August 29, 2025

Richard Dwyer
Manager of Licensing
Nunavut Water Board

Re: Agnico Eagle's response to Meadowbank (2AM-MEA1530) and Whale Tail (2AM-WTP1830) 2024 Annual Report comments

Dear Mr. Dwyer,

The following information are intended to address regulator's comments regarding the Meadowbank (2AM-MEA1530) and Whale Tail (2AM-WTP1830) 2024 Annual Report:

- Fisheries and Oceans Canada – July 23, 2025: 2AM-MEA1530 & 2AM-WTP1830– Agnico Eagle – Meadowbank Gold Mine and Whale Tail Pit Projects (Meadowbank Complex) – 2024 Annual Monitoring Report.
- Crown-Indigenous Relations and Northern Affairs Canada – July 23, 2025: Review of the 2024 Annual Report for Meadowbank and Whale Tail Gold Mine Projects, Type A Water Licence Nos. 2AM-MEA1530 and 2AM-WTP1830.
- Kivalliq Inuit Association – July 28, 2025: Review of Agnico Eagle Mines Limited's Meadowbank Complex 2024 Annual Report; 2AM-MEA1530 and 2AM-WTP1830.

Should you have any questions or require further information, please do not hesitate to contact us at the below.

Regards,

Agnico Eagle Mines Limited – Meadowbank Complex

Eric Haley
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Environment and Critical Infrastructures Superintendent

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1 Fisheries and Oceans Canada (DFO)

1.1 Correction of DFO File Numbers

References: Main Report Section 11.5.7

Comment: Gap/Issue: The annual report reports DFO occurrence file number incorrectly (#4- HCAA-02467 and #4-HCAA-02468).

Conclusion/Request: Proponent to correct DFO file numbers to 24-HCAA-02467 and 24-HCAA-02468 respectively.

> ***Agnico Eagle's Response:*** *Agnico Eagle apologizes to DFO for this error and will ensure that the correct DFO occurrence file numbers are referenced in the next submission of the annual report.*

1.2 Culverts: Barriers to Fish Passage and Sedimentation

References: Appendix 7: 2024 Geotechnical Inspection Report

Comment: Gap/Issue: AEM notes potential barriers to fish passage and sedimentation (buried culverts, signs of erosion, and granular material from the road). However, gravel deposition from the road has not been removed from culverts that were identified in the 2023 annual report and remain buried.

Conclusion/Request: Proponent to remove gravel that is burying culverts posing a risk to fish passage, potential sedimentation into fish bearing waters, and impeding drainage. While some of the culverts buried or blocked by gravel have not been identified as fish-bearing, DFO recommends removal of gravel at all culverts to ensure protection of fish habitat.

This work can be done following DFO's Culvert Maintenance Code of Practice.

> ***Agnico Eagle's Response:*** *Agnico Eagle is currently in communication with DFO regarding culverts that are potentially a barrier to fish passage. During Freshet 2024, Agnico Eagle visited all the culverts on the AWAR and WTHR to conduct a fish-bearing assessment. The results of this assessment were communicated to DFO prior to their 2025 site visit and were re-assessed in the field with DFO in June 2025. Agnico Eagle will continue to work in collaboration with DFO to find the best path forward to ensure protection of fish habitat.*
>
> *Agnico Eagle also acknowledges the recommendation regarding the removal of gravel at all culverts not being identified as fish bearing. Obstructed and damaged culverts are listed in the Annual Geotechnical Inspection Report. As per this report, if insufficient capacity to handle the flow is*

observed at locations where culverts are obstructed or damaged, Agnico Eagle will implement a plan to clear the obstruction, repair or replace the culvert.

1.3 Marine Mammal Monitoring Program

References: Appendix 32: Meadowbank and Whale Tail 2024 Marine Mammal and Seabird Report

Comment: Gap/Issue: Current Marine Mammal Monitoring survey efforts (1 survey per day, lasting 1.5-2 hours) are not sufficient for effective marine mammal monitoring.

Conclusion/Request: DFO requests increasing monitoring effort to 2 surveys per day minimum, with a break in between to alleviate monitor eye fatigue and/or consider using technology to scan for marine mammals.

Agnico Eagle's Response: *Agnico Eagle acknowledges DFO's request and continues to promote shipping companies to conduct, where possible, monitoring efforts for the 2025 MMSO program to a minimum of two surveys daily.*

1.4 Marine Mammal Monitoring Program: Vessels travelling in sensitive habitat

References: Appendix 32: Meadowbank and Whale Tail 2024 Marine Mammal and Seabird Report

Comment: Gap/Issue: Vessels are required to avoid sensitive wildlife habitat and travel south of Coats Island when it is safe to do so. However, vessels transited north of Coats Island on 3 occasions.

Conclusion/Request: Proponent to ensure compliance with setbacks from sensitive habitat. Additionally, DFO recommends when compliance cannot occur due to safety, a marine mammal observer monitor for marine mammals during all transits north of Coats Island and when crossing setback distances, in addition to their regular monitoring schedule.

DFO to work with the proponent to update their marine mammal monitoring protocol and include these additional monitoring efforts.

Agnico Eagle's Response: *Agnico Eagle acknowledges DFO's request and has advised the shipping companies to increase monitoring efforts during all transits north of Coats Island.*

1.5 Aquatic Invasive Species

References: Shipping Management Plan (Version 5)

Comment: Gap/Issue: Current monitoring plans do not include a monitoring program for aquatic invasive species.

There is a risk of introducing aquatic invasive species through hull contamination from ships coming from Quebec. The Shipping Management Plan requires the shipping companies contracted to supply the mine though the annual sea-lift operations to comply with the Ballast Water Regulations, which reduces the risk of invasive species being introduced as a result of shipping activities, but does not eliminate this risk so that monitoring for the occurrence of aquatic invasive species is required to confirm this. There is a greater risk of invasive species establishment due to Meadowbank shipping activities since vessels are travelling from freshwater (Quebec) to freshwater (Baker Lake).

Conclusion/Request: Proponent to consider a Non-Indigenous Species/Aquatic Invasive Species Monitoring Program around zones of higher risk (Baker Lake).

Proponent to provide specific monitoring and mitigation measures that are being conducted, including but not limited to any ballast water treatment, monitoring for aquatic invasive species (eDNA, hull, and ballast water sampling), any hull clean-up and maintenance protocols, etc.

> ***Agnico Eagle's Response:*** *As per Agnico Eagle's response to DFO's comment on the 2023 Annual Report, Agnico Eagle contracts Transport Canada certified shipping companies that are using standard and acceptable practices common for all vessels in the Canadian Arctic, complying with the requirements and shipping regulations related to the concerns DFO has expressed, including Project Certificate Terms and Conditions, the Shipping Act, and the Ballast Water Regulations. Agnico Eagle feels this issue is resolved.*
>
> *The shipping companies (Groupe Desgagnés Inc. and Woodward Group and Companies – Coastal Shipping Ltd.) servicing the Meadowbank Complex have confirmed that both monitoring and mitigation measures for aquatic invasive species is currently being done. Ballast water treatment is conducted by all contracted vessels, with procedures and systems complying with the D2 requirements indicated under the International Maritime Organization's Ballast Water Management Convention.*
>
> *Groupe Desgagnés Inc. has indicated that monitoring and mitigation for aquatic invasive species is done through monthly visual hull inspection and underwater surveys, hull clean-up and maintenance protocols when indicated by underwater survey, and annual ballast water sampling. Desgagnés is currently engaged in a ballast water treatment systems efficiency study with Transport Canada until 2027.*
>
> *Woodward Group and Companies – Coastal Shipping Ltd. has indicated that monitoring and mitigation for aquatic invasive species is done through coating vessel hulls with approved antifouling coatings and cleaning of hulls at dry dockings as required.*

Both Desgagnés and Woodward are Green Marine certified and as of 2024 have achieved the top ranking of Level 5 in the Aquatic Invasive Species category. The objective of this category is to "Reduce the risk of introducing and propagating aquatic invasive organisms and pathogens associated with ballast water discharges and biofouling.". A Level 5 ranking indicates that both companies exhibit "excellence and leadership" in this category.

1.6 Underwater Noise

References: Shipping Management Plan (Version 5)

Comment: Gap/Issue: Underwater noise from shipping vessels has the potential to elicit disturbance effects on marine mammals by reducing their ability to travel, communicate, and find food.

During the 2024 shipping season, 16 vessel trips served the project. We currently do not know what noise level and characteristic is produced by those shipping vessels and the potential impact on marine mammals.

The FEIS predicted the residual environmental effect of a change in marine mammal behaviour as a result of Project vessel noise was considered to be low in magnitude, however the likelihood of behavioural disturbance from Project related vessel noise was considered likely. However there is no monitoring of noise levels to help understand and mitigate these effects.

Conclusion/Request: Proponent to provide any data or modeling work to date by the Proponent or the shipping company. DFO to work with the Proponent to monitor and model their noise footprint using expert support. This model should aim at evaluating the impact of shipping noise on marine mammals present on the shipping route. A Shipping Management Plan should be updated according to the model.

Agnico Eagle's Response: *As per Agnico Eagle's response to DFO's comment on the 2023 Annual Report, Agnico Eagle has noted that discussion has formerly been initiated between Agnico Eagle and DFO on the topic of underwater noise monitoring. Agnico Eagle is willing to participate in a committee led by DFO and including all relevant stakeholders involved with shipping activities in Nunavut.*

As mentioned above, both Desgagnés and Woodward are Green Marine certified and as of 2024 have achieved a ranking of Level 5 and Level 3 respectively in the Underwater Noise category. The objective of this category is to "Reduce underwater noise made by ship operations to reduce impacts to marine mammals.". A Level 5 ranking indicates that Desgagnés exhibits "excellence and leadership" and Woodward exhibits "integrated management and quantified impacts".

1.7 Updated DFO Regions & Contacts for Emergency Response

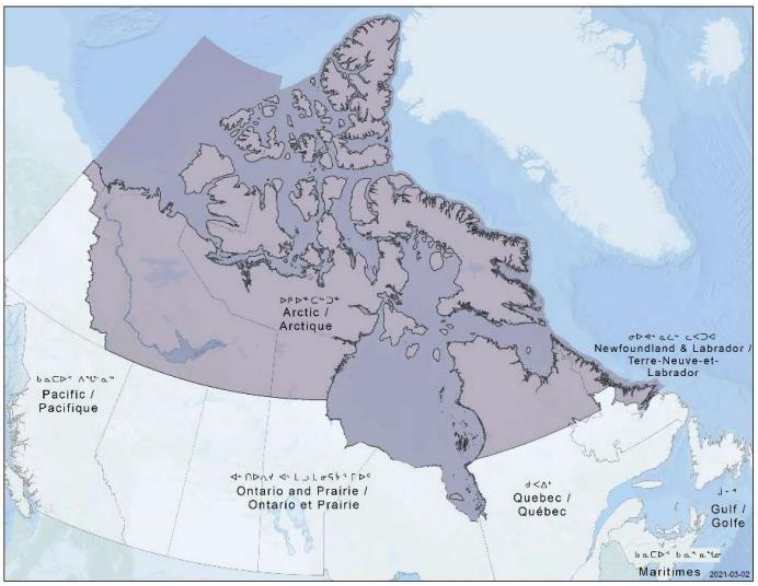
References: Appendix 25: Meadowbank OPEP and OPPP Version 18

Comment: Gap/Issue: The Department of Fisheries and Oceans separated the Central and Arctic Region in April of 2024.

Conclusion/Request: Proponent to update the information in Appendix 25 with new DFO Arctic Region information and contact list for environmental emergency response.

- DFO Arctic Environmental Incident Coordinator
  dfo.arcenvincident-incidentenvarc.mpo@dfo-mpo.gc.ca

E.g., Replacing Figure 1-1 with updated DFO regions. Example figure shown below.



DFO to work with the Proponent to ensure all necessary changes and updates are made, and provide a contact list for marine environmental emergencies.

> ***Agnico Eagle's Response:*** *Agnico Eagle acknowledges DFO's recommendation and will consider including an updated figure of DFO regions and contact information in the next version of the Meadowbank OPEP/OPPP. Agnico Eagle looks forward to receiving further information from DFO regarding this recommendation.*

2 Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)

2.1 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 this information, 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 (WRSF);
- 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.

Agnico Eagle's Response: *Agnico Eagle updated the Closure and Reclamation Plan (CRP) for the Meadowbank Complex and submitted it to CIRNAC and the KivIA in November 2024. This was a proactive approach by Agnico Eagle to initiate dialog with respect to closure for the Meadowbank Complex.*

This said, there has been active dialogue with CIRNAC and the KivIA since November 2024 on this updated plan. Questions and comments made by CIRNAC and the KivIA on the closure plan are being addressed through this initial review process. Once we have addressed the comments, the updated CRP will be submitted to the NWB for distribution and comment by parties.

Agnico Eagle agrees that topics noted in Appendix A are best handled through the detailed review of the updated CRP for the Meadowbank Complex, and not through the annual report review.

In addition, the NWB has jurisdiction over waters and waste in Nunavut: this means that it is the regulatory authority in Nunavut with specialized expertise over closure matters, per the Nunavut Waters and Nunavut Surface Rights Tribunal Act. Approval of closure plans is not an environmental assessment matter and is a post project approval matter.

The terms and conditions of the Type A Water Licenses do not require submission of closure plans to the NIRB for review. The NWB requires studies and designs to support the closure activities, which are carefully being prepared by Agnico Eagle to meet the rigorous technical requirements of the NWB.

2.2 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 off 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 as 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 (NWB) clarify whether the Annual Report review process is 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.

Agnico Eagle's Response: *Agnico Eagle respectfully disagrees with CIRNACs position that a major unauthorized change has not undergone the appropriate reviews; nor has there been "significant project changes".*

This activity was approved by the NWB (March 25, 2025):

- *As noted in the NWB letter, 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.*
- *The NWB confirms that the proposed activity is not in conflict with the existing terms and conditions of the Licence.*
- *The NWB looks forward to receiving the updated Water Management Plan as per Part B, Item 16 of the Water Licence 2AM-MEA1530.*

As part of our submission on February 26, 2025, Agnico Eagle submitted a self assessment to the NWB related to the activity of the Vault distribution line at Meadowbank. As noted in the submission:

- *The distribution line is required for operations and closure.*
- *The objective of the distribution line is to transfer contact water from Portage pits to the bottom of Vault Pit within an area of our approved footprint.*
- *An update to the Water Management Plan would be submitted to NWB (as per Part B, Item 16 of the Water Licence) within 60 days of approval of this notice.*
- *The updated WMP was included with the 2024 annual report.*

In addition, when the Vault distribution line was discussed in May at the latest CRP working session with CIRNAC and the KivIA, CIRNAC representative (Andrew Keim) indicated there was no need to discuss further. As ultimately, by reviewing the information provided from CIRNAC and Agnico Eagle, as well as soliciting the NIRB's opinion, the NWB made a decision on the activity.

Regarding the TSF cover. Agnico Eagle has advanced the closure cover for the TSF. This is one of the items currently in review with KivIA and CIRNAC. CIRNAC has attended all of those meetings. Updated information on the TSF cover will be provided once the review process with CIRNAC and KivIA is complete.

The annual reporting process was the most appropriate time to submit the updated Water Management Plan that reflected the approved activity.

2.3 Water Quality Predictions of Unapproved Activities

Comment: As required, the 2024 Annual Report includes predictions of the future environmental performance of the project. 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.

> ***Agnico Eagle's Response:*** *Agnico Eagle respectfully disagrees with CIRNACs position that a major unauthorized change has not undergone the appropriate reviews. As noted above, the Vault distribution line has been approved, and the updated TSF cover design is currently in review with CIRNAC and the KivIA. As part of the TSF cover design, it is necessary to carry forward models that incorporate the proposed design features. It is not reasonable to present multiple models as this will create confusion.*
>
> *In addition, the annual report should focus on monitoring and predictions for operations, and leave predictions for closure for the active dialogue on the updated CRP.*

2.4 Model Prediction Accuracy and Decision Making

Comment: CIRNAC draws attention to the following three example figures:

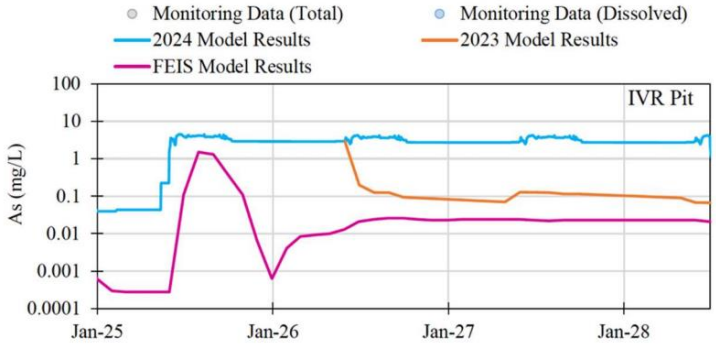


Figure 6-1 from Appendix 14 (Whale Tail Site)

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.

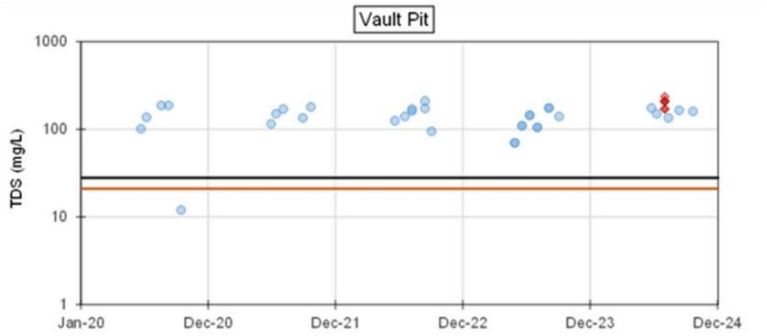


Figure 10 from the 2024 Annual Report (Meadowbank Site)

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.

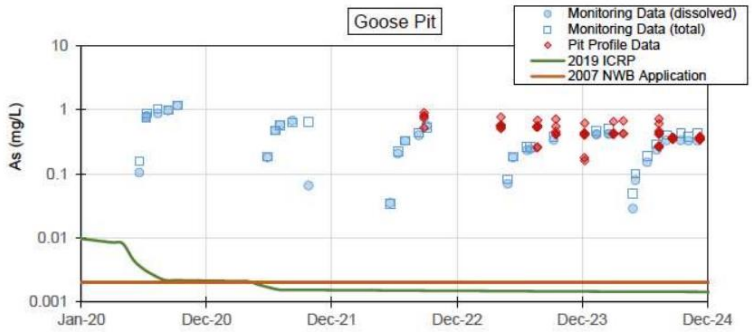


Figure 11 from the 2024 Annual Report (Meadowbank Site)

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:

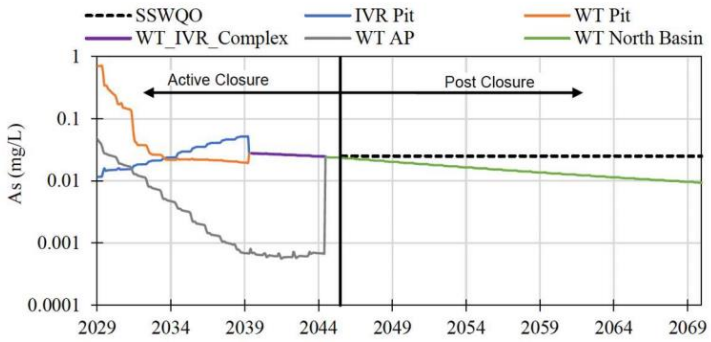


Figure 6-4 from Appendix 14 of the 2024 Annual Report

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 overpredict any potential impacts. Results from past predictions demonstrate that this is not the case.

> ***Agnico Eagle's Response:*** *Agnico Eagle disagrees to the degree of uncertainty in the model. The differences between model outputs are not because of uncertainty, rather they are because of changes in water management strategy and movement of water, in particular, for Goose Pit and IVR Pit. For example, Figure 6-2 shows monitoring data compared with the 2023 and 2024 models. Generally, both water quantity (water levels) and water quality (concentration) are in agreement with monitoring results, and there is a high degree of certainty in model predictions.*

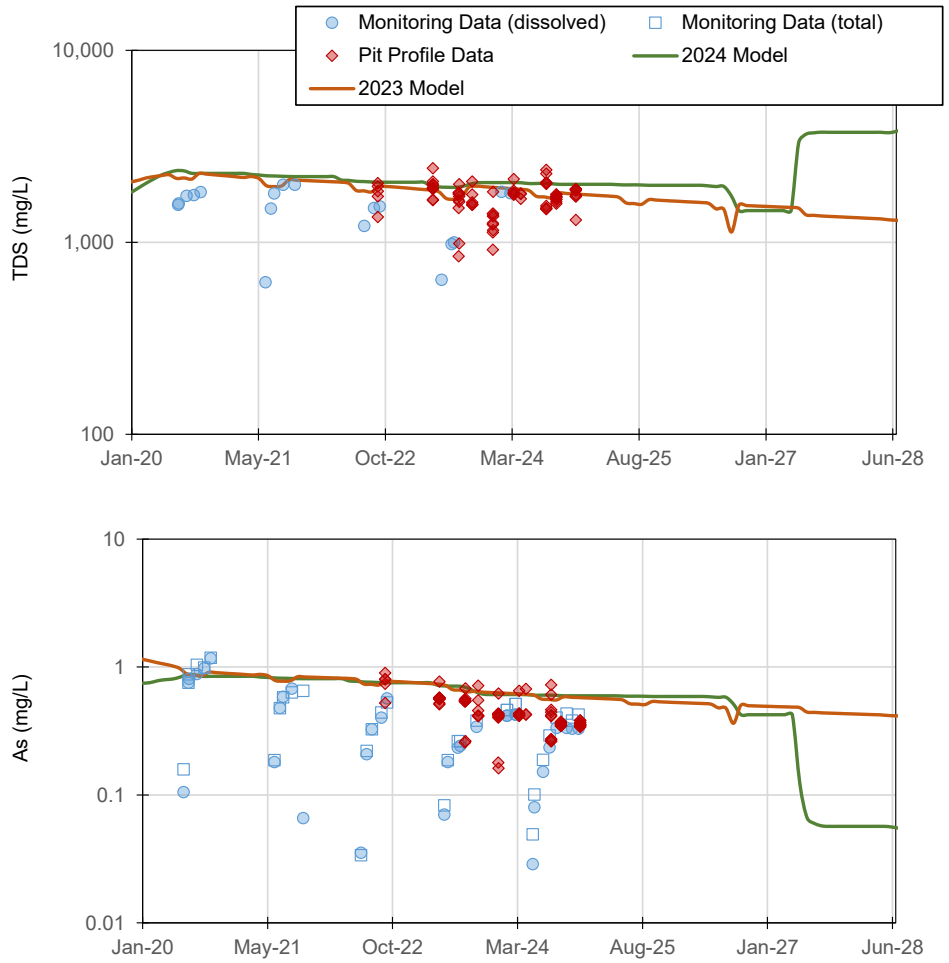


Figure 6-2: Water quality model results for TDS (top) and As (bottom) in Goose Pit during Operations Phase plotted alongside available monitoring data.

Differences between model iterations are also explained by source term updates through laboratory testing and model calibration to site monitoring data. Agnico Eagle progressively investigates opportunities for model improvements via model verification and calibration exercises each year. These exercises provide an opportunity to verify model results with monitoring data and calibrate model components where necessary. It is Agnico Eagle's opinion that there is greater benefit to taking this approach, whereby the model is iteratively validated and updated based on real world data, then by running a broad range of 'what if' sensitivity analyses.

Regarding Figure 6-4, the ICRP states that active closure period is defined by the period until which water quality in Whale Tail North Basin meet CCME or SSWQO guidelines. In this case, the parameter of concern is arsenic, and the guideline is a SSWQO of 0.025 mg/L for total arsenic. This is the criteria for defining when post-closure period begins. Post-closure period cannot begin unless

all parameters meet CCME or SSWQO guidelines, including arsenic. As noted above, Agnico Eagle disagrees with the conclusion of the degree of uncertainty in model predictions. Regardless, if SSWQO for arsenic are not met, Agnico Eagle will continue with active closure water management practices.

In addition, monitoring is ongoing during operations, as well as the 17-year active and passive closure life cycle. Throughout this time period, the water balance and water quality model will be compared to monitoring data and calibrated on an annual basis as per Water Licence conditions. There will be sufficient time to recognize changes from the predicted water quality and take corrective action in the form of adaptive management.

2.5 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.

Agnico Eagle's Response: *Agnico Eagle can only provide model results (for future iterations) out to 2100. This is because IPCC projections do not extend further than this and is an industry standard to cut off model predictions at 2100.*

2.6 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.

> ***Agnico Eagle's Response:*** *As noted in responses above, and as referenced in letters from the NIRB and the NWB, the activity of moving water between exhausted pits has been approved and is within the conditions of the licence. NIRB has already provided an opinion that the Vault distribution line is within the thresholds of a non-significant amendment; therefore, a NIRB assessment was not required.*
>
> *When the Vault distribution line was discussed in May at the latest CRP working session with CIRNAC and the KivIA, CIRNAC representative (Andrew Keim) indicated there was no need to discuss further. As ultimately, by reviewing the information provided from CIRNAC and Agnico Eagle, as well as soliciting the NIRB's opinion, the NWB made a decision on the activity.*
>
> *Agnico Eagle will not be deferring the Vault distribution line as it is a form of operational management of moving water around site.*
>
> *In addition, an assessment through the NIRB is not required, as the overarching water management strategy has not changed from what was previously proposed:*

- *The key component of the strategy remains the same: flooding the open pit mines at closure.*
- *Water is being treated, whether via active treatment, in-situ/aeration method, or some combination.*
- *Treated water would be discharged to the environment, albeit much lower volumes and loadings.*

Finally, Agnico Eagle would like to address some comments raised by CIRNAC in their background/rationale preamble:

1) *The Vault distribution line is not just for closure. As per communication sent to the NWB on March 5, 2025 from Agnico Eagle "Agnico Eagle confirms this line is needed for and will be used in Operations and into Closure.". This was also discussed with CIRNAC, KivIA, and the NWB at a meeting in Toronto on March 4, 2024.*

It is inappropriate to make a comparison to the Meliadine Waterline file and associated NIRB process. While the objectives are the same, to move water, the undertakings and technical details are not. The Meliadine waterline application was to convey treated saline effluent for discharge directly to the marine environment. The Vault distribution line is moving water around site between exhausted pits.

2.7 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.

> ***Agnico Eagle's Response:*** *As noted in responses above, Agnico Eagle reiterates the activity of moving water between exhausted pits* ***has been approved*** *by the NWB and is within the conditions of the licence. At this time, it is predicted that water will be moved between the pits in 2026.*

2.8 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.

> ***Agnico Eagle's Response:*** *Agnico Eagle respectfully disagrees with the recommendation. In the Review and Decision section of the approval letter from NWB (28 May 2025), NWB acknowledged concerns from CIRNAC and ECCC. However, NWB equally acknowledged that "Agnico Eagle's Notice is consistent with the requirements of Part E, Item 7 of Water Licence 2AM-MEA1530. The Licence allows for the development of SSWQOs that are protective of the aquatic environment, subject to Board approval."*
>
> *Having reviewed the facts of the operational notice, the NWB confirmed that the notice is not in conflict with the conditions of the licence, and that no intervener provided evidence that the proposed SSWQO was not protective of the receiving environment. Furthermore, the NWB acknowledged that the Closure and Reclamation Plan (CRP) is in development, and there will be further discussions regarding overall closure objectives, which may include a revision to the SSWQO if new evidence or information is provided.*

2.9 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 applications 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.

Agnico Eagle’s Response: *The CRP (ICRP) will be circulated through the NWB in the coming months whereby Agnico Eagle suggests comments are handled through the detailed review of the updated CRP for the Meadowbank Complex, and not through the annual report review. As per responses to other comments, Agnico Eagle has the approval of moving water between exhausted pits and has been approved by the NWB and is within the conditions of the licence.*

Managing and treating water is part of standard operational practices. Agnico Eagle has approved water management systems in place on-site to move and treat water to meet water quality objectives; therefore, water quality is protective of the receiving environment.

2.10 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.

Agnico Eagle's Response: *A Human Health and Ecological Risk Assessment (HHERA) was prepared to support the CRP. The objective of the HHERA was to evaluate the potential risks to human health and the environment from the historical operation and remediation of the Site. The HHERA included evaluation of ecological risks (including aquatic life) to future water quality in the pits. There were no parameters of potential concern (POPCs) identified in Vault Pit. Thus a 15 m depth of freshwater is sufficient to protect aquatic life.*

DFO has previously informed Agnico Eagle that they do not have confidence in flooded pits as a fish and fish habitat offsetting measure, as described in a letter from 2015 (DFO, November 27 2015, Offsetting Proposals).

The flooded Vault Pit will not become aquatic habitat, and there were no parameters of potential concern (POPCs) identified in Vault Pit.

2.11 Meadowbank TSF Cover Design

Background/Rationale: 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.

Agnico Eagle's Response: *The water balance and water quality model is based on the updated tailings cover design, including a contaminant transport model for the cover. This cover consists of varying cover thicknesses, from a minimum 1 meter to a maximum of 6 metres, which has been presented to CIRNAC in Ottawa on May 8-9, 2025. Progressive reclamation of the TSF is in progress as NPAG material becomes available.*

2.12 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.

Agnico Eagle's Response: *While the recommendation in this comment is directed to the NWB, Agnico Eagle believes that, as it pertains to the annual report, Agnico Eagle is compliant with Schedule B, Item 17 of the Water Licence. Agnico Eagle will continue to work with CIRNAC and KivIA for additional documentation of progressive closure activities, in addition to what is reported in the annual report.*

2.13 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 the 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.

Agnico Eagle's Response: *Agnico Eagle's responses to CIRNAC's recommendations are below:*

a) TSF seepage is currently represented in the WBWQM by the Central Dike flows that move eastwards towards Pit A and Pit E. These flows are driven by the hydraulic gradient that currently exists between these pits and the TSF, and the model assumes that once the pits have been flooded, this gradient is null, and the TSF seepage does not report to Pit A and Pit E.

b) The TSF is constructed within the northern arm of the Second Portage Lake (SPL) within an open talik that extends down to the deep groundwater flow regime. Reclaim water enters into the deep groundwater system by infiltrating downward through the TSF, till, weathered bedrock and into the bedrock. Regional groundwater is interpreted to flow east towards the SPL and Third Portage Lake (TPL). Available thermal monitoring and modeling results (SNCL 2018) indicate that a permafrost bulb exists between the West Road and TPL which extends greater than to an elevation of 200 m (300 m depth). As a result, the migration pathway of reclaim water from the center of the TSF into the groundwater system to the SPL is at least 1,500 m.

The closure plan includes the capping of the TSF to reduce infiltration and direct it to TPL and flooding of the Central Dike Pond and Portage Pits. This will result in lowering the water level in the TSF and over time it will be similar to the water level in the pit lake. In addition, thermal modelling results indicate that the TSF will gradually freeze over time and a talik zone will develop between the pit lake and the SPL and eventually at the reconnected TPL (SNCL 2018). As a result, the hydraulic gradient between the TSF and the Portage pit areas will be greatly reduced to near zero, and the flux from the tailings area into the lake will be negligible.

c) At closure thermal modelling undertaken by SNC indicates that the groundwater pathway from the TSF through the overburden is frozen and the groundwater pathway needs to flow down and beneath a 300 m deep permafrost bulb to TPL. Darcy's law was used to estimate the potential inflow of reclaim water into the groundwater system. The hydraulic conductivity of the bedrock was conservatively estimated to range between 1.8×10^{-8} m/s and 2.7×10^{-8} m/s. The estimated groundwater flux from the approximate 1,000 m by 900 m area of the TSF along an approximately 1,500 m flow path ranges between 1,500 to 2,250 m^3/year. Thermal modelling predicts that after closure the overburden between the TSF and the pit lake will become

unfrozen, resulting in a shorter groundwater flow path for the reclaim water. At the Central Dike (CD) a liner is tied into the grout curtain through the weathered bedrock. This results in the groundwater flowing beneath the liner and grout curtain to discharge though the pit lake. In addition, as discussed above, the water level in the TSF and the gradual freezing of the TSF will reduce the water level difference between the TSF and the pit lake. The area of groundwater flow through the overburden is smaller than these area of flow at closure (i.e., approximate thickness of the overburden 30 m by 900 m width of the tailings). The combination of these factors (even if the water level in the TSF is assumed to remain the same) is predicted to result in a discharge of reclaimed water to less than predicted at closure (ranging from about 350 m^3/year to 500 m^3/year).

It is noted the available groundwater quality at CD monitoring well MW-16-01, located west and downgradient of the TSF currently meets the Third Portage Effluent Discharge Limits of the Meadowbank Water Licence No. 2AM-MEA1530. Hydrogeologic model results (SNCL 2018) indicate the freshwater runoff input to Pit A is 900,000 m^3/year. The amount of TSF reclaim water input to the groundwater system that will eventually be discharged to SPL is estimated to be small (less than 0.25% contribution right after closure and 0.06% contribution once the overburden becomes thawed between the CD and the pit lake, which is equivalent to a dilution factor of 400 to 1,800, respectively) compared to surface water runoff and are deemed acceptable; therefore, TSF mitigation is not considered required.

In addition, hydrogeologic model results (SNLC 2018) indicate groundwater seepage volume to Pit A is 43 m^3/year, while the freshwater runoff input to the lake 900,000 m^3/year. The estimated TSF reclaim water input to the groundwater system that will eventually be discharged to SPL is negligible (0.05% contribution or a dilution factor of 21,000) compared to surface water runoff and are deemed acceptable; therefore, TSF mitigation is not considered required.

Reference:

SNC Lavalin (SNCL) (2018). Meadowbank In-Pit Tailings Deposition – Thermal and Hydrogeological Modeling Update to Address NRCan's Comments. Technical memorandum dated December 14, 2018. Reference: 655183-000-4GCA-0001 Rev 01.

3 Kivalliq Inuit Association (KivIA)

3.1 Tailings Management

Comment: The KivIA is currently reviewing and discussing with AEM, AEM's consultants, CIRNAC and NRCAN potential changes to the design of the Tailings Storage Facilities originally documented in Project Certificate 004 in light of changes to impacts of climate variability and mine operations.

Recommendation:

1. The KivIA recommends that the 2m cover required in the Project Certificate be incorporated into any amended TSF design.
2. The KivIA recommends that these discussions continue and that any changes to the TSF design incorporates KivIA feedback and addresses KivIA concerns.
3. The KivIA also recommends that any alterations to the TSF design be supported by adequate monitoring data to ensure the tailings are preserved and the receiving environment is protected in perpetuity. The KivIA would like to ensure Agnico Eagle provides all monitoring data to the relevant intervenors such that an informed decision-making process can take place.

Agnico Eagle's Response: *Agnico Eagle appreciates the continued discussion with the KivIA on the key components of the site, particularly the TSF cover. Ongoing discussions on the TSF cover will continue through meetings with KivIA and CIRNAC, which includes details on monitoring. Annual monitoring of the TSF is provided through the Thermal Monitoring Report in the annual reports.*