water Management Plan Version 14	Agnico Eagle, March 2025
Appendix 15: Meadowbank and Whale Tail IRB Report No 32	MDRB, 30 January 2025
Appendix 16: Meadowbank Predicted Water Quantity and Quality (2024)	Agnico Eagle, 31 March 2025

Document Title	Author, File No., Rev., Date
Appendix 17: Meadowbank Gold Mine Waste Rock and Tailings Management Plan Version 15	Agnico Eagle, February 2025
Appendix 18: Whale Tail Waste Rock Management Plan Version 14	Agnico Eagle, March 2025
Appendix 19: Meadowbank Thermal Monitoring Report 2024 Version 6	Agnico Eagle, 4 March 2025
Appendix 20: Whale Tail Thermal Monitoring Report 2024	Agnico Eagle, February 2025
Appendix 21: Meadowbank 2024 Hazardous and Non-Hazardous Waste Transport Manifest	Agnico Eagle, 31 March 2025
Appendix 22: Meadowbank and Whale Tail Spill Contingency Plan Version 22	Agnico Eagle, March 2025
Appendix 23: Meadowbank 2024 GN Spill Reports	Agnico Eagle, 31 March 2025
Appendix 24: Whale Tail 2024 GN Spill Reports	Agnico Eagle, 31 March 2025
Appendix 25: Meadowbank OPEP and OPPP Version 18	Agnico Eagle, March 2025
Appendix 26: Meadowbank and Whale Tail 2024 CREMP Report	AZIMUTH, 18 March 2025
Appendix 27: Whale Tail 2024 Mercury Monitoring Program Report	AZIMUTH, 20 March 2025
Appendix 28: Meadowbank Dewatering Dikes OMS Version 12	Agnico Eagle, March 2025
Appendix 29: Meadowbank Tailings Management OMS Version 13	Agnico Eagle, February 2025
Appendix 30: Whale Tail Water Management Infrastructure OMS Version 5	Agnico Eagle, February 2025
Appendix 31: Whale Tail 2024 Report on Implementation of Measures to Avoid & Mitigate Serious Harm to Fish	Agnico Eagle, March 2025
Appendix 32: Meadowbank and Whale Tail 2024 Marine Mammal and Seabird Report	ERM, March 2025
Appendix 33: Meadowbank and Whale Tail Blast Monitoring Program Version 10	Agnico Eagle, December 2024
Appendix 34: Meadowbank and Whale Tail 2024 Blast Monitoring Report	Agnico Eagle, 31 March 2025
Appendix 35: Meadowbank 2024 Groundwater Monitoring Report	WSP, 29 January 2025
Appendix 36: Whale Tail 2024 Groundwater Management Monitoring Report	WSP, 20 March 2025
Appendix 37: Whale Tail 2024 Fish Habitat Offsets Monitoring Report	Agnico Eagle, March 2025
Appendix 38: Meadowbank and Whale Tail Terrestrial Ecosystem Management Plan Version 9	Agnico Eagle, March 2025
Appendix 39: Meadowbank and Whale Tail 2024 Wildlife Monitoring Summary Report	WSP, March 2025
Appendix 40: Meadowbank and Whale Tail Wildlife and Country Foods Screening Level Risk Assessment Report	Agnico Eagle, March 2025
Appendix 41: Meadowbank and Whale Tail 2024 Noise Monitoring Report	Agnico Eagle, March 2025
Appendix 42: Meadowbank and Whale Tail 2024 Air Quality and Dustfall Monitoring Report	Agnico Eagle, March 2025
Appendix 43: Meadowbank and Whale Tail Hazardous Materials Management Plan Version 8	Agnico Eagle, March 2025
Appendix 44: Meadowbank and Whale Tail Quality Assurance-Quality Control (QAQC) Plan Version 10	Agnico Eagle, March 2025
Appendix 45: Meadowbank and Whale Tail 2024 QAQC Results	Agnico Eagle, 31 March 2025
Appendix 46: Meadowbank and Whale Tail Emergency Response Plan Version 20a	Agnico Eagle, 25 March 2025
Appendix 47: Agnico Eagle Kivalliq Projects 2024 Socio-Economic Monitoring Program Report	Aglu & ERM, March 2025
Appendix 48: Meadowbank & Whale Tail 2024 Public Consultations	Agnico Eagle, 31 March 2025
Appendix 49: Agnico Eagles's 2024 Training Management System & Learning Management System Reports	Agnico Eagle, 31 March 2025
Appendix 50: Agnico Eagle 2024 Newsletter	Agnico Eagle, 2024

Document Title	Author, File No., Rev., Date
Appendix 51: 2024 Kivalliq Labour Market Analysis	Aglu & ERM, 25 March 2025
Appendix 52: Agnico Eagle Kivalliq Elders Advisory Committee 2024 Summary Report	Agnico Eagle, February 2025
Appendix 53: 2024 Meadowbank Conceptual Socio-Economic Closure Plan Update	Agnico Eagle, September 2024
Appendix 54: Meadowbank Landfarm Design and Management Plan Version 6	Agnico Eagle, 19 March 2025
Appendix 55: Whale Tail Landfarm Design and Management Plan Version 4	Agnico Eagle, March 2025
Appendix 56: Meadowbank Landfill Design and Management Plan Version 7	Agnico Eagle, 20 February 2025
Appendix 57: Whale Tail Landfill Design and Management Plan Version 6	Agnico Eagle, February 2025
Appendix 58: Meadowbank 2024 Quarry 22 Report	Agnico Eagle, January 2025
Appendix 59: Shipping Management Plan Version 5	Agnico Eagle, March 2025
Appendix 60: Baker Lake Bulk Fuel Storage Facility Environmental Performance Monitoring Plan, Version 7	Agnico Eagle, March 2025
Appendix 61: Whale Tail Thermal Monitoring Plan Version 5	Agnico Eagle, February 26, 2025
Appendix 62: Meadowbank and Whale Tail TEMP Version 9 - Approval Letters	
Appendix 63: Meadowbank and Whale Tail Executive Summary Translation	Agnico Eagle, March 31, 2025
Other Reports	
CIRNAC Letter to NWB Re: CIRNAC's Review of the 2023 Annual Report for Meadowbank and Whale Tail Gold Mine Projects, Type A Water Licence Nos. 2AM-MEA1530 and 2AM-WTP1830	CIRNAC, June 03, 2024
CIRNAC Letter to NWB Re: CIRNAC's Review of the 2024 Modification Request for the Development of a Site Specific Water Quality Objective for Meadowbank Gold Mine Projects, Type A Water Licence 2AM-MEA1530.	CIRNAC, October 07, 2024
CIRNAC Letter to NWB Re: CIRNAC's Final Submission on the 2024 Modification Request for the Development of a Site-Specific Water Quality Objective for the Meadowbank Gold Mine Projects, Type A Water Licence 2AM-MEA1530.	CIRNAC, April 02, 2025

C. RESULTS OF REVIEW

1. Closure Planning [with Appendix A]

Comment:

Section 9 of the 2024 Annual Report provides high-level discussions of the closure planning and implementation process. For example, the section describes the state of the closure planning process, ongoing studies, information gaps and progressive reclamation. While CIRNAC appreciates receiving these descriptions, the Department has a wide range of questions and comments regarding the closure of the Meadowbank and Whale Tail sites, including issues related to:

- Freeze back and Capping Thickness;
- Progressive Reclamation – Mine Site;
- Results of Thermistor Measurements for Tailings and Waste Rock Storage Facilities;
- Meadowbank Water Treatment Requirements;
- Meadowbank WRSF Seepage Quality;
- Meadowbank Post-Closure In-Pit Water Quality;
- Meadowbank In-Pit Tailings Covers;
- Thermal Performance of Meadowbank WRSF Covers; and
- Whale Tail Project Post-Closure Water Quality.

These questions and comments have been submitted in prior annual report reviews conducted by CIRNAC, as summarized in Appendix A.

While these questions and comments could be deferred until the submission of formal closure planning documents (e.g., periodic updated Interim Closure and Reclamation Plans (ICRPs) and security estimates), CIRNAC is of the view that a more active dialogue on closure planning is justified and would be beneficial for all parties. This is particularly important given that the project is scheduled to begin active closure within three years (i.e., by 2028).

CIRNAC notes that Agnico Eagle initiated a process early in 2025 to advance discussions regarding the closure of the Meadowbank and Whale Tail Projects. That process, which is continuing throughout 2025, has yet to fully resolve the broad spectrum of technical questions and concerns previously identified by CIRNAC.

Recommendation:

(R-01) CIRNAC recommends that Agnico Eagle ensure all previously identified closure questions and concerns, as identified by CIRNAC, are explicitly addressed and documented during the ongoing closure planning process occurring in 2025. For reference, Appendix A presents a consolidated list of prior CIRNAC closure-related questions and comments requiring resolution.

2. Approval of Major Project Changes and Revised Management Plans

Comment:

The 2024 Annual Report and recent closure planning workshops have introduced multiple major changes to the Meadowbank and Whale Tail Projects. For example, in the case of the Meadowbank Mine, the 2024 Annual Report indicates that Agnico Eagle intends to make the following major changes to the closure approach for the site:

- Permanently storing contaminated water in the Vault Pit instead of treating and discharging it to the environment; and
- Covering the Tailings Storage Facility (TSF) with a 1 m thick isolation cover instead of a thermal cover with a minimum thickness of 2 m, as agreed to during the original Project approval process.

Both of the above items represent major changes to the closure approaches described in the conceptual Closure and Reclamation Plan (CRP) and subsequent Interim Closure and Reclamation Plans (ICRPs) for the Meadowbank Mine. The major changes have yet to be approved through an approved Closure Plan. Similarly, the changes have not been approved through formal Project Certificate Amendments and/or Water Licence Amendments or Modifications.

In addition to describing these unapproved changes throughout the Annual Report, numerous Management Plans submitted with the Annual Report also describe the changes as if they are part of the approved project. Furthermore, Sections 10.2.1 and 10.2.2 of the 2024 Annual Report with respect to the management plans state:

“Plan(s) will be considered approved unless a notification from the NWB requested the formal approval process.”

This implies that all changes presented in a revised Management Plan will automatically be classified as approved unless the (NWB) requests that the plan undergo a formal approval process.

CIRNAC is of the view that:

- Major project changes are most appropriately addressed through formal processes such as Project Certificate Amendments and/or Water Licence Amendments or Modifications;
- Major revisions to Management Plans reflecting major project changes must undergo a formal approval process by the NWB to ensure regulatory consistency; and
- While Annual Reports serve an essential role in tracking the performance of approved activities, it is not the appropriate forum to review or approve Management Plans that introduce substantial modifications to project scope, particularly when technical implications require more detailed review.

Given the implications of such changes, clear guidance on the appropriate pathways for their assessment—particularly in relation to the scope and intent of annual performance reviews—would help ensure that technical and regulatory considerations are adequately addressed through the proper channels.

Recommendation:

(R-02) CIRNAC recommends that:

a) Nunavut Water Board clarify whether Annual Report review processes are intended to consider the implications of major project changes that have yet to be authorized through an appropriate formal process, such as Project Certificate Amendments and/or Water Licence Amendments or Modifications;
b) Agnico Eagle voluntarily requests that revised Management Plans undergo a formal review and approval process by the NWB if they have been revised to reflect project changes that have the potential to require a Water Licence Amendment or Modification.

3. Water Quality Predictions of Unapproved Activities

Comment:

As required, the 2024 Annual Report includes projections of the project's future environmental performance. For instance, the Meadowbank Water Management Plan presents a Water Quality Forecasting Update (Appendix C from Appendix 13). Predictions have also been prepared for the Whale Tail Site (Appendix C from Appendix 14). These predictions provide critical information for CIRNAC when assessing trends and potential emerging impacts of the mining operations.

CIRNAC notes that the above-referenced predictions have incorporated major project changes that have yet to be approved. Specifically, the predictions include the major changes to closure strategies for water management and tailings covers. As described in CIRNAC#2 above, these changes have yet to be approved through a Final Closure and Reclamation Plan, a Project Certificate Amendment, and/or a Water Licence Amendment or Modification. Given that the major changes have not been approved, it is inappropriate to include them in the Annual Report predictions. Furthermore, by assessing unapproved project components, Agnico Eagle has neglected to provide water quality predictions for the approved project. Consequently, CIRNAC is unable to assess whether there are emerging environmental quality issues associated with the approved project that may have the potential to cause future impacts. This is contrary to the objective of the Annual Reporting process.

Recommendation:

(R-03) CIRNAC recommends that Agnico Eagle resubmit Appendix 13 and 14 of the 2024 Annual Report with predictions that are limited to project components that have been

approved under the relevant Project Certificates and Water Licences. Predictions associated with proposed but unapproved project activities should not be included in the updates. The revised Appendices should be submitted by October 1, 2025.

4. Model Prediction Accuracy and Decision Making

Comment:

CIRNAC draws attention to the following three example figures:

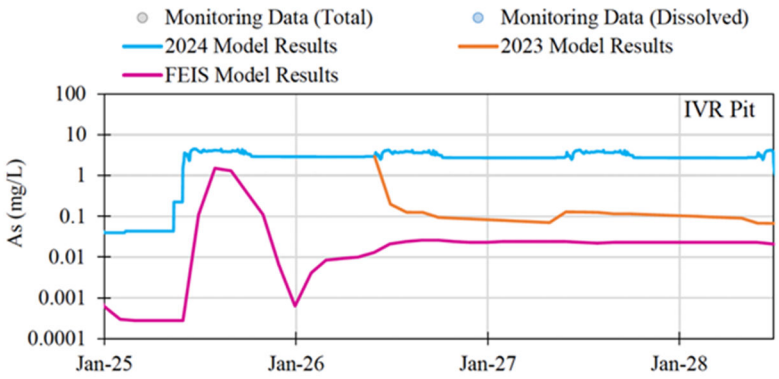

Figure 6-1 from Appendix 14 (Whale Tail site)

In this case, the figure clearly demonstrates that there has been a wide range of water quality predictions throughout the evolution of the Whale Tail Project. At the right side of the figure, the current 2024 arsenic concentration predictions for the IVR Pit are approximately two orders of magnitude greater (i.e., 100 X) than what was predicted in the 2019 FEIS.

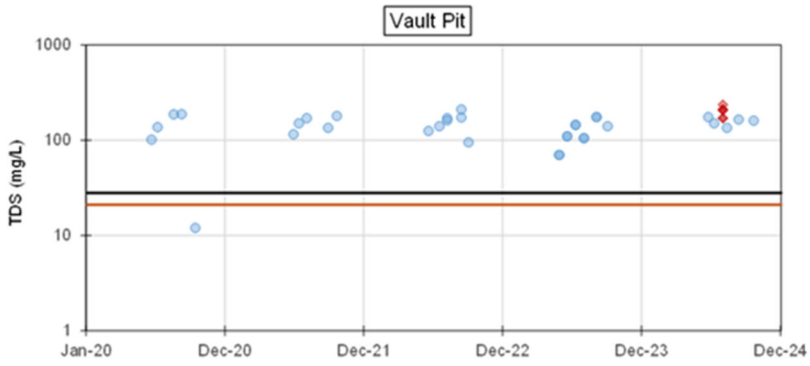

Figure 10 from the 2024 Annual Report (Meadowbank Site)

In this case, the figure illustrates that measured TDS concentrations in the Vault Pit are approximately one order of magnitude (i.e., 10x) greater than Agnico Eagle's "poor end" prediction during the original Water Licence application.

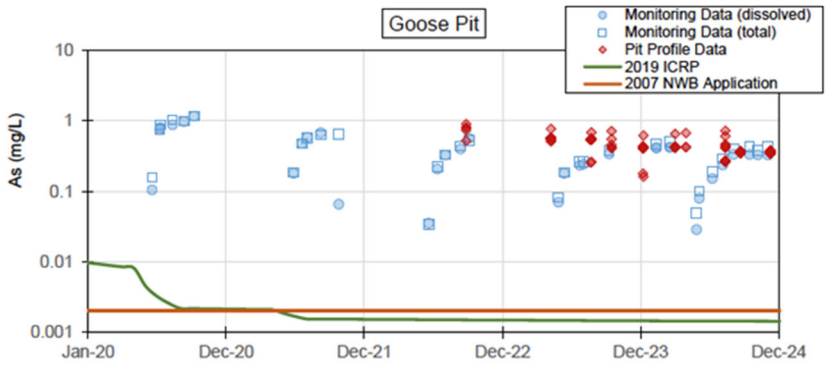

Figure 11 from the 2024 Annual Report (Meadowbank Site)

In this case, the figure shows that measured arsenic concentrations in Goose Pit are two orders of magnitude (i.e., 100x) greater than the most recent ICRP water quality predictions from as recently as 2019.

Collectively, the example figures demonstrate that predictions can change significantly over time and that measured concentrations often differ by multiple orders of magnitude relative to predictions. The 2024 Annual Report and supporting documents contain numerous similar variances.

CIRNAC notes that such variances are common in predictions of complex environmental systems, which can be challenging to model. In this regard, CIRNAC is not criticizing Agnico Eagle's predictions; to the contrary, competent professionals perform Agnico Eagle's predictions, using a large inventory of monitoring data and industry best practices. CIRNAC is, however, concerned that the uncertainty associated with the predictions has been overlooked when making some project decisions. Following is an example from the 2024 Annual Report:

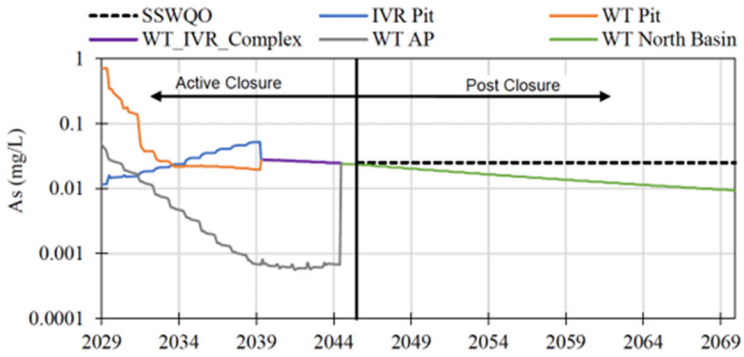

Figure 6-4 From Appendix 14 of the 2024 Annual Report

In this instance, arsenic concentrations in Whale Tail Lake are predicted to equal the Site-Specific Water Quality Objective (SSWQO) in 2044. On that basis, Agnico Eagle indicates that it will reconnect the pit lake to the receiving environment, and the post-closure phase will begin immediately afterward. Taking into consideration the uncertainty associated with

model predictions (as noted above), CIRNAC considers it inappropriate to make closure decisions without any "margin of error". Instead, CIRNAC's position is that closure decisions should be based on a more conservative set of assumptions regarding future water quality, taking into account the accuracy of past predictions.

Recommendation:
(R-04) CIRNAC recommends that Agnico Eagle perform quantitative sensitivity analyses of their water quality predictions. The analyses should quantify potential variability in all major source terms and associated pathways (e.g., elevated arsenic seepage from pit walls, waste rock storage facilities (WRSFs) and mine areas). CIRNAC acknowledges that some sensitivity analyses have already been performed in prior predictions, but a more comprehensive analysis of all variables is justified. The additional information is necessary to verify Agnico Eagle's conclusion that their modelling results are conservative and over-predict any potential impacts. Results from past predictions demonstrate that this is not the case.

5. Duration of Modelling Predictions

Comment:
During the approval process for the Whale Tail Project, a slug of contaminated seepage was predicted to occur more than 80 years after mine closure when the WRSF reached their hydraulic field capacities. Similarly, the effects of climate change are likely to become increasingly significant over the next century. To anticipate these long-term changes, water quality predictions should extend for an appropriate time into the post-closure phase.

With few exceptions, the majority of modelling predictions presented in the updated Water Quality and Load Balanced Models (Appendices 13 and 14 to the Annual Report) end shortly after the closure phase has been initiated. Consequently, the predictions are of insufficient duration to demonstrate that environmental quality will remain acceptable throughout the post-closure phase.

Recommendation:
(R-05) CIRNAC recommends that Agnico Eagle extend the duration of all future water quality modelling predictions to 100 years post-closure. Shorter durations should only be considered if Agnico Eagle can demonstrate that site factors (e.g., WRSF hydraulic field capacities) or climate change are not relevant to the system being modelled.

6. Waterline To Vault

Comment:
As described in CIRNAC #2 above, Agnico Eagle has recently proposed making significant changes to the management of Meadowbank contact water during the project's closure phase. The changes involve pumping contaminated reclaim water in the Portage and Goose

Pits 10 km via a new pipeline to the Vault Pit. The reclaim water would be permanently stored in the base of the pit using engineered meromixis (i.e., stratification with contaminated water at depth). A 15-m deep cap of clean water placed on the top of the pit will serve as an aquatic habitat after reconnecting the pit lake to Wally Lake. By comparison, the currently approved approach involves treating the Portage and Goose Pit reclaim water to meet discharge criteria and actively releasing the treated water to the receiving environment.

The transfer of reclaim water from the Portage and Goose Pits to the Vault Pit will be achieved using a new 10-km-long pipeline that was not included in the original project scope. The water transfer will occur at a rate of up to 1,600 m^3/hour or 38,400 m^3/day.

CIRNAC has the following concerns regarding the transfer of contact water to the Vault Pit using a new pipeline:

- **Closure Activity**: The transfer of contact water to the Vault Pit is not part of Agnico Eagle's water management strategy for the current operational phase of the Meadowbank Mine. It is, instead, a component of Agnico Eagle's proposed revised closure strategy for the project.

  In this context, it is CIRNAC's position that the transfer of contact water to the Vault Pit should only be approved and implemented as a component of a fully integrated and approved Closure Plan for the entire Meadowbank Mine. Given that the full Closure Plan is currently under development, it is premature to approve or implement the transfer of contact water to the Vault Pit using a new pipeline.

- **Impact Assessment**: For context, the Meliadine saline water pipeline had a volumetric capacity of 12,000 m^3/day when it was initially proposed and assessed by the NIRB. In contrast, the new Vault pipeline will convey 38,400 m^3/day (i.e., 3.2 times greater capacity) of contaminated water over 10 km through a minimally disturbed area. Notably, the Environmental Assessment (EA) of the Meliadine Pipeline led to substantive project refinements and terms and conditions that ensured the environment was adequately protected. Based on this precedent, CIRNAC is of the view that the construction of a new pipeline and transfer of reclaim water to the Vault Pit represents a significant change to the scope of the approved project. As a consequence, the activity should be subjected to an EA as part of the entire Closure Plan for the Meadowbank site.

Notwithstanding the above, on 3 March 2025, the NWB issued a letter to Agnico Eagle summarizing its analysis and conclusions regarding the issue described above. Within that letter, the NWB states:

"In the meantime, the NWB shared the Agnico Eagle's submission including the "Table 1: Agnico Eagle NuPPAA Section 90 Self-Assessment" with the Nunavut Impact Review Board

(NIRB) to determine significance for an amendment or modification to the project, requesting for a confirmation on whether NIRB agrees with Agnico Eagle's assessment. On March 21, 2025, NIRB confirmed by email that the proposed activity appears to be within the non-significant amendment: NIRB assessment not required category."

In summary, based on a self-assessment from Agnico Eagle, NIRB concluded that an EA is not required. On this basis, after acknowledging the concerns identified by CIRNAC, the NWB concluded:

"Upon review of all information submitted, and acknowledging that an impact assessment of the proposed activity by NIRB is not required, the NWB confirms that the proposed activity is not in conflict with the existing terms and conditions of the Licence. The NWB also recognizes that while the Final Closure and Reclamation Plan for Meadowbank Gold Mine is not still submitted, some of mine facilities and infrastructures may be going through progressive reclamation."

CIRNAC notes the following for consideration:

- As noted above, the activity is not part of Agnico Eagle's approved operations. Instead, it is a component of the closure strategy for the mine, which has not yet been finalized, assessed or approved. Consequently, the activity is not within the scope of the approved project, and the existing terms and conditions of the Licence are not applicable.
- Progressive reclamation should only be implemented if it is consistent with the conceptual Closure and Reclamation Plan (CRP) and/or the most recent approved versions of Interim CRPs (ICRP). Any actions taken to implement proposed modifications to a CRP or ICRP prior to being approved do not constitute progressive reclamation. In this regard, transferring contact water to the Vault Pit should not be classified as progressive reclamation until the activity has been formally assessed and approved.

Recommendation:

(R-06) CIRNAC recommends that Agnico Eagle defer from implementing any newly proposed closure-related activities until the full CRP has been finalized, assessed and approved.

7. Meromixis Stability in Vault Pit

Comment:

As described in Comment #2 above, Agnico Eagle has proposed a revised water management strategy in which, at the end of mill operations and after initial treatment of mill reclaim waters, reclaim water from the Portage and Goose Pits will be pumped to the Vault Pit for permanent storage throughout the post-closure phase. Agnico Eagle indicates that

the reclaim water, which is not amenable to discharge, will remain in the base of the Vault Pit through engineered meromixis (i.e., stratification with contaminated water remaining in the base of the pit). Although the approach has yet to be formally assessed or approved, Agnico Eagle indicates that pumping to the Vault Pit will begin in 2026.

Through the informal ongoing closure planning process initiated in late 2024, Agnico Eagle has provided qualitative evaluations to demonstrate that meromixis within the Vault Pit will remain stable indefinitely. However, the evidence provided to date does not include any quantitative analysis or modelling demonstrating that meromixis will be effective, and in response, CIRNAC provided multiple recommendations to Agnico Eagle regarding concerns and issues related to meromixis. CIRNAC does not expect responses to these recommendations in the context of the current Annual Report Review; the recommendations are provided here solely to inform NWB of the topics being considered. Specifically, CIRNAC requested that Agnico Eagle provide:

a) A detailed rationale for rejecting the previously proposed water management strategy for the Meadowbank pits.
b) Hydrodynamic and geochemical modelling to assess stratification stability, contaminant migration, and the long-term maintenance of meromixis within the Vault Pit.
c) Hydrogeological and permafrost studies to evaluate groundwater-seepage risks within the Vault Pit.
d) An assessment of potential failure modes that could destabilize meromixis (e.g., extreme storm events, thermal extremes, subaqueous pit wall failures).
e) Demonstrate that the proposed 15 m depth of freshwater cover in the flooded Vault Pit is sufficient to protect aquatic life.
f) Confirmation that the flooded Vault Pit Lake will become an aquatic habitat that protects aquatic life after connection to Wally Lake.
g) Descriptions of the approaches that could be taken if post-closure monitoring determines that the revised water management approach is not performing as intended (e.g., meromixis is not stable, and water in the Vault Pit becomes fully or partially mixed).

Recommendation:

(R-07) CIRNAC recommends that Agnico Eagle clarify whether it will pump reclaim water from the Portage and Goose Pits to the Vault Pit beginning in 2026 if the revised water management approach has not been approved through the approval of a final CRP for the project.

8. Revised Criterion for Total Dissolved Solids (TDS)

Comment:

On 22 August 2024, the NWB received an Operational Notice from Agnico Eagle regarding the development of a Site-specific Water Quality Objective (SSWQO) for Total Dissolved Solids (TDS). The notice requested that the SSWQO be set at 1,000 mg/L and that the TDS Effluent Quality Criterion (EQC) be increased from 1,400 mg/L to 4,000 mg/L. The NWB subsequently initiated a consultation process with relevant parties, including CIRNAC. Several rounds of comments/responses and meetings were held involving the NWB, Agnico Eagle, KivIA, ECCC and CIRNAC.

As described in a letter from the NWB to Agnico Eagle dated 28 May 2025, CIRNAC expressed multiple concerns related to Agnico Eagle's proposed SSWQO for TDS. In summary, CIRNAC indicated that the SSWQO was not required for Agnico Eagle's approved operations to remain compliant but was instead relevant to the closure phase of the project. CIRNAC therefore recommended that the SSWQO be deferred and addressed within the Final Closure and Reclamation Plan (FCRP), rather than as a standalone initiative. CIRNAC also raised concerns regarding the lack of sufficient justification for not meeting baseline or CCME guidelines, the absence of long-term site-specific toxicity testing, exceedances of other water quality parameters beyond TDS, and the potential precedent that might be set by approving site-specific criteria in advance of closure planning.

After considering input from CIRNAC, Agnico Eagle and others, the NWB approved Agnico Eagle's proposed SSWQO for TDS. However, the NWB explicitly acknowledged CIRNAC's concerns related to the timing of developing the SSWQO and its relation to the overall closure planning. Furthermore, the NWB stated its expectation that further discussions regarding the overall closure objectives will occur through ongoing discussions as part of the final closure planning process. If new evidence or information is presented that is not supportive of the proposed SSWQO for TDS being protective of the receiving environment, the NWB indicated that they may require Agnico Eagle to revisit the approved SSWQO for TDS.

CIRNAC maintains that the SSWQO for TDS is not required for the currently approved operational phase of the project. Specifically, it is CIRNAC's understanding that the higher TDS criterion will not be required until the closure phase. Further, Agnico Eagle has not demonstrated that the less conservative SSWQO criterion is justified. Specifically, they have not explored other mitigations that have the potential to reduce TDS loadings to the environment.

Recommendation:

(R-08) CIRNAC recommends that Agnico Eagle voluntarily defer applying the SSWQO for TDS until the closure plan for the Meadowbank Mine has been finalized, assessed and

approved. This will allow Agnico Eagle to conform with the spirit and intent of the NWB's decision.

9. Water Treatment of Reclaim Water

Comment:

Before tailings deposition into pits, Agnico Eagle had been optimistic that pit waters on reflooding may not need water treatment. During the amendment application and approval process for In-Pit Tailings Deposition at the Meadowbank Mine, Agnico Eagle indicated that the water in the open pits above the settled tailings (referred to as "reclaim" water) would likely need to be treated before release to the environment. This requirement was verified during the initial years of in-pit deposition, prompting Agnico Eagle to investigate water treatment needs and methods. To this end, a series of laboratory and bench-scale tests were conducted to refine the water treatment approach. The expectation that reclaim water would be treated and discharged into surface water receivers has been an integral part of the site's closure strategy.

As described in CIRNAC Comment #2 above, in late 2024, Agnico Eagle shared its working draft Closure Plan, which included its proposed changes to water management for the pits. The revised (but not yet approved) approach involves pumping reclaim water to the Vault Pit for permanent storage under meromictic conditions. Based on current plans, Agnico Eagle indicates that they will perform in-pit biological treatment in the Portage and Goose pits to remove nitrogen species before pumping to the Vault pit. For that treatment to be effective, Agnico Eagle anticipates that the pit water will need to be pre-treated in a Water Treatment Plant (WTP) to reduce arsenic and copper concentrations to levels conducive for biological nitrogen removal. CIRNAC anticipates that this pre-treatment step will also reduce other parameter concentrations that are elevated in the reclaim water.

Given that the reclaim water will be treated for nitrogen, arsenic, copper and potentially other elevated parameters, it is unclear to CIRNAC what additional parameters will remain elevated above concentrations that would prevent the direct discharge of the treated reclaim water to the environment. If the concerns relate to elevated TDS, alternative treatment technologies may be available.

Recommendation:

(R-09) CIRNAC recommends that Agnico Eagle:

a) Clarify why the approved strategy of treating and discharging reclaim water to the surface water environment is no longer a viable closure approach; and
b) Indicate what additional parameters would need to be removed from the reclaim water after pre-treatment for arsenic and copper, followed by in-situ treatment for nitrogen species before discharging the reclaim water to the environment (i.e., instead of storing the water in the Vault Pit).

c) Provide a list of public discussions, technical and general community input, on the proposed new use of the Vault Pit.

10. Recontamination of Goose and Portage Pit Lakes

Comment:

Fish and other aquatic species will enter Portage and Goose pit lakes once they are reconnected to the surface water environment after closure. Consequently, there will be a need for confirmation that the water and sediment quality within the pits will continue to provide a safe aquatic habitat over the long-term. Given the ongoing presence of tailings within the pits and contaminant loadings from other sources (e.g., groundwater from the TIA – see Comment 13), long-term predictions of water and sediment quality are necessary. Based on the information reviewed to date, it is CIRNAC's understanding that detailed long-term water and sediment quality predictions for the pit lakes have not yet been prepared.

In addition to predictions, CIRNAC is concerned that any emerging trends in the water quality of the pit lakes will be masked/diluted once they are connected with the surface water environment. It is, therefore, important that water quality is shown to be stable for a sufficient duration of time until the dikes surrounding the pit lakes are breached.

Recommendation:

(R-10) CIRNAC recommends that Agnico Eagle:

a) Perform detailed long-term modelling of water and sediment quality in the Portage and Goose Pit Lakes, taking into consideration all potential source terms; and
b) Commit to delaying reconnecting the flooded pit lakes to the surface water environment until there is a minimum of 5 years of monitoring data proving that water and sediment concentrations are stable and safe for use by fish and other aquatic receptors.

11. Meadowbank TSF Cover Design

Comment:

As indicated in CIRNAC#2 above, the 2024 Annual Report and supporting documents (e.g., Management Plans) have incorporated several changes that have yet to be formally assessed and licensed. One of these changes involves covering the TSF with a 1 m thick isolation cover, rather than a thermal cover with a minimum thickness of 2 m, as agreed upon during the original Project approval process.

The updated Water Quality and Load Balance Model (WQLBM) for the Meadowbank site (Appendix 13, Appendix C) includes source terms from the TSF. However, it is unclear to CIRNAC whether the predictions are based on the approved 2 m thick thermal cover or the unapproved 1 m thick isolation cover.

Additionally, the 2024 and prior Annual Reports have presented a summary of the progressive reclamation that has occurred on the TSF. It is unclear to CIRNAC whether the progressive reclamation has followed the approved design concept of a 2 m thick thermal cover or the unapproved 1 m thick isolation cover.

Recommendation:

(R-11) CIRNAC recommends that Agnico Eagle:

a) Indicate whether the updated WQLBM presented in the 2024 Annual Report was based on the approved 2 m thick thermal cover or the unapproved 1 m thick isolation cover; and
b) Indicate whether the progressive reclamation performed on the Meadowbank TSF has been in accordance with the approved 2 m thick thermal cover or the unapproved 1 m thick isolation cover.

12. Progressive Reclamation Documentation

Comment:

Section 9.1 of the 2024 Annual Report presents a high-level narrative summary of progressive reclamation activities implemented to date. Similar summaries were provided in prior Annual Reports. While CIRNAC appreciates receiving these summaries, they are insufficient to serve as formal documentation verifying that the objectives and criteria of the closure works have been met. As a result, the progressive reclamation activities reported by Agnico Eagle have yet to be verified by CIRNAC.

Considering Agnico Eagle's current plan to initiate closure in 2028, CIRNAC recommends that detailed and formal documentation of all progressive reclamation completed to date be submitted. This will enable all parties to evaluate the extent to which previously completed closure activities have been executed in accordance with the required criteria and approved designs. Any monitoring data collected from progressively reclaimed areas of the sites (e.g., thermal monitoring from covered WRSFs) should be presented to demonstrate that the progressive closure works are performing as intended. Where appropriate, the detailed progressive reclamation documentation can inform potential adjustments to security estimates.

Recommendation:

(R-12) CIRNAC recommends that:

a) The NWB initiate a process involving Agnico Eagle, CIRNAC and other parties to develop guidance regarding the nature and extent of documentation requirements to verify that progressive reclamation and subsequent final closure activities have been carried out by the required criteria and approved designs. CIRNAC suggests that the processes followed by the Mackenzie Valley Land and Water Boards would serve as an appropriate starting point for developing such guidance.

b) Following the guidance noted above, Agnico Eagle should formally document all previously completed progressive reclamation activities.

13. Groundwater Migration of TSF Reclaim Water

Comment:

The Meadowbank 2024 Groundwater Monitoring Report (Appendix 35 to the 2024 Annual Report) concludes that the groundwater quality at monitoring well MW-16-01 has been impacted by reclaim water from the South Cell TSF. This conclusion is based on the well having chemical signatures that are similar to samples collected from TSF surface water and dike seepage.

So far, contaminant transport from the TSF has locally affected groundwater quality to the west side of the central dump and mined-out pits. Agnico Eagle has determined that the gradient between the surrounding lakes and the mined-out pits is currently preventing advection from carrying contaminants further eastwards. This barrier, however, will cease to exist once the pits are fully flooded. On this basis, Agnico Eagle has concluded that subsequent groundwater monitoring programs are necessary to mitigate the effects of mining on local hydrogeology and ensure that these contaminants do not impact regional groundwater quality in the future.

Recommendation:

(R-13) CIRNAC recommends that Agnico Eagle:

a) Confirm that the updated WQLBM predictions presented in Appendix 13 have included potential loadings of TSF reclaim water migrating via the groundwater pathway;
b) Describe the migration pathway of reclaim water from the TSF into the groundwater system; and
c) Describe approaches/options that could be used to mitigate TSF reclaim water and/or seepage from entering the groundwater system if flows are deemed to be unacceptable.

Appendix A: Previously Identified CIRNAC Closure and Reclamation Comments to be Addressed During Ongoing Closure Planning Processes.

CIRNAC Prior Closure and Reclamation Comment #	Topic	CIRNAC's Prior Recommendations	Agnico Eagle Prior Response/Action	Current Status
Prior 1	Freeze back and Capping Thickness	CIRNAC recommended that Agnico Eagle include a meaningful discussion of the results from the thermal monitoring in the Annual Report. FEIS predictions should be compared with monitoring results and be clearly presented. Agnico Eagle should present the updated modeling supporting their conclusions that the conceptual plans for thermal encapsulation of the Tailings Storage Facility (TSF) and the Waste Rock Storage Facility (WRSF) remain effective to prevent and control deleterious seepage over long term. Finally, if results show discrepancies from the predicted values, Agnico Eagle should discuss the management actions that should be implemented to address the risk.	Agnico Eagle acknowledges CIRNAC's comment on thermal monitoring of the WRSF and will continue to report in the annual report the work and the data that are being gathered to assess the performance of the WRSF. These data will continue to be analysed to ensure they are aligned with closure prediction and the model will be revised periodically to ensure the goal of meeting closure objective. In 2020 instrumentation installation continued on both sites as per O'Kane recommendation. The data gathered at Meadowbank are aligned with the latest review of the thermal model performed in 2019. Agnico Eagle also acknowledges CIRNAC's comment on the progressive reclamation for the cover of the WRSF. Agnico Eagle will be submitting in due time the necessary documentation to support its claim of completion of the progressive reclamation work done on the WRSF.	Agnico Eagle continues to assess the existing and predicted long-term thermal performance of mine wastes and cover systems. However, similar to prior years, the 2024 Annual Report provides limited new information in this regard and the topic remains a work in progress. **CIRNAC Recommendation:** The issue has yet to be resolved. CIRNAC recommends that Agnico Eagle explicitly address and document the issue through the closure and reclamation planning process.
Prior 2	Freeze back and Capping Thickness	CIRNAC recommended that Agnico Eagle provide more information on the nature and extent of research efforts, results of the research and a discussion of how the proposed cover design has been influenced by these results.	Refer to response for 1	Agnico Eagle, their consultants and research partners continue to assess the existing and predicted long-term thermal performance of mine wastes and cover systems. However, similar to prior years, the 2024 Annual Report provides limited new information in this

CIRNAC Prior Closure and Reclamation Comment #	Topic	CIRNAC's Prior Recommendations	Agnico Eagle Prior Response/Action	Current Status
				regard and the topic remains a work in progress. **CIRNAC Recommendation:** The issue has yet to be resolved. CIRNAC recommends that Agnico Eagle explicitly address and document the issue through the closure and reclamation planning process.
Prior 3	Progressive Reclamation – Mine Site	CIRNAC recommended that future updates to the Interim Closure and Reclamation Plan (ICRP) include more details on progressive reclamation at Meadowbank such as areas of Tailings Storage Facility (TSF) and Waste Rock Storage Facility (WRSF) facilities covered in the prior year, total areas covered to date, along with the volumes associated with these areas.	In response to 2019-2020 NIRB recommendations, Agnico Eagle has committed to include more details on progressive closure in the 2020 Annual Report. Relevant information to progressive closure can be found in Section 9.1 of the 2020 Annual Report and will continue to be updated annually. Details related to work completed and schedules of progressive reclamation is also included in the closure schedule presented in Appendix P of the ICRP which was updated in March 2020 and provided in the 2019 Annual Report in Appendix 55. Agnico is of the opinion that the last update March 2020 version fulfills the current request. Agnico Eagle is nevertheless committed to providing more details on the progressive closure in the next iteration of the Meadowbank ICRP.	Agnico Eagle's Annual Reports only provide high level summaries of progressive reclamation completed to date. CIRNAC requested that the missing information be incorporated into future ICRPs. **CIRNAC Recommendation:** The issue has yet to be resolved. CIRNAC recommends that Agnico Eagle explicitly address and document the issue through the closure and reclamation planning process.

CIRNAC Prior Closure and Reclamation Comment #	Topic	CIRNAC's Prior Recommendations	Agnico Eagle Prior Response/Action	Current Status
Prior 4	Results of Thermistor Measurements for Tailings and Waste Rock Storage Facilities	CIRNAC recommended that Agnico Eagle analyze the thermistor monitoring results against early thermal modelling predictions and update its Waste Rock and Tailings Management Plans if large discrepancies are observed between the monitoring results and model predictions. While the 2020 Annual Report presents a high-level summary of the topic, the document contains insufficient detail to understand the status of thermal monitoring/modelling as it relates to final closure. CIRNAC expects that the next iteration of the Meadowbank Interim Closure and Reclamation Plan (ICRP) will include a comprehensive analysis of all thermal monitoring data and modelling.	Agnico Eagle is monitoring freeze back in tailings and the waste rock and will continue to do so and expand the monitoring program as required. The data gathered will continue to be analyzed and compared to the FEIS prediction as more data becomes available to ensure that the closure strategy and concept still meet the closure prediction. Agnico Eagle acknowledges CIRNAC's comment and will evaluate this recommendation during the next updated of the Meadowbank ICRP.	Agnico Eagle continues to assess the existing and predicted long-term thermal performance of mine wastes and cover systems at the Meadowbank and Whale Tail sites. While the Annual Reports present a high-level summary of the topic, the documentation contains insufficient detail for the reader to understand the status of thermal monitoring/modelling as it relates to final closure. CIRNAC expects that the next iteration of the Meadowbank Complex ICRP will include a comprehensive analysis of all thermal monitoring data and modelling. **CIRNAC Recommendation:** The issue has yet to be resolved. CIRNAC recommends that Agnico Eagle explicitly address and document the issue through the closure and reclamation planning process.
Prior 5	Meadowbank Water Treatment Requirements	CIRNAC recommended that the next iteration of the Meadowbank ICRP identify and examine potential water treatment scenarios based on current and future water quality projections during the closure phase. Although final decisions are not required at this time, costs associated with implementing the most likely water treatment scenario should also be incorporated into security estimates.	Agnico Eagle acknowledges CIRNAC comments and intends to assess the requirement for treatment of the re-flooded pits within the next iteration of the ICRP.	Agnico Eagle indicates that it continues to assess the requirements for treatment of reclaim water stored in the Goose and Portage pits at the Meadowbank Mine. CIRNAC notes that the strategy is limited to treatment of reclaim water and does not address whether water in the re-flooded pits will require on-going treatment after the reclaim water has been treated and discharged. Despite the progress, the topic remains a work in progress and

CIRNAC Prior Closure and Reclamation Comment #	Topic	CIRNAC's Prior Recommendations	Agnico Eagle Prior Response/Action	Current Status
				significant work will need to be done prior to reaching final decisions. **CIRNAC Recommendation:** The issue has yet to be resolved. CIRNAC recommends that Agnico Eagle explicitly address and document the issue through the closure and reclamation planning process.
Prior 6	Meadowbank WRSF Seepage Quality	CIRNAC recommended that Agnico Eagle confirm whether long-term modelling of seepage from the Meadowbank Waste Rock Storage Facilities (WRSFs) is of sufficient duration to characterize seepage after breakthrough. If not, CIRNAC recommends that Agnico Eagle extend the temporal scope of its WRSF seepage modelling to ensure that potential seepage impacts after breakthrough are accurately characterized.	Long term seepage from the Meadowbank WRSF was not identified as a concern during the FEIS and was not examined. For the next iteration of the Interim Closure & Reclamation Plan, Agnico Eagle will review if this mechanism can have an impact on the closure objectives and if so, will do the necessary analysis to characterize this impact and develop mitigation measure as required. However, it must be noted that, as opposed to Whale Tail WRSF, there is no metal leaching material in the Meadowbank WRSF and the pile is expected to remain in permafrost condition which would suggest that water seeping from the Meadowbank WRSF beyond the NAG capping is unlikely and would have little bearing on the water quality objective at closure.	Agnico Eagle's response does not address CIRNAC's request. They have, however, indicated the issue will be considered during preparation of the next Meadowbank Interim Closure and Reclamation Plan (ICRP) if they determine there is a potential impact on the ability of Agnico Eagle to achieve the closure objectives. The response indicates that the potential for leaching from the Meadowbank WRSF is lower than for the Whale Tail WRSF due to an absence of metal leaching material and the expectation that the rock will remain frozen. On this basis, Agnico Eagle concludes that water seeping from the Meadowbank WRSF beyond the non-potentially acid generating (NAG) capping is unlikely and would have little bearing on the water quality objective at closure. Regardless, CIRNAC is of the opinion that quantitative long-term modelling of seepage from the Meadowbank WRSF is required to confirm Agnico Eagle's assumptions.

CIRNAC Prior Closure and Reclamation Comment #	Topic	CIRNAC's Prior Recommendations	Agnico Eagle Prior Response/Action	Current Status
				CIRNAC Recommendation: The issue has yet to be resolved. CIRNAC recommends that Agnico Eagle explicitly address and document the issue through the closure and reclamation planning process.
Prior 7	Meadowbank Post-Closure In-Pit Water Quality	CIRNAC recommended that Agnico Eagle: a) Conduct a modelling exercise to predict post-closure water quality in the re-flooded Goose and Portage mine pits at the Meadowbank Gold Mine site. b) Incorporate the findings of the modelling into the next iteration of the Meadowbank ICRP. c) Use the modelling results to inform the design of various other closure components, including but not limited to capping of the in-pit tailings and post-closure water management, water treatment facility designs, sludge generation and disposal, requirements as well expected treatment duration all of which should be included in the next iteration of the Interim Closure and Reclamation Plan (ICRP).	a) Agnico Eagle acknowledges CIRNAC' comments. Agnico Eagle will integrate this recommendation during the next update of the Meadowbank ICRP. b) Agnico Eagle acknowledges CIRNAC's comment. Findings of the modelling will be taken into consideration in a future update of the Meadowbank ICRP. c) Agnico Eagle acknowledges CIRNAC's comments. Agnico Eagle will integrate this recommendation during the next update of the Meadowbank ICRP.	While the topics included in the comment have yet to be resolved, Agnico Eagle has committed to address CIRNAC's recommendations during future updates to the Meadowbank ICRP. **CIRNAC Recommendation:** The issue has yet to be resolved. CIRNAC recommends that Agnico Eagle explicitly address and document the issue through the closure and reclamation planning process.
Prior 8	Meadowbank In-Pit Tailings Covers	CIRNAC recommended that Agnico Eagle: a) Describe the strategy they will use to evaluate cover requirements and methods for the in-pit tailings (e.g., water covers, coarse/fine granular	a) Agnico Eagle will present a timeline for further study to determine the requirement of a cover and possible construction strategy during the next update of the ICRP.	While the topics included in the comment have yet to be resolved, Agnico Eagle has committed to address CIRNAC's recommendations during future updates to the Meadowbank ICRP.

CIRNAC Prior Closure and Reclamation Comment #	Topic	CIRNAC's Prior Recommendations	Agnico Eagle Prior Response/Action	Current Status
		covers, construction/leave a submerged berm at the connection to the pit). b) Provide the strategy and an update on progress towards the selection of a preferred closure concept in the next update to the Meadowbank Interim Closure and Reclamation Plan (ICRP). CIRNAC requested that this information be provided to assist in satisfying the New Commentary of Project Certificate 004 (Amendment 003) Term and Condition 19.	b) Agnico Eagle will present this information in the next update of the ICRP.	**CIRNAC Recommendation:** The issue has yet to be resolved. CIRNAC recommends that Agnico Eagle explicitly address and document the issue through the closure and reclamation planning process.
Prior 9	Thermal Performance of Meadowbank WRSF Covers	CIRNAC recommended that Agnico Eagle describe the technical rationale for using different WRSF cover thicknesses at the Meadowbank Gold Mine and Whale Tail Pit sites. Any notable differences in the design assumptions for the two sites should be provided in the rationale.	Waste rock covers are designed based on project specific attributes and will naturally have variables that differentiate between sites (i.e., the active layer depth in the region is variable). The freezing mechanism is impacted by the material characteristics, such as the grain size distribution. The attributes of the cover system at Whale Tail include low annual precipitation (less than 300 mm per year); high summer evapotranspiration; coarse-texture soil availability; high spring surface runoff; and creation of low permeability ice barriers. The development of the 4.7 m cover was based on an active layer depth in the WRSF of 4.2 m during operations and closure with an additional 0.5 m for contingency. The active layer was determined by preliminary 1D steady-	Agnico Eagle has yet to address the specific recommendation. While the topics included in the comment have yet to be resolved, CIRNAC is of the opinion that the recommendation is best addressed through the closure and reclamation planning process. **CIRNAC Recommendation:** The issue has yet to be resolved. CIRNAC recommends that Agnico Eagle explicitly address and document the issue through the closure and reclamation planning process.

CIRNAC Prior Closure and Reclamation Comment #	Topic	CIRNAC's Prior Recommendations	Agnico Eagle Prior Response/Action	Current Status
			state numerical modelling and further confirmed by O'Kane's 2D transient model. Both simulations considered predicted effects of climate change. Material properties for the cover system and waste rock materials were calibrated based on observed ground temperature measurements obtained from thermistors in Meadowbank's WRSFs. Numerical modelling considered the effect of slope angle, slope aspect, wind exposure on thermal conditions within the WRSF. Modelling of the WRSF cover system indicates a greater thaw depth in the WRSF than observed regional data. Thus, the thaw depth simulated by numerical modelling, rather than the less conservative regional thaw depth, was used in support of the detailed design of the Whale Tail and IVR WRSF cover system. Agnico Eagle refers CIRNAC to the Whale Tail Project – Thermal Modelling of Whale Tail and IVR WRSFs (O'Kane 2019) report which was previously issued to address CIRNAC's comments under the Whale Tail Expansion Project.	
Prior 10	Whale Tail Project Post-Closure Water Quality	CIRNAC recommended that Agnico Eagle address the following in the next iteration of the Whale Tail Interim Closure and Reclamation Plan (ICRP): a) Clearly indicate which modelling parameters have been adjusted since the last modelling run. In situations where the level of conservatism has	a) Agnico Eagle agrees with CIRNAC to indicate which modelling parameters were adjusted since the last modelling run and to explain situations where the level of conservatism has reduced relative to FEIS predictions.	Agnico Eagle has yet to address the specific recommendation. While the topics included in the comment have yet to be resolved, CIRNAC is of the opinion that the recommendation is best addressed through the closure and reclamation planning process.

CIRNAC Prior Closure and Reclamation Comment #	Topic	CIRNAC's Prior Recommendations	Agnico Eagle Prior Response/Action	Current Status
		reduced relative to FEIS predictions, appropriate justification should be provided. b) Future modelling results should explicitly and quantitatively report the range of predicted modelling outcomes based on Agnico Eagle's assumptions regarding model prediction accuracy (i.e., +/- one order of magnitude). Any required mitigations should be based on a reasonable worst-case scenario. For example, what actions would be required if post-closure arsenic concentrations in Mammoth Lake are at the upper end of the potential prediction range? c) Water quality predictions should clearly indicate the spatial extent of post-closure water quality exceedances within surface water receivers.	b) Agnico Eagle agrees with CIRNAC for the next iteration of the water quality forecast model to explicitly report the range of predicted modelling outcomes based on model prediction accuracy. c) Agnico Eagle acknowledges CIRNAC's recommendation for the next iteration water quality forecast model to clearly indicate the spatial extent of post-closure water quality exceedances within surface water receivers.	**CIRNAC Recommendation:** The issue has yet to be resolved. CIRNAC recommends that Agnico Eagle explicitly address and document the issue through the closure and reclamation planning process.