



AGNICO EAGLE

May 15, 2026

Abid Jan
Nunavut Water Board
PO Box 119
Gjoa Haven, NU
X0B 1J0

Re: Response to Comments on Meadowbank Complex Interim Closure and Reclamation Plan

Dear Mr. Jan,

Agnico Eagle thanks the Nunavut Water Board for the opportunity to respond to comments regarding the updated Meadowbank Complex Interim Closure and Reclamation Plan. Our comments are provided in the enclosed.

As of May 15, 2026, Agnico Eagle has been consulting on this ICRP for 537 days. This pre-submission step went well beyond typical engagement.

While we do strive for agreement with reviewers where it is possible, given the lengthy ICRP pre-submission and formal NWB review process, it seems unlikely that a protracted back and forth further will increase the level of consensus.

Further delay of the finalization of the ICRP is not in the public's best interest as Agnico Eagle wishes to begin implementation of an approved ICRP as soon as possible. We are confident in the technical ability of the NWB and its staff to evaluate the evidence that Agnico Eagle has presented.

Should you have any questions or require further information, please contact the undersigned at your convenience.

Regards,

Colleen Prather
colleen.prather@agnicoeagle.com
Superintendent, Permitting & Regulatory Affairs

Table of Contents

Table of Contents	1
KIVALLIQ INUIT ASSOCIATION (KivIA)	2
CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS CANADA (CIRNAC)	16
ENVIRONMENT AND CLIMATE CHANGE CANADA (ECCC)	90
FISHERIES AND OCEANS CANADA (DFO)	103

ATTACHMENTS:

Attachment A: Meadowbank Complex Tailings Storage Facility Thermal Cover Model

Attachment B: Response to the Kivalliq Inuit Association’s Comments (March 2, 2026) and Meadowbank
TSF Thermal Model Temperature Contour Plots

KIVALLIQ INUIT ASSOCIATION (KivIA)

Interested Party:	KivIA	Rec No.:	KivIA-01
Re:	Arsenic Water Quality Objectives and Traditional Use		

Request Made by Interested Party:

Inuit routinely drink water from the land without any additional treatment. The water quality forecasts at the Amaruq site for closure predicts arsenic concentrations that exceed Canadian Drinking Water Guidelines (CDWG) of 0.010 mg/L, and as low as reasonably achievable. Arsenic is a documented human carcinogen, and this value was determined by Health Canada as minimizing health impacts due to ingesting arsenic, while being achievable in municipal drinking water at a reasonable cost. Arsenic concentrations at the Amaruq site, specifically at Kangislulik Lake, Whale Tail North, Lake A15, and Lake A12, exceed the CDWG at post-closure, persisting to as long as 2065 in the current model. These values are summarized in Table 1.

The Proponent should manage water treatment at Amaruq to ensure that water in lakes in the postclosure period is safe for Inuit Traditional Use.

Agnico Eagle’s Response to Request:

At closure, all the concentrations of parameters of potential concern (POPCs) in Whale Tail North Basin, Kangislulik Lake and Lake A15 are forecasted to decrease over time since there would no longer be any discharge of treated water to the lakes. At post-closure, Whale Tail Lake (North Basin) will be reconnected to Kangislulik Lake and once the Whale Tail and Mammoth Dikes are breached. All POPCs are expected to remain below the CCME guidelines and in alignment with 2AM-WTP1830, Part E, Item 9.

Surface water quality predictions provide an estimate of water quality under post-closure conditions. As such, water quality modelling will continue to be updated as the Meadowbank Complex progresses towards closure and will inform post-closure water management strategies. Arsenic exceedances within the water balance and water quality model were predicted to be marginally above CDWG’s under the current, conservative modeling regime. Arsenic concentrations however are still below CCME guidelines for the protection of aquatic life beyond 2046 (WBWQ, Table 6-3, Appendix 6-E of the ICRP).

The CDWG for arsenic are technology based values and incorporate conservative safety margins compared to most guidelines which are based on toxicological thresholds. The most appropriate measure of assessing risk to the Community from drinking water from the three lakes in post-closure is by conducting a risk characterization based on Health Canada methodology (2021a) as was conducted for the HHERA (Appendix 6-D of the ICRP). Risk characterization showed that all hazard quotients (HQs) for arsenic were below the target value of 0.2, and all incremental lifetime cancer risks (ILCRs) were below the target of 3×10^{-5} for all age groups and exposure scenarios. Therefore, both threshold and non-threshold health risks are not anticipated for individuals who may occasionally use these waterbodies for drinking water or fish consumption, including during short term (14day) traditional land use (Appendix 6-D of the ICRP).

Based on our consultation, we understand that there are no known permanent residences or cabins near these three waterbodies, the waterbodies are located a far distance from the Community, the proximity of these waterbodies to the main travel corridors used by the Community is quite far, they are unlikely to be visited frequently, and overall appears to be limited use of resources near the mine site would indicate that short term exposure through ingestion of water or fish would not pose a risk to Inuit Traditional use as outlined in the HHERA (Appendix 6-D of the ICRP, Section 6.1.3.2).

Interested Party:	KivIA	Rec No.:	KivIA-02
Re:	Vault Pit Lake		

Request Made by Interested Party:

The KivIA recommends that the design of the Vault dike breach limit the exchange of water from the downstream environment (ie, a spillway), and limit fish passage into the pit lake.

Agnico Eagle's Response to Request:

Agnico Eagle appreciates the recommendation from the KivIA regarding breach of the Vault Dike. Agnico Eagle will assess options for dike breaching.

Interested Party:	KivIA	Rec No.:	KivIA-03
Re:	Tailings Storage Facility		

Request Made by Interested Party:

[Summary of the comments; refer to submission from KivIA for full comment]

Comment a) Water saturation

The water saturation approach will be effective as long as water levels in the tailings are carefully managed. This will require a robust monitoring program to ensure that saturated conditions are maintained.

Comment b) Thermal model results

Thermal model results indicate better thermal performance with a thicker NAG cover, however the conclusion of Agnico Eagle was to go with a 2 meter cover. The results of the thermal model do not agree with Agnico Eagle’s decision.

Comment c) Model calibration

Calibration of the thermal model was not provided.

Comment d) Climate projection dataset

Provide details on climate projection dataset that was used to model performance of the cover.

Comment e) Seasonal thaw and duration

Describe expected seasonal thaw and duration of the cover.

Agnico Eagle’s Response to Request:

The final TSF cover conceptual design was presented in a memorandum (Appendix 6J-A) with additional evidence outlining the technical rationale behind this decision (Appendix 6J-B). As presented, this is the preferred option, signed off by the Meadowbank Independent Review Board (IRB), that derisks the facility based on the evidence and expertise of Agnico Eagle and the IRB. In addition, the initial cover design (early 2025) was adjusted to the preferred option (with a 2 m cover), based on comments from the KivIA.

The preferred option considers climate resiliency (based on recent climate change models), and achieving chemical and physical stability. The updated cover design relies on management of saturation within the cover and tailings to limit the ingress of dissolved oxygen and suppress metal leaching (the KivIA reviewer noted this is an accepted approach). Finally, the updated design does not rely on complete freezeback of tailings, however most of the tailings will be frozen.

Further supporting information to address this comment from KivIA is provided in:

- *Attachment A: Meadowbank Complex Tailings Storage Facility Thermal Cover Model*
- *Attachment B: Response to the Kivalliq Inuit Association’s Comments (March 2, 2026) and Meadowbank TSF Thermal Model Temperature Contour Plots*

Response to comment a)

As noted by the reviewer, saturation of tailings is a widely-accepted means of ARD prevention from waste rock and tailings.

The water saturation cover approach for Meadowbank involves maintaining a minimum water content of the tailings of 85% by controlling the water levels within the impoundment. In this scenario the cover plays a limited role in limiting oxygen because the main control of oxygen ingress will be water present within the pores of the tailings. With this approach a cover is necessary to provide physical stability to the tailings storage facility, but it is the water saturation of the pores maintained by an elevated water level within the tailings that controls oxygen contact with the tailings. We consider this to be an effective approach as long as water levels in the tailings are very carefully managed. A robust water level/tailings saturation monitoring program is required to ensure that saturated conditions are maintained, and an active water management program is required to assess the data on an on-going basis and adjust the water management plan where necessary.

To address this concern, Agnico Eagle will develop a robust monitoring program which are captured in the framework (Table 1) outlining objectives, parameters and instrumentation.

The monitoring framework will be designed to verify the performance objectives of the cover system, including confirmation of saturation conditions where required. The monitoring plan will identify:

- The parameters to be monitored and their relevance to cover performance objectives;
- Recommended monitoring technologies and instrumentation for each parameter;
- Proposed monitoring frequency and data collection methods;
- Instrument testing and commissioning periods and approach to validate instrument accuracy and reliability prior to full implementation.

Detailed instrumentation specifications, including the number of sensors, their locations, and data collection frequency, will be defined in the final monitoring plan. These details will be informed by the detailed cover design, construction approach, and site-specific conditions observed during installation and early operation. In other words, the monitoring plan may be reviewed and refined following the construction phase and early operation of the cover.

The monitoring program is intended to be adaptive and will evolve over time. A commissioning and early-operation monitoring period will be implemented following construction to assess instrument performance and data quality. Based on monitoring results and performance against objectives, the program may be refined to better align with long-term monitoring needs. This may include installation of additional or complementary instrumentation, adjustment of monitoring frequency, or removal or replacement of instruments that do not provide sufficient accuracy or value. Monitoring will therefore not be static, but will be adjusted to reflect observed conditions, infrastructure performance, and compliance with closure objectives.

An adaptive management approach will be formalized through the development of a Trigger Action Response Plan (TARP) for the closed TSF cover system. The TARP will define performance thresholds,

trigger conditions, and pre-approved response actions in the event monitoring indicates potential underperformance of the cover system. The TARP will be developed in conjunction with the monitoring plan and incorporated into the Operations, Maintenance, and Surveillance (OMS) Manual for the closed TSF. Development of the OMS Manual and TARP will occur following completion of detailed design and construction.

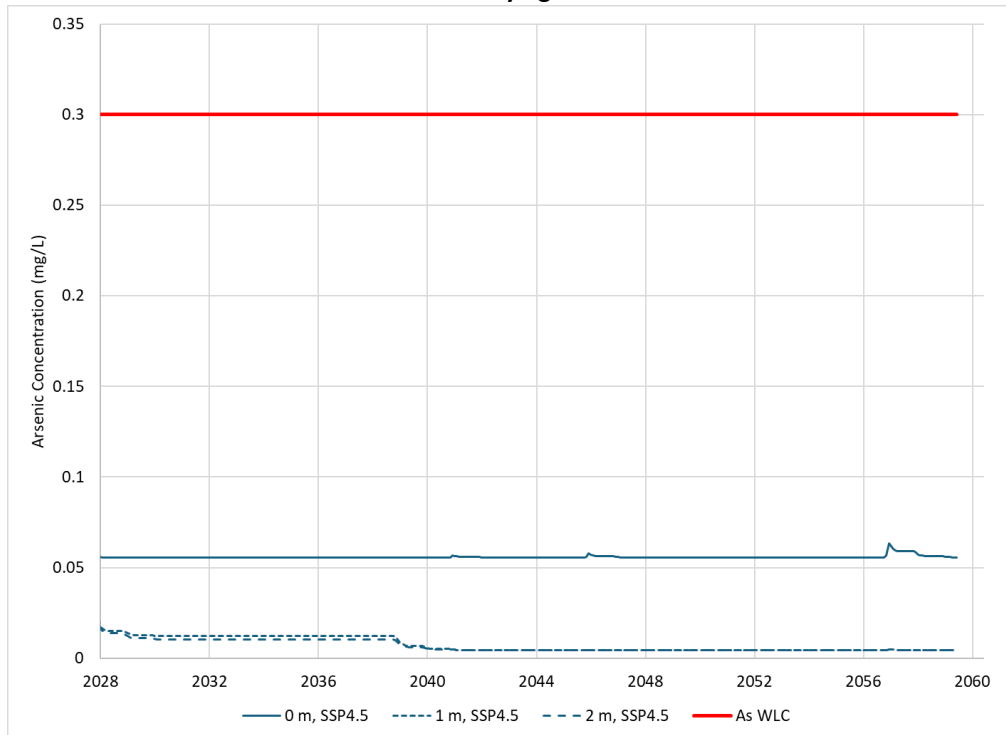
Table 1: TSF Monitoring Framework

Cover System Objective	Proposed Monitoring Parameter	Instrumentation Requirement	Target	Supplemental Data Collection when required	Note
Long-term geotechnical stability	Erosional features	n/a	n/a	Inspections LiDAR or similar	
	Surface Elevation	Settlement plates (or equivalent)	Within surface design	Survey, Inspections, LiDAR (or similar)	
Chemical stability	Water quality (in TSF)	Standpipe piezometers or equivalent technology	TBD	n/a	
	Water quality (downstream; e.g. Collection Pond 23)	n/a	Parameters (TBC) Criteria (as in HHERA)	Inspections Observations	Monitoring frequency monthly if water present
Chemical stability (reduced oxidation)	Temperature	Thermistors	n/a	n/a	
	Water content	Water content sensors, Matric suction sensors, or equivalent technology	>85% saturation in tailings	n/a	
	Water levels	Pressure transducers, Standpipe piezometers or equivalent instrument	n/a	Manual surveys	No water level target Same instrumentation as used for water quality
	Oxidation	Oxygen sensors	Suboxia (1% oxygen vol.)	n/a	
Water on the cover system	Surface Elevation	Settlement plates (or equivalent)	Within surface design	Survey, Inspections, LiDAR (or similar)	

Response to comment b)

Hydrologic and thermal modelling indicate improved thermal performance with increasing cover thickness, however, and more importantly, the contaminant transport modelling indicates very minimal to no improvement in water quality with an increase in cover (Appendix 6-JB). As noted in the above response, maintaining saturation at or above 85% is the important metric. As described in Appendix 6J-A, a cover of less than 1 m is required to maintain saturation. Additionally, even if the tailings are fully thawed, the cover will maintain a saturation at or above 85%. Therefore, the contaminant transport model showed significant water quality improvement from a *no-cover* scenario to a 1 m cover, but very little to no improvement going from a 1 m cover to a 2 m cover. An example of these results is provided in Figure 1 for arsenic. Therefore, a 2 m cover is predicted to meet closure criteria for chemical stability, and a thicker cover is not necessary. Improved thermal performance does not provide any improvements in water quality.

Figure 1: Arsenic concentration in the TSF runoff for varying cover thicknesses



Regardless of the significance of thermal performance towards achieving chemical stability, as requested by intervenors, Agnico Eagle completed a sensitivity analysis of the thermal performance of the TSF cover under different cover thicknesses (Attachment A). Table 2 summarizes the results of the thermal model.

Table 2: Summary of Active Zone with Different NAG waste rock Waste Cover at 2100

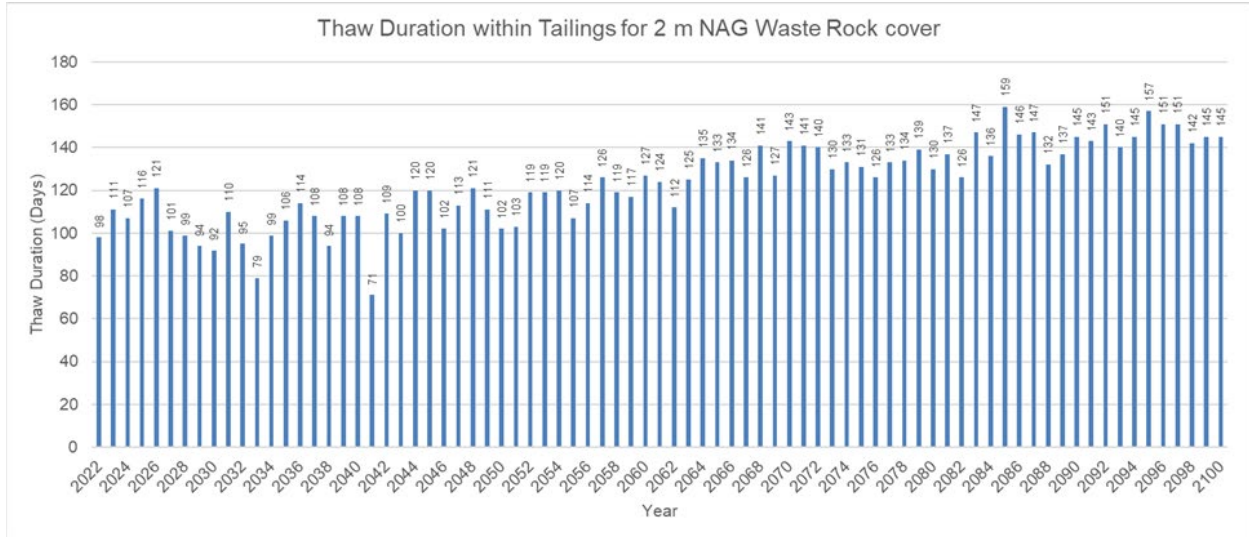
NAG Waste Rock Cover (m)	Projected Thaw Depth in NAG Waste Rock Cover by the Year 2100	Projected Thaw Depth in Tailings by the Year 2100
0	NA	2.47
2	2.00	0.97
3	3.00	0.45
4	4.00	0.01

The thermal model predicts improved thermal performance with thicker cover, however this does not correspond with an improvement to chemical stability. Although a 2 m cover is expected to thaw up to 0.97 m into the tailings, the contaminant transport model does not predict a corresponding increase in contaminant load off the tailings. This is a direct result of maintaining saturation above 85% in the tailings. Furthermore, Agnico Eagle examined the thaw duration to provide context to the results summarized in Table 2.

Where Table 2 presents *maximum thaw depth*, the results do not show *thaw duration*. For example, while a 2 m cover may experience thaw of up to 0.97 m into tailings, the thaw front is dynamic and is predicted to shrink/decrease back into the NAG cover during colder periods of the year. Figure 2 shows the thaw duration predicted by the thermal model at the *boundary* of the NAG cover and tailings (Section 3.2 of Attachment B). The analysis shows that thaw at the boundary can persist from 71 to 159 days, and the cover is predicted to be frozen for the remainder of the year. Therefore, thaw is predicted to be seasonal and not permanent.

It should be noted that these results are for the boundary between the NAG cover and tailings. If a location slightly lower into tailings was selected, thaw duration would be lower due to delayed and reduced thaw penetration. This is presented in Appendix A of Attachment B of this response package, where Agnico Eagle produced thermal contour plots. The contour plots show the seasonal advance and retreat of the thaw front through the NAG cover and tailings, and provides an additional dimension of analysis showing the thaw duration versus depth.

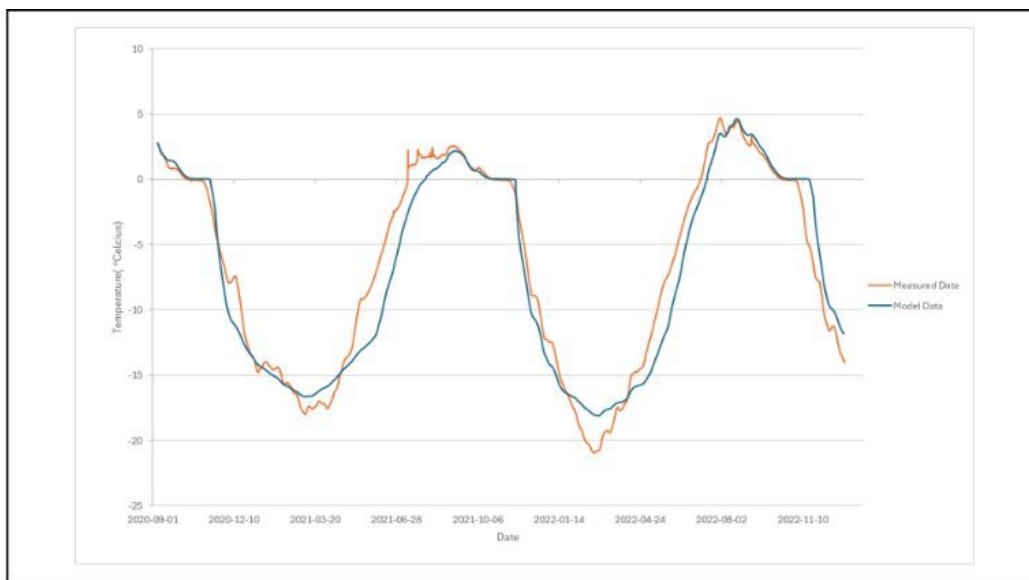
Figure 2 Thaw Duration Within the Tailings for the 2 m NAG Waste Rock Cover



Response to comment c)

Thermal calibration was completed to validate the thermal model to monitoring data, prior to modelling future projections. Details of the calibration are provided in Attachment A of this response. An example of this calibration exercise is provided below in Figure 3, where the model (blue line) reproduces the observed temperature (orange line) very well.

Figure 3: Modeled and thermistor temperature data compared at 2.15 m below surface



Response to comment d)

Details regarding the climate dataset are provided in Attachment A.

Response to comment e)

Additionally, Agnico Eagle also produced contour plots of the thermal model to show the evolution of the thaw-front through the cover and tailings (Appendix A of Attachment B). The contour plots show that the projected thaw into tailings is expected to last during the warmer months but recede to the cover during most of the year, even for a 2 m NAG cover. Thermal modelling does not indicate any permanent thaw-front in the tailings, so settlement associated with thaw is considered a low to negligible risk. Agnico Eagle also implements best practices to limit potential for formation of ice lenses in the tailings and reduce the potential for thaw consolidation. Best practices and mitigations include:

- Dewatering ponded areas of the TSF to the open pits, prior to winter freezing; and
- Removing accumulated snow from the tailings surface prior to placement of the cover.

If thaw consolidation does occur, local slumps in the cover will naturally fill with ponded water, further helping maintain saturation in the tailings.

Interested Party:	KivIA	Rec No.:	KivIA-04
Re:	Financial Security		

Request Made by Interested Party:

The proponent states that certainty is required in order that the closure construction of the TSF can begin in 2026 and be completed by 2028 using the currently proposed water saturation approach with a minimum 2 metre cover. The proponent also states* that following completion in 2028 a reduction in security for the TSF will be requested.*

The Kivalliq Inuit Association (KivIA) does not agree with a reduction in security for the TSF. The questions and comments in the thermal model review require responses that determine what impacts or changes may be required for the final design and closure strategy of the TSF. In addition, the KivIA holds the view that the security should not be reduced until the final design and closure strategy (i.e. Final Reclamation and Closure Plan) has proven its robustness into the Closure period.

Agnico Eagle’s Response to Request:

Agnico Eagle is requesting a reduction on security based on the direct dollars for placement of the cover.

Progressive reclamation and reduction of security are conditions of the Water Licence and also associated policies.

As outlined in the 2AM-MEA1530 Water Licence:

- **Schedule A:** definition of “Progressive Reclamation” means actions that can be taken during mining operations before permanent closure, to take advantage of cost and operating efficiencies by using the resources available from mine operations to reduce the overall reclamation cost incurred. It enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals.
- **Part J, Item 5:** The Licensee shall implement progressive reclamation, including progressive covering of the tailings and if practicable re-vegetation
- **Part C, Item 6:** The Licensee shall provide the Board with at least ninety (90) days written notice prior to any material changes to the Undertaking or the risk of environmental damage associated with the Undertaking that could result in a material change to the reclamation liability associated with the Undertaking (including, but not limited to, updates to the reclamation cost estimate arising from unexpected changes or modifications of the works and activities associated with the Undertaking, a release, in whole or in part, of reclamation security held under this Part by the Minister pursuant to Part C, Item 11 and Section 76(5) of the Act).

The 2002 CIRNAC Mine Site Reclamation Policy is quite clear that security is to be reduced for progressive reclamation:

Ongoing reclamation throughout the life of the mine is preferable from both the environmental and financial liability perspectives. The financial security of a mining project will be adjusted to reflect progressive reclamation on the following basis:

- *When ongoing reclamation work reduces the outstanding environmental liability, it will result in a reduction in the level of financial security required to be maintained.*
- ***Credit for progressive reclamation work should be made in a timely fashion in accordance with authorities set out in the applicable legislation.***
- *The value of reclamation work will be based on generally accepted modelling (e.g., the RECLAIM model) and calculated as the difference between previous outstanding liabilities and estimates made of the remaining liability following the reclamation work (as opposed to actual costs, if actual costs do not fully reduce outstanding liability).*
- *The amount of financial security on deposit will normally increase proportionately as mining proceeds. Generally, this implies that as the mine site grows, water usage increases and the cost to restore a site expands. Accordingly, reclamation costs are usually estimated to rise over the life of the mine. However, as reclamation work is performed, the environmental liability is reduced and the financial security required may decrease proportionately.*
- *If, during a specific period, the value of any progressive reclamation exceeds the value of new reclamation liability created through additional mining operations, DIAND would reduce the amount of security required through the surface lease and would support an application by the mining company to the Water Board to reduce the amount of the water licence security accordingly.*
- *Progressive reclamation may not reduce the financial assurance required to zero. Sometimes, a residual amount is required to meet other licensing obligations.*

The monitoring dollars will remain as part of the security. It should be also noted that Agnico Eagle has submitted this portion of the ICRP as a final cover based on the preferred option, which is supported by the Independent Review Board (a condition of our Water Licence).

CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS CANADA (CIRNAC)

Interested Party:	CIRNAC	Rec No.:	CIRNAC-01
Re:	Closure sequencing versus potential life-of-mine extension		

Request Made by Interested Party:

CIRNAC recommends that AEM should clearly document the rationale for advancing TSF closure at this stage, including explicit scenarios for closure in 2028 versus continued operation beyond 2028, and to explain how each scenario affects site-wide closure integration, water management, and long-term risk.

Agnico Eagle’s Response to Request:

As described in response to CIRNAC-02 and CIRNAC-08, the capacity of the North Cell/South Cell TSF has been reached and Agnico Eagle wishes to initiate the final closure cover design commencing in 2026.

Tailings deposition are occurring in the in-pit tailings facility.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-02
Re:	Treatment of the TSF closure appendix as “final” prior to a Final Closure and Reclamation Plan (FCRP)		

Request Made by Interested Party:

CIRNAC recommends that AEM should explicitly justify the appropriateness of treating the TSF closure strategy as final in advance of the full FCRP, including a clear explanation as to how interdependencies with other closure components will be managed and revisited if site-wide assumptions change.

Agnico Eagle’s Response to Request:

The TSF closure strategy component of the ICRP must be treated as final because the TSF is planned for progressive reclamation – that is, Agnico Eagle does not intend to defer closure of the TSF until after production at Meadowbank is complete. Agnico Eagle intends to advance closure of the Meadowbank TSF in 2026 because it allows Agnico Eagle to:

- Actively reduce environmental liabilities at site for facilities that are no longer needed for production mining (which will reduce the amounts required for reclamation security and potential liabilities to the Crown and KivIA).
- Utilize equipment and workforce during operations (which also helps maintain employment levels).
- Closely monitor the performance of the cover during operations.
- Comply with the Type A Water Licence which requires that *“The Licensee shall implement progressive reclamation, including progressive covering of the tailings and if practicable re-vegetation”* (see Part J, Item 5). Additionally,
 - The definition as per the Type A Water Licence of *“Progressive Reclamation”* aligns with the actions that Agnico Eagle is planning for the TSF: *“means actions that can be taken during mining operations before permanent closure, to take advantage of cost and operating efficiencies by using the resources available from mine operations to reduce the overall reclamation cost incurred. It enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals.”*
 - The definition of Interim Closure and Reclamation Plan as per the Type A Water Licence also references closure of facilities that are no longer needed during the operational mine life: *“Interim Closure and Reclamation Plan means a conceptual detailed plan on the reclamation of mine components which will not be closed until the end of mining operations, and operational detail for components which are to be progressively reclaimed throughout the mine life”*.
- Align with certain 2002 CIRNAC Mine Site Reclamation Policy for Nunavut statements regarding progressive reclamation, including:
 - *“Best management practices, including progressive reclamation, should be applied to advance environmental protection and reduce environmental risks.”*

- *“Mine closure and reclamation plans should be sufficiently flexible to allow adjustments as the life of the mine progresses, including the flexibility to adapt to new and improved technologies and methodologies, and allowing for progressive reclamation, while ensuring obligations under the plans are met.”*
- *“A plan should fully address the following: ... The progressive reclamation of the site during the life of the operation, to the extent feasible, given the mining and processing methods employed.”*
- *“Ongoing reclamation throughout the life of the mine is preferable from both the environmental and financial liability perspectives.”*

Synergies in workforce and equipment availabilities during operations make progressive closure of the TSF the preferred option, while delaying closure activities puts undue stress on the active closure period. There are no advantages that Agnico Eagle has identified to deferring closure of the TSF. It is not necessary to have final closure strategies in place for all Meadowbank mine facilities in order to close the TSF.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-03
Re:	Aggressive review timelines		

Request Made by Interested Party:

Appendix 6J suggests that review and approval of the ICRP, including the TSF closure design, should not exceed 60 days, citing prior engagement with reviewers. Given the number of substantive information gaps and unresolved technical issues identified across multiple components (as identified in this submission of review comments), this timeline is not consistent with the level of review required to support informed closure decisions.

CIRNAC recommends that AEM should remove any implied expectation of a fixed or accelerated approval timeline, and instead support a review process that is paced by the resolution of identified technical information gaps.

Agnico Eagle’s Response to Request:

For clarity, Agnico Eagle is not requesting an accelerated timeline. As of May 15, 2026, Agnico Eagle has been consulting on this ICRP for 537 days.

Agnico Eagle first shared the ICRP draft with CIRNAC and KivIA on November 14, 2024, which has provided a lengthy timeline for sharing of information and raising of technical issues. Following the November 2024 submission, Agnico Eagle:

- met with CIRNAC and KivIA in January 2025
- addressed technical comments from CIRNAC and KivIA between February-April 2025
- hosted a in-person two-day meeting with CIRNAC and KivIA in May 2025
- hosted a three-day site visit at the Meadowbank Complex with CIRNAC and KivIA in August 2025
- met with CIRNAC in-person in October 2025
- had a virtual conference call with KivIA in October 2025

This pre-submission step went well beyond typical engagement.

While we do strive for agreement with reviewers where it is possible, given the lengthy ICRP pre-submission and formal NWB review process (537 days), it seems unlikely that a protracted back and forth further will increase the level of consensus.

Further delay of the finalization of the ICRP is not in the public’s best interest as Agnico Eagle wishes to begin implementation of an approved ICRP as soon as possible. We are confident in the technical ability of the NWB and its staff to evaluate the evidence that Agnico Eagle has presented.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-04
Re:	Engagement claims and incorporation of feedback		

Request Made by Interested Party:

CIRNAC recommends that AEM provide a summary table documenting engagement inputs, AEM responses, and specific changes made to the ICRP as a result of that input, including identification of any unresolved issues.

Agnico Eagle’s Response to Request:

Agnico Eagle acknowledges CIRNAC’s comments and can look for opportunities to improve the engagement summary log. However, Appendix 1-A does include details CIRNAC provides in its request, including:

- Engagement inputs
- Agnico Eagle responses
- Status of issues

As outlined in Section 1.5.3 of the ICRP, engagement past April 2025 has been ongoing and in addition, future engagement is slated for 2026. Consultation in 2025, past April 2025, will be summarized in the 2025 annual report. To avoid duplication of review, a copy has not been included in this response package.

Many questions and comments received are related to socio-economics (e.g., training, employment, etc.). As outlined in Section 1.5.3 of the ICRP, as required by NIRB Project Certificate No.008 Condition 51, Agnico Eagle was to develop a conceptual Socioeconomic Closure Plan for the Whale Tail Mine. The Socio-economic Closure Plan has been updated as part of the 2024 Annual Report and will continue to be updated on a yearly basis and reported through the NIRB annual report process.

Comments are considered in the ICRP, where appropriate, as again, many comments relate more to the Socio-economic Closure Plan. An example of incorporation to the ICRP includes Section 6.11.1 *“When no longer required for closure or post-closure monitoring, the AWAR and Whale Tail Haul Road will be reclaimed, and the natural drainage and terrain will be restored as much as possible. Upon local interest and regulatory approval, the AWAR and Whale Tail Haul Road could be transferred to the local community.”*. The KEAC, Baker Lake HTO and Elders, and others questioned what will be done with the AWAR. There are discussions ongoing with this topic with Hamlet, Government, and others; therefore, is left high-level in the ICRP at this time.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-05
Re:	Revegetation strategy		

Request Made by Interested Party:

CIRNAC recommends that AEM should document current Inuit organization positions on the omission of active revegetation and to define clear, verifiable criteria for assessing the success of natural recovery post-closure.

Agnico Eagle’s Response to Request:

Given limited salvageable topsoil and harsh Arctic conditions, Agnico Eagle’s base case remains natural revegetation. As outlined in the ICRP, reclamation efforts will be designed to encourage natural succession of indigenous plant species.

To address NIRB Project Certificate No.008, Term and Condition 13 and 26, natural revegetation is already promoted and included in the Whale Tail ICRP (2019).

As per past Meadowbank Complex Annual Reports, additional assessments are being completed at the Meadowbank site for the monitoring of natural revegetation and to identify ways to promote natural revegetation during the closure activities. The details will be included in the Final Closure and Reclamation Plan.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-06
Re:	Tracking of changes from previously approved closure concepts		

Request Made by Interested Party:

CIRNAC recommends that AEM should include a comprehensive closure change log that identifies all departures from previously approved closure concepts, provides the rationale for each change, documents engagement undertaken, and identifies any regulatory implications. Any changes not included in this log should be treated as not yet approved.

Agnico Eagle’s Response to Request:

The general purpose of the Meadowbank Complex ICRP is to update the previous 2019 ICRPs and combine them into one unified document, allowing Agnico Eagle flexibility in progressive reclamation, closure approaches, and closure scheduling. The unified plan presents an updated description on the Meadowbank Complex (Section 2), Progressive Reclamation (Section 5), and a comprehensive update to Permanent Reclamation and Closure (Section 6) with details on the closure objectives and criteria.

Although CIRNAC requests a change log, the following is provided to support comments made by CIRNAC. A management plan, as per Conditions of the Water Licenses, can be updated, modified, and submitted to the NWB for an appropriate review process. Agnico Eagle is compliant with the Conditions of the licenses with respect to updates to an ICRP. The following Conditions are from the Meadowbank and Whale Tail licenses (emphasis added):

2AM-MEA1530 Part B, Item 13: The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing. The Board has approved (or accepted) the following Plans for implementation under the relevant sections in the Licence. Any changes to the plans deemed significant shall be reviewed by the Board to determine the process for the Board’s review and approval of the amendment to the plan(s). Reflecting the scale and scope of the future changes to an approved plan, the Board may subsequently process the changes as solely an amendment to the plan, as a Modification under Part G of the Licence, or as an Amendment to the Licence.

2AM-MEA1530 Part B, Item 16. The Licensee shall review the Plans or Manuals referred to in this Licence as required by changes in operation and/or technology and modify the Plans or Manuals accordingly. Revisions to the Plans or Manuals are to be submitted in the form of an Addendum to be included with the Annual Report required by Part B, Item 2, complete with a revisions list detailing where significant content changes are made.

Note: The NWB has provided guidance that if a Plan has significant content changes, then they are to be submitted outside of the Annual Report process.

2AM-WTP1830 Part B, Item 13: *The Licensee shall implement the following Plans also required under the Type “A” Water Licence 2AM-MEA1530 as approved (or accepted) by the Board. Any future updates to these Plans approved (or accepted) under the Type “A” Water Licence 2AM-MEA1530 or this Licence shall be applicable to both 2AM-MEA1530 and 2AM-WTP1830 Licences. Any changes to the plans deemed significant shall be reviewed by the Board to determine the process for the Board’s review and approval of the amendment to the plan(s).*

2AM-WTP1830 Part B, Item 14. *The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing. The Board has approved (or accepted) the following Plans for implementation under the relevant sections in the Licence. Any changes to the plans deemed significant shall be reviewed by the Board to determine the process for the Board’s review and approval of the amendment to the plan(s). Reflecting the scale and scope of the future changes to an approved plan, the Board may subsequently process the changes as solely an amendment to the plan, as a Modification under Part G of the Licence, or as an Amendment to the Licence.*

Note: The NWB has provided guidance that if a Plan has significant content changes, then they are to be submitted outside of the Annual Report process.

We recognize there are technical comments to address, which are being done through this response package. However, the technical evidence put forward by Agnico Eagle in its submission is reliable and supports any updates to the ICRP.

Table CIRNAC-6-1 provides the main updates from the Meadowbank ICRP (2019 Rev1, Mar 27 2020) and the Whale Tail Pit ICRP (2019) to the current Meadowbank Complex ICRP (Dec 2025 v1).

Table CIRNAC-6-1: Comparison of Meadowbank ICRP (2019 Rev1) and Whale Tail Pit ICRP (2019) to the Meadowbank Complex ICRP (2025)

Component/Topic	Original ICRP	Change Type	Departure Description	Rationale/Implications
Plan scope / document structure	MBK & WT	Modification	Standalone Meadowbank ICRP (project-specific) replaced by unified Meadowbank Complex ICRP combining Meadowbank + Whale Tail closure concepts and reporting.	Changes governance, reporting, and closure sequencing across two mines and two Type A Water Licenses.
Open Pits	MBK	Addition	2019: annual water quality forecasting and treatment options to be examined if required. 2025: water quality management (aeration / nitrogen treatment): active aeration in Goose Pit and planned aeration for Portage at onset of closure to enhance nitrogen compound degradation.	Adds defined active treatment step within closure concept; may accelerate achievement of discharge criteria and affect closure schedule/cost.
	MBK	Modification	2019: Vault pit flooded using water pumped from Wally Lake to reach lake level. 2025: Vault Pit flooded (meromictic pit lake / deep discharge): treated water transferred to Vault and discharged at depth to create a meromictic pit lake system before reconnection.	Changes pit lake design objectives and monitoring needs; may alter water balance and treatment requirements.
	WT	Clarification/Modification	2025: Maintains Whale Tail & IVR pit flooding sequence; adds explicit reconfiguration of pumps/pipes post-mining and identifies flooding feed sources (WRSF collection, attenuation ponds, WT South Basin pumping).	Clarifies closure work packages and supports schedule/cost estimating.
	WT	Addition	2025: Water quality forecasting & contingency treatment: Predicts annual water quality forecast modelling and includes a WTP as contingency if flooded pit water is not suitable for release.	Adds defined decision loop and contingency infrastructure to closure baseline.
Dikes and Dike Breaching	MBK	Clarification/Modification	2019: open specific dewatering dikes once pit water meets criteria, controlling condition late winter; open Saddle Dam 3 after TSF runoff quality acceptable; retain East Dike and TSF containment structures. 2025: Dikes & saddle dams end-state and reconnection timing; retains concept of reconnection only after criteria met; description and details added complex-wide sequencing; reiterates which structures remain intact.	Maintains winter constraint and formalizes permanent structures; impacts long-term OMS/inspection obligations.
	WT	Addition	2025: Adds expectation that dike breaching/reconnection may occur during winter to align with thick ice and minimum lake levels.	Introduces seasonal constraint for implementation and risk control.

Component/Topic	Original ICRP	Change Type	Departure Description	Rationale/Implications
Permanent sill	WT	Addition	2025: Permanent sill feature (Kangislulik Lake / Whale Tail water level). Introduces construction of a sill in Kangislulik Lake upstream of Mammoth Dike to support increased water level in Whale Tail Lake as a permanent post-closure feature.	Adds permanent engineered structure and associated performance monitoring.
Tailings Storage Facility	MBK	Modification	2019: TSF used through operations with incremental in-pit deposition for additional tailings; includes concept to cover in-pit tailings with NPAG rock and possibly maintain water cover. 2025: Tailings deposition strategy (TSF vs in-pit). Complex-wide deposition plan formalizes in-pit tailings use and integrates it with water management and closure sequencing.	Changes closure liabilities and water quality management requirements for pit lakes; affects TSF cover quantities and long-term monitoring focus.
	MBK	Modification	2019: NC/SC TSF cover concept described with uncertainty around permafrost encapsulation and required cover thickness. 2025: NC/SC TSF closure strategy maturity (finalized design appendix) elevated to near-final with supporting technical evidence and specified cover design basis.	Reduces uncertainty and enables execution-ready closure work and potential security reductions upon completion.
Reclaim pond	MBK	Modification	2019: Reclaim pond moved from TSF South Cell to Portage Pit; treatment needed to place rock cover on in-pit tailings; possible temporary conversion of process plant. 2025: Water management – Reclaim pond relocation and treatment approach; integrates water treatment and infrastructure removal sequencing into closure planning, with contingency WTP concept retained.	May change treatment duration and infrastructure needs; affects cost estimate and closure sequencing.
Underground closure	WT	Addition	2025: Equipment disposition; Explicitly assumes underground equipment left in place (no salvage), requiring de-energizing, cleaning, draining, and remediation to prevent contaminant release.	Affects closure liabilities, contaminant management, and documentation.
	WT	Clarification	2025: Portal securing; Specifies portal and boxcut backfilled with NPAG/NML to eliminate access by people/animals.	Defines method and materials for physical safety measure.
WRSF cover	MBK	Addition	2019: general “cap with clean rock” 2025: to specified thermal covers (4.0 m at Portage PAG/ML) supported by modelling and instrumentation.	
	WT	Addition	2019: specified thermal covers (4.7 m NPAG/NML at WT/IVR) 2025: updated with instrumentation plan.	Defines quantities, QA/QC, monitoring, and success evidence.

Component/Topic	Original ICRP	Change Type	Departure Description	Rationale/Implications
Waste management	MBK	Clarification/ Continuation	2019: closure landfill (#2) on top of Portage RSF, encapsulated under 4.0 m NPAG; Landfarm 2 used through closure then capped with 4.0 m NPAG to ensure freeze-back. 2025: continues landfill/landfarm concepts with updated operational detail and integration into complex-wide waste management. Adds Meadowbank landfill strategy (Landfill #1 and #2) entombed under Portage WRSF cover	Likely consistent concept with refinements to acceptable waste lists, locations, and monitoring; impacts closure material allocation.
	WT	Modification	2019: Defines Whale Tail landfill entombment within WRSF 2025: Expands description and closure cover (4.7 m NPAG/NML)	Clarifies long-term waste isolation and cover requirements.
Transportation & off-site facilities	MBK & WT	Clarification/ Alignment	2019: offer Baker Lake facilities to local interests; if not, dismantle and restore drainage; AWAR decommission unless transferred in public interest; remove culverts/bridges. 2025: retains approach and integrates decision-making into complex-wide closure plan.	Decision point remains; influences closure scope and long-term access for monitoring.
Closure duration framing	MBK & WT	Modification	2019: Provides closure and post-closure phases. 2025: Reframes and updates closure timeline at Complex scale (expected 15–20 years) and provides integrated closure/post-closure scheduling across sites.	Supports integrated resourcing and monitoring plans.
Financial security estimate and methodology	MBK & WT	Modification	2019: Meadowbank closure cost estimate \$89,427,746 (direct + indirect) using RECLAIM v7.0 with completed rehab to 2017 included. 2025: updated complex-wide liabilities and explicit comparison with 2019, reflecting revised scope and cost assumptions.	Updates security requirements and reduction procedures; reflects integrated closure liabilities across the complex.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-07
Re:	Change to the approved Tailings Storage Facility (TSF) design basis		

Request Made by Interested Party:

CIRNAC recommends that AEM provide evidence that KivIA does not oppose the revised TSF closure approach and to evaluate whether additional mitigation measures are required to address long-term tailings thaw and stability prior to advancing closure construction.

Agnico Eagle's Response to Request:

In the submission to the NWB, the KIA provided technical comments on the ICRP. These are addressed in this response package.

See response to KivIA-03 for further details.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-08
Re:	TSF closure strategy is not ready to be treated as “final”		

Request Made by Interested Party:

CIRNAC recommends that AEM should treat TSF closure works as progressive reclamation only, with any approval explicitly conditional on the submission and approval of detailed engineering designs and recognition that the design may change as work advances.

Agnico Eagle’s Response to Request:

There is nothing unique about the approval of the closure strategy for the TSF compared to construction of other mining facilities that requires an approval as noted by CIRNAC. The scope of the Type A Water Licence explicitly includes closure and progressive reclamation.

The final closure strategy for the TSF has been provided in Appendix 6J. As presented, this is the preferred option, signed off by the IRB, that derisks the facility based on the evidence and expertise of Agnico Eagle and the IRB.

CIRNAC also has not provided any evidence to validate its suggestion that the approach to the closure of the TSF described in the ICRP and Appendix 6J-A introduces risk. As described in detail in the ICRP and Appendix 6J-A, monitoring of the cover will proceed once progressive reclamation of the TSF is complete and the TSF is closed.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-09
Re:	Risk of advancing TSF closure ahead of integrated site-wide closure planning		

Request Made by Interested Party:

CIRNAC recommends that AEM should justify the need for early “approval” of the TSF closure strategy and to demonstrate that advancing TSF closure ahead of the full Closure and Reclamation Plan (CRP) will not constrain or increase risk to integrated sitewide closure decisions, particularly those related to water management.

Agnico Eagle’s Response to Request:

Please refer to responses to CIRNAC-02 and CIRNAC-08.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-10
Re:	Closure objectives and criteria are not measurable		

Request Made by Interested Party:

CIRNAC recommends that AEM revise the TSF closure criteria to include explicit, quantitative performance thresholds, including concentration-based water quality limits at Collection Pond 23, defined averaging periods, allowable exceedances, and measurable indicators of cover and physical performance.

Agnico Eagle’s Response to Request:

The closure and reclamation plan refers to achieving chemical stability by meeting site specific water quality objectives (SSWQO) or Canadian Council of Ministers of the Environment (CCME) guidelines. These criteria are concentration-based water quality limits that apply to the TSF runoff water collected in Collection Pond 23.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-11
Re:	No TSF-specific post-closure Trigger Action Response Plan (TARP)		

Request Made by Interested Party:

CIRNAC recommends that AEM develop a TSF-specific post-closure TARP that defines measurable triggers, response actions, and reporting requirements, with triggers tied directly to water quality at Collection Pond 23 and other key TSF performance indicators.

Agnico Eagle’s Response to Request:

Agnico Eagle agrees with CIRNAC on the necessity of a TSF-specific post-closure TARPs and is working towards developing them, with input from a third-party reviewer and the design engineer. Triggers will be tied directly to water quality and other TSF performance indicators. The TARP will be part of a TSF Closure OMS Manual.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-12
Re:	Geotechnical risks of thicker covers are not demonstrated		

Request Made by Interested Party:

CIRNAC recommends that AEM identify and quantify the geotechnical failure modes associated with increased cover thickness and demonstrate how these risks compare to the proposed 2 m cover.

Agnico Eagle’s Response to Request:

Agnico Eagle is in the process of finalizing the detailed design of the TSF cover. One major aspect of this work is the detailed geotechnical design of the cover and understanding the cover impact on the TSF structures. This includes seepage analysis, stability analysis, thermal analysis, and settlement analysis.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-13
Re:	Referenced supporting studies are not provided		

Request Made by Interested Party:

CIRNAC recommends that AEM submit the test pit logs, porewater chemistry results, and numerical modelling documentation referenced in Appendix 6J-A, with sufficient detail to allow for independent technical review.

Agnico Eagle’s Response to Request:

Agnico Eagle appreciates the recommendation; however, the test pitting, porewater chemistry, and the numerical modelling referenced in Appendix 6J-A are in reference to the work completed for the Feasibility Study Report that is not part of this ICRP submission. For reference of TSF runoff water quality and quantity predictions, please refer to Appendix 6-E (Lorax 2024) that details TSF source terms driving the contaminant transport model. For all other information related to the TSF, please refer to Appendix 6-J, 6J-A and 6J-B.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-14
Re:	No structured post-closure failure modes assessment		

Request Made by Interested Party:

CIRNAC recommends that AEM complete a post-closure Failure Modes and Effects Assessment for the TSF focused on geotechnical and hydrotechnical failure modes, with clear linkages to monitoring, TARPs, and mitigation measures.

Agnico Eagle’s Response to Request:

In 2025, Agnico Eagle and the design engineer completed a Failure Modes and Effects Assessment (FMEA) for the TSF cover that assessed risks over the Operations Phase, Closure Phase, and Post-Closure Phase. This included a focus on geotechnical and hydrotechnical failure modes. Third-party review of the FMEA by the TSF dike designer will take place in 2026.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-15
Re:	Cold-regions cover performance		

Request Made by Interested Party:

CIRNAC recommends that AEM evaluate the TSF cover design against the Cold Regions Cover System Design Technical Guidance Document (MEND, 2012), explicitly addressing known cold-regions failure mechanisms and their implications for long-term performance.

Agnico Eagle’s Response to Request:

Agnico Eagle, via design engineers Okane Consulting, have evaluated the TSF cover design against the MEND 2012 guidance document, which was drafted by Okane Consulting. As indicated in CIRNAC-12, Agnico Eagle is continuing work on the detailed design of the TSF. Also indicated in CIRNAC-14, Agnico Eagle has also completed an FMEA of the TSF in 2025.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-16
Re:	Rationale for strategy change		

Request Made by Interested Party:

CIRNAC recommends that AEM provide a structured rationale for the strategy change, including the technical basis for rejecting the prior approach and a clear statement of the new objectives and constraints driving the revision.

Agnico Eagle’s Response to Request:

Agnico Eagle does not agree that the transfer of water to Vault Pit is a material change. As described in CIRNAC-17, the overarching water management strategy has not changed from what was previously proposed. What has changed from the previously proposed strategy is how process water is treated and distributed. Where the previous strategy relied on active treatment of process water and discharge to the environment, the new strategy utilizes the concepts of aeration and meromixis to optimize active water treatment and reduce environmental discharge.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-17
Re:	Alternatives analysis (Multiple Accounts Analysis (MAA)/options screening)		

Request Made by Interested Party:

CIRNAC recommends that AEM conduct a formal alternatives evaluation (MAA or equivalent) comparing credible water management concepts on environmental performance, long-term liability, constructability, operational risk, regulatory fit, and cost.

Agnico Eagle’s Response to Request:

Agnico Eagle does not believe an MAA is needed for water management, as the overarching water management strategy has not changed from what was previously proposed, and the key components remain the same:

- Flooding the open pits at closure.
- Treat water, whether via active treatment, in-situ/aeration method, or some combination.
- Discharge treated water to the environment.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-18
Re:	Meromixis feasibility and verification		

Request Made by Interested Party:

CIRNAC recommends that AEM perform quantitative modelling to demonstrate meromixis stability under realistic forcing conditions, including clear performance criteria and monitoring parameters that would confirm stratification is behaving as assumed.

Agnico Eagle’s Response to Request:

Agnico Eagle has conducted quantitative modelling (Gold Sim) to predict long-term water quality within Vault Pit, incorporating hydrodynamics and regional hydrology. The results of the analysis are summarized in the Water Balance Water Quality Model (Appendix 6-E) report.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-19
Re:	Meromixis failure modes and contingency planning		

Request Made by Interested Party:

CIRNAC recommends that AEM conduct a failure modes assessment specific to Vault Pit stratification and a contingency response plan (triggers, actions, equipment/logistics) for partial or full mixing scenarios.

Agnico Eagle’s Response to Request:

Agnico Eagle appreciates the comment. Sensitivity analysis of failure modes will be part of the quantitative analysis to be provided when available.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-20
Re:	Freshwater cap depth and aquatic life protection		

Request Made by Interested Party:

CIRNAC recommends that AEM explicitly demonstrate that the freshwater cap depth is protective of aquatic life under expected and upset conditions, including how criteria will be evaluated pre- and post-connection to receiving waters.

Agnico Eagle’s Response to Request:

As stated in CIRNAC-18, Agnico Eagle has demonstrated in the WBWQM report that Vault Pit freshwater cap will meet CCME or SSWQO post-closure. The morphology of Vault Pit reduces the magnitude of mixing of bottom and top water layers. Therefore, concentrations in the freshwater cap are predicted to decrease over time due to the regional hydrologic water balance (runoff mixing).

Interested Party:	CIRNAC	Rec No.:	CIRNAC-21
Re:	Regulatory acceptability of “dirty water at depth”		

Request Made by Interested Party:

CIRNAC recommends that AEM provide written confirmation (or documented engagement outcomes) from relevant federal regulators (e.g., Environment and Climate Change Canada (ECCC)/Fisheries and Oceans Canada (DFO), as applicable) commenting on the acceptability of the proposed approach as well as any conditions or constraints that would apply.

Agnico Eagle’s Response to Request:

Agnico Eagle appreciates CIRNACs comment. The NWB process for reviewing the closure and reclamation plan includes comment period that includes the KivIA, ECCC, and DFO. Those interveners will have an opportunity to comment on the submitted information by Agnico Eagle.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-22
Re:	Pipeline transfer risk and mitigation		

Request Made by Interested Party:

CIRNAC recommends that AEM conduct a pipeline risk assessment and mitigation package, including credible rupture scenarios, spill consequence analysis, detection/automatic isolation, seasonal operability, and response planning appropriate for Nunavut’s remote conditions.

Agnico Eagle’s Response to Request:

As per Agnico Eagle’s discussions with CIRNAC on February 20, 2025, the purpose of the water distribution line is to transfer contact water from one pit to another within an already impacted footprint. The distribution line was approved by the NWB (March 25, 2025) and is an approved activity on site.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-23
Re:	Portage/Goose pit re-flooding assumptions (tailings stability and water quality)		

Request Made by Interested Party:

CIRNAC recommends that AEM provide modelling and/or supporting evidence for (a) long-term water quality evolution in re-flooded pits with tailings, and (b) adequacy of minimum water cover depths to prevent resuspension under expected hydrodynamic and ice-related conditions.

Agnico Eagle’s Response to Request:

Agnico Eagle has conducted quantitative modelling (GoldSim) to predict long-term water quality in the flooded pits. The results of the analysis are summarized in the Water Balance Water Quality Model (Appendix 6-E) report.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-24
Re:	Cost and liability transparency		

Request Made by Interested Party:

CIRNAC recommends that AEM provide a comparative cost and liability assessment between the revised and prior strategies, including long-term monitoring, contingency actions, and implications for financial assurance.

Agnico Eagle’s Response to Request:

Section 8.3.5 of the Meadowbank Complex ICRP provides details to support the changes that were made to security. Tables 8.3-3 and 8.3-4 of the Meadowbank Complex ICRP provide a comparison of the current security holding against the updated estimate for Meadowbank and Whale Tail, respectively.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-25
Re:	Early Implementation of Unapproved Water Management Strategy		

Request Made by Interested Party:

CIRNAC recommends that AEM formally acknowledge that permanent disposal of partially treated water in the Vault Pit has not yet been approved, and that any early transfers are undertaken at AEM’s risk, with the understanding that alternative or previously approved closure approaches may ultimately be required.

Agnico Eagle’s Response to Request:

As per CIRNAC-22, the purpose of the water distribution line is to transfer contact water from one pit to another within an already impacted footprint, and the activity has been approved by the NWB (March 25, 2025).

Interested Party:	CIRNAC	Rec No.:	CIRNAC-26
Re:	Potential Requirement for Nunavut Impact Review Board (NIRB) Environmental Assessment Review		

Request Made by Interested Party:

CIRNAC recommends that AEM provide a formal assessment as to whether the revised water management strategy triggers referral to NIRB under the NIRB process, including a clear rationale supporting its conclusions and documentation of any regulatory engagement supporting those conclusions.

Agnico Eagle’s Response to Request:

An assessment through the NIRB is not required, as the overarching water management strategy has not changed from what was previously proposed and the key components remain the same:

- Flooding the open pits at closure.
- Treat Water, whether via active treatment, in-situ/aeration method, or some combination.
- Discharge treated water to the environment.

Based on a NuPPAA s.90 screening review and NIRB’s project modification guidance, Agnico Eagle’s water management strategy (including the Meadowbank–Vault water transfer line and associated storage/treatment adjustments) does not trigger referral to NIRB for further environmental assessment:

1. The activities occur within previously assessed/disturbed corridors and authorizations, do not introduce new residual effects or materially different effect pathways than those already evaluated, and are managed under existing licenses, monitoring, and mitigation.
2. Works are confined to existing project areas/linear corridors; no new mine development or new receiving environment is proposed.
3. With established mitigation, licensing (NWB/MDMER) compliance, and monitoring, no increase in magnitude or geographic extent of effects beyond FEIS predictions is anticipated.

In addition, Agnico Eagle completed a NuPPAA s.90 self-assessment for the Meadowbank–Vault water transfer line and submitted to the NWB at its request (submitted to NWB February 26, 2025). The NWB consulted the NIRB for determination, the NIRB concluded (March 21, 2025) that the activity is within the non-significant amendment and a NIRB assessment was not required.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-27
Re:	Post-closure water quality criteria are not clearly defined or differentiated		

Request Made by Interested Party:

CIRNAC recommends that AEM clearly state the post-closure water quality criteria, compliance points, and averaging periods that will govern pit reconnection and discharge decisions, and confirm whether these differ in any way from the current operational criteria and why.

Agnico Eagle’s Response to Request:

The closure and reclamation plan states that a closure objective is “water quality is safe for humans, wildlife, and aquatic life” with the criteria of “water quality meets modelled predictions and relevant criteria, and is protective of human and ecological health” (ICRP, e.g., Table 4.3-1). The Human Health and Ecological Risk Assessment provided tables of the relevant criteria (Appendix D, Tables D-1, D-4a, D-7). Monitoring will confirm when post-closure criteria are achieved.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-28
Re:	Lack of a structured Trigger Action Response Plan (TARP) and reconnection decision framework		

Request Made by Interested Party:

CIRNAC recommends that AEM develop a post-closure water quality TARP that includes a decision tree for pit reconnection and Collection Pond 23 discharge, defining required parameters, trends, confirmation periods, and response actions if predictions are not met.

Agnico Eagle’s Response to Request:

Agnico Eagle thanks CIRNAC for the recommendation. Closure and post-closure monitoring outlined in the CPCMP provide monitoring guideline for determining whether the required criteria are met to trigger certain actions, such as pit reconnection of Collection Pond 23.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-29
Re:	Waste Rock Storage Facility (WRSF) wet-up and dynamic equilibrium may not be demonstrated		

Request Made by Interested Party:

CIRNAC recommends that AEM explicitly demonstrate, using model outputs, that WRSF seepage has reached hydrologic and geochemical dynamic equilibrium within the simulation period, including clear criteria for how equilibrium is defined. Where equilibrium is not achieved, extend the modelling horizon or apply bounding cases to ensure that longterm seepage rates and water quality are conservatively represented in closure and reconnection decision-making.

Agnico Eagle’s Response to Request:

Assessment of the thermal and water balance regime (CIRNAC request) of the Meadowbank RSFs is ongoing, in concert with thermal monitoring, and measurement of contact water volumes and quality pumped from local sumps.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-30
Re:	Sensitivity and uncertainty analysis is insufficiently developed		

Request Made by Interested Party:

CIRNAC recommends that AEM complete and document sensitivity and uncertainty analyses for the water quality and water balance models, focusing on key assumptions and drivers that influence predicted compliance and reconnection timing. The results should clearly illustrate the range of plausible outcomes and identify which parameters and assumptions most strongly affect post-closure water quality performance, to better inform risk-based decision-making and contingency planning.

Agnico Eagle’s Response to Request:

Agnico Eagle thanks CIRNAC for the recommendation.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-31
Re:	Role of in-pit tailings as a water quality source term is unclear		

Request Made by Interested Party:

CIRNAC recommends that AEM clearly document how in-pit tailings are represented in the water quality model, including source term assumptions, resuspension or diffusion mechanisms, and sensitivity of predicted pit lake chemistry to those assumptions.

Agnico Eagle’s Response to Request:

Water quality and balance modelling methods are provided in Section 4.0 of Appendix 6-E, which also includes how in-pit tailings are represented in the water and load balance model. As described in Appendix 6-F, porewater flux from tailings will be negligible where the flux of parameters to the overlying water is approximately zero. Therefore, there are no source terms assumed from the tailings pore-water.

For tailings resuspension, Agnico Eagle has previously provided information (*SNC-Lavalin, 2018. In-Pit Tailings Disposal Detailed Engineering Study, 651196-9000-40ER0001_PB, July 20th, 2018.*) as part of the in-pit deposition water license amendment application (approved by NWB on March 29, 2019). The SNC-Lavalin report demonstrated that a water cover of 8 metres would prevent the resuspension of tailings, so this assumption has been carried forward in all modelling of tailings in flooded pits.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-32
Re:	Reconnection timing is highly sensitive to arsenic predictions		

Request Made by Interested Party:

CIRNAC recommends that AEM define contingency approaches and mitigations for pit reconnection decisions where arsenic (or other key parameters) does not meet predicted concentrations, including delayed reconnection, additional treatment, or alternative endstate configurations.

Agnico Eagle’s Response to Request:

Agnico Eagle, through the CPCMP, will continue monitoring water quality during active closure. During this period, the O-WTP will continue to operate until the water quality objectives for treatment are achieved. The water quality model currently projects 6 years of O-WTP operation being required. As indicated in the ICRP, Agnico Eagle will not reconnect the flooded pits with the regional watershed unless water quality criteria are met.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-33
Re:	Modelling horizon does not fully capture late-time source term evolution		

Request Made by Interested Party:

CIRNAC recommends that AEM extend water quality predictions and plots to align with the full source term modelling period (or justify the cut-off), and present late-time results for key parameters (e.g., arsenic) that are relevant to pit lake reconnection and discharge

Agnico Eagle’s Response to Request:

The long-term water quality of the flooded pits will be determined by the hydraulic residence time of flooded pit water, the rate of loading from the surrounding mine facilities, and the degree to which the flooded pit water mixes with the downstream receiving environment. To appropriately model the water quality post lake reconnection, the dike breach design will first need to be finalized. A final dike breach design would then inform a hydrodynamic model of the mixing characteristics within the reconnected flooded pit. These details and model updates can be completed after the dike breach design is developed.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-34
Re:	Long-term recontamination risk from in-pit tailings		

Request Made by Interested Party:

CIRNAC recommends that AEM explicitly demonstrate with modelling and/or sitespecific data, that in-pit tailings will not result in long-term degradation of pit lake water quality following reflooding, including consideration of diffusive fluxes, geochemical evolution, and potential disturbance mechanisms.

Agnico Eagle’s Response to Request:

The 8 m water cover of tailings has already been assessed and approved as part of the In-pit Tailings Deposition Amendment, and is reflected in Project Certificate No.003, Term & Condition 19, under the ‘new commentary’.

Additionally, at closure, the rate of porewater flux from tailings to the surface water will be negligible. Therefore, there will be no water quality exceedances. This conclusion is based on modelling completed by AtkinsRéalis (Appendix C of Appendix 6-F) that showed tailings consolidation occurs in the first 2-3 years after deposition (max flux rate of 0.004 m³/s to 0.007 m³/s depending on the model). After 2-3 years, the flux rate of porewater to the overlying water decreased to nil (zero) in the model.

Thermal and hydrogeological modelling including the 8 m water cover which was performed to address comments received from NRCan during the review process. This document is available at: 181214 2AM-MEA1526 Update Thermal&Hydrogeological Modeling-IMLE.pdf. The NWB In-pit Tailings Deposition Reasons for Decision report (pages 31 to 37 2AM-MEA1526) summarizes the history and models done as part of the in-pit deposition. Further details on the history of the In-pit Tailings Deposition Amendment are available on the NWB Registry. Additional modelling and studies are not required as part of the ICRP as the work has already been completed and is approved through the NWB and NIRB.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-35
Re:	Removal of committed rock cover over in-pit tailings		

Request Made by Interested Party:

CIRNAC recommends that AEM either: (i) provide clear evidence that the environmental context of in-pit tailings disposal has materially changed since the commitment was made and the practice was approved; or (ii) implement the previously committed rock cover over in-pit tailings.

Agnico Eagle’s Response to Request:

The NIRB decision report (August 31, 2018) included the narrative and recommendation from ECCC: “that the tailings closure plans include an evaluation of the feasibility of introducing a rock cover above the tailings, and identify conditions where this may be warranted.”

As noted in Section 6.2.3 of the December 2025 ICRP, this closure option was assessed (Appendix 6-F) and is no longer viable, as an aggregate cover over the tailings is not required to mitigate risks to fish. Thus, the in-pit tailings rock cover is therefore not considered in this version of the ICRP.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-36
Re:	Tailings resuspension and physical disturbance under flooded conditions		

Request Made by Interested Party:

CIRNAC recommends that AEM assess tailings resuspension potential under flooded conditions, including identification of credible disturbance mechanisms and evaluation of whether additional mitigation (e.g., minimum water cover depth, localized armouring, or operational controls) is warranted.

Agnico Eagle's Response to Request:

Please refer to CIRNAC-34.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-37
Re:	Regulatory and closure consistency of changing the in-pit tailings end state		

Request Made by Interested Party:

CIRNAC recommends that AEM explicitly reconcile the revised in-pit tailings closure approach with prior approvals and commitments, and confirm whether additional regulatory review or concurrence is required as a result of this change.

Agnico Eagle's Response to Request:

Please refer to CIRNAC-34 and CIRNAC-35.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-38
Re:	Status and suitability of partially treated reclaim water		

Request Made by Interested Party:

CIRNAC recommends that AEM explicitly identify the parameters in partially treated reclaim water that exceed applicable discharge criteria, including expected concentrations, comparison to criteria, and whether those exceedances are temporary or persistent.

Agnico Eagle’s Response to Request:

It is assumed the reviewer is referring to water being transferred to the base of Vault Pit (see responses to CIRNAC-18 and CIRNAC-20), and refer to Appendix 6-E for more details on the water model and predicted chemistry. This water will not be discharged to the receiving environment and thus there are no discharge criteria.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-39
Re:	Rationale for abandoning the approved treatment-and-discharge strategy		

Request Made by Interested Party:

CIRNAC recommends that AEM provide a clear, structured rationale for moving away from the approved treatment-and-discharge strategy, including comparison of environmental performance, long-term risk, regulatory implications, and closure liability between the two approaches.

Agnico Eagle’s Response to Request:

As noted in response to CIRNAC-16 and CIRNAC-17, the overarching water management strategy has not changed from what was previously proposed.

As indicated in the ICRP, Table 1.6-1, Agnico Eagle gives preference to closure solutions that reduce the maintenance requirements for closure. As presented in Appendix 6-E, the present closure strategy for treatment will achieve the chemical stability objective, particularly in the flooded pits. Furthermore, the current strategy will reduce pumping required from Wally Lake for active flooding of Vault Pit, further reducing active closure activities. Therefore, by transitioning to a more passive treatment strategy, Agnico Eagle has reduced maintenance requirements while still meeting chemical criteria.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-40
Re:	Demonstration of in-pit treatment performance		

Request Made by Interested Party:

CIRNAC recommends that AEM provide technical performance reports for in-pit water treatment conducted to date, including monitoring data, treatment mechanisms, seasonal limitations, and implications for long-term closure water quality.

Agnico Eagle’s Response to Request:

Agnico Eagle thanks CIRNAC for the recommendation. Agnico Eagle will provide treatment performance data when they are available in due time.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-41
Re:	Status and readiness of the closure water treatment system		

Request Made by Interested Party:

CIRNAC recommends that AEM submit a detailed description of the proposed closure water treatment system, including treatment technologies, testing results, design criteria, expected effluent quality, operational duration, and implications for closure reclamation security.

Agnico Eagle’s Response to Request:

Agnico Eagle thanks CIRNAC for the recommendation. Details on treatment technologies and their expected effluent quality have been provided in the WBWQM report (Appendix 6-E). Information on closure reclamation security was provided in Appendix 8-A.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-42
Re:	Consistency with the approved ICRP		

Request Made by Interested Party:

CIRNAC recommends that AEM explicitly demonstrate why treated reclaim water cannot be further treated to meet discharge criteria under the approved closure strategy, including identification of limiting parameters, technical constraints, or disproportionate impacts.

Agnico Eagle's Response to Request:

Please refer to CIRNAC-39.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-43
Re:	Basis for differing Waste Rock Storage Facility (WRSF) cover thicknesses (Meadowbank vs. Whale Tail)		

Request Made by Interested Party:

CIRNAC recommends that AEM clearly document the technical basis for differing WRSF cover thicknesses between the Meadowbank and Whale Tail sites, including a side-by-side comparison of thermal modelling inputs, assumptions, and performance outcomes.

Agnico Eagle’s Response to Request:

Section 6.5.1 of the ICRP notes that “The Vault WRSF contains a majority NPAG/NML material and is not expected to require a cover, thus will be left in its current configuration.”

In addition, Section 6.5.3.2 of the ICRP states the Vault WRSF geochemical predictions indicate that a capping layer will not be required at the Vault WRSF as most waste rock produced is NPAG/NML. To date, through the ARD testing program, it has been determined that approximately 85.5% of the waste rock generated is NPAG/NML. As a precaution, PAG/ML waste rock was placed in the middle of the Vault WRSF and this material will be covered with at least 4m of NPAG/NML to minimize any generation of ARD/ML and to promote freeze back (Waste Rock and Tailings Management Plan version 13).

Further, as outlined in the ICRP, Section 6.5.3.2 “...Based on the cover thermal model results, the Whale Tail WRSF and the IVR WRSF will be covered with a 4.7 m thick closure cover that will be constructed with NPAG/NML waste rock (Okane 2018b). The intent of the cover is to contain the yearly active layer inside the thickness of the cover, and to maintain a temperature below 0°C for the underlying rock (e.g., Figure 6.5-1). Additionally, the cover aims to limit acid generating reactions and migration of contaminants. Similarly to Portage WRSF, the likelihood of a 4.7 m cover system being insufficient is very low due to the factors listed previously for Meadowbank’s WRSFs (e.g., low volumetric water content, low pyrite content, etc.).”

These two covers have been presented and approved through past Water Licence applications and are not new concepts.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-44
Re:	Active layer penetration through the thermal covers		

Request Made by Interested Party:

CIRNAC recommends that AEM explicitly explain why cover thicknesses were not increased to fully accommodate predicted active layer depths, and to quantitatively demonstrate how thaw beneath the covers affects long-term seepage quality and loading, including confirmation that this effect is conservatively captured in the water quality source terms.

Agnico Eagle’s Response to Request:

Agnico Eagle updated the thermal modelling for the Portage WRSF in 2023 to examine if the active layer would extend below the NPAG cover. The report (Appendix 6-H of the ICRP) concluded, while annual thaw below the WRSF cover system is expected, the likelihood of a 4.0 m cover system thickness being insufficient, leading to unacceptable water quality in the receiver is expected to remain very low. This is due to several factors, including:

- Low volumetric water content in the thawed waste rock, resulting in low likelihood of mobilization of seepage from waste rock;
- Lower pyrite oxidation rates within the thawed waste rock compared to the cover system material (because of consistent near-freezing temperatures within the waste rock) resulting in low to moderate likelihood of production of metal leaching and acid rock drainage (ML/ARD) products;
- Limited volume of PAG/ML waste rock in the estimated thawed waste rock zone, resulting in low likelihood of production of ML/ARD products; and
- Limited interaction between infiltrating water and PAG/ML waste rock due to the development of ice lenses in the upper profile of the RSF and frozen conditions at the base of the RSF.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-45
Re:	Availability and adequacy of detailed thermal modelling reports		

Request Made by Interested Party:

CIRNAC recommends that AEM provide updated thermal modelling reports for both Meadowbank and Whale Tail WRSFs, including full documentation of methods, assumptions, calibration, and climate scenarios, to support independent technical review.

Agnico Eagle’s Response to Request:

The cover design for the Portage WRSF was reviewed (see Appendix 6-H of the ICRP).

The cover design for the Whale Tail and IVR WRSFs was provided as part of the previous [Water Licence Amendment process](#) (Agnico Eagle 2019).

Whale Tail Pit, WRSF 60-day notice – Whale Tail and IVR WRSFs – Phase 2 and Appendix (in 6 parts)

- **Part 1:** [191220 2AM-WTP1826 WRSF 60-Day Notice - Whale Tail IVR WRSFs - Phase 2 and Appendix part 1-IMLE.pdf](#)
- **Part 2:** [191220 2AM-WTP1826 WRSF 60-Day Notice - Whale Tail IVR WRSFs - Phase 2 and Appendix part 2-IMLE.pdf](#)
- **Part 3:** [191220 2AM-WTP1826 WRSF 60-Day Notice - Whale Tail IVR WRSFs - Phase 2 and Appendix part 3-IMLE.pdf](#)
- **Part 4:** [191220 2AM-WTP1826 WRSF 60-Day Notice - Whale Tail IVR WRSFs - Phase 2 and Appendix part 4-IMLE.pdf](#)
- **Part 5:** [191220 2AM-WTP1826 WRSF 60-Day Notice - Whale Tail IVR WRSFs - Phase 2 and Appendix part 5-IMLE.pdf](#)
- **Part 6:** [191220 2AM-WTP1826 WRSF 60-Day Notice - Whale Tail IVR WRSFs - Phase 2 and Appendix part 6.pdf](#)

Agnico Eagle’s Response to Request:

Agnico Eagle. 2019. Whale Tail Pit Expansion Project NWB Water Licence 2AM-WTP1826 Amendment. May 2019.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-46
Re:	Progressive reclamation verification		

Request Made by Interested Party:

CIRNAC recommends that AEM provide formal as-built documentation for progressively reclaimed WRSF areas, including pre- and post-cover placement surveys, cover thickness verification, NPAG material verification, and confirmation of conformity with the approved closure design.

Agnico Eagle's Response to Request:

Agnico Eagle thanks CIRNAC for the recommendation. As-built documents are provided as they are made available.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-47
Re:	Consideration of non-geochemical closure factors (e.g., wildlife interaction)		

Request Made by Interested Party:

CIRNAC recommends that AEM clarify how non-geochemical closure considerations (including wildlife interaction, surface roughness, and access control) have been addressed in the WRSF closure design, or identify where additional mitigation or monitoring may be required.

Agnico Eagle’s Response to Request:

A review and inspection by a licensed engineer provides the final approval whether the WRSF meets the physical stability closure criteria or not. Agnico Eagle will resolve engineer review and inspection non-conformities until the WRSF does meet physical stability closure criteria. As described in Section 4.2 of the ICRP, the ICRP also considers the safe end land use of the site, whether it is use of the land by wildlife (e.g., caribou) or traditional land uses (e.g., hunting, foraging). Monitoring of the closed Mine site during the Post-closure phase is also included in the Closure Post-Closure Monitoring Plan.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-48
Re:	Viability of contingency measures for underperforming thermal covers on WRSFs		

Request Made by Interested Party:

CIRNAC recommends that AEM confirm whether post-closure placement of additional cover material is a viable and realistic contingency, and to describe the conditions under which this measure would be implemented, including logistical and environmental constraints.

Agnico Eagle’s Response to Request:

Agnico Eagle has assessed the chemical stability of the WRSFs given the current cover concept and concluded that chemical stability will be achieved and maintained post-closure. Please refer to CIRNAC-44 for further information regarding chemical stability.

Furthermore, studies are ongoing to determine whether contingent placement of NPAG to thicken the cover is necessary or not. As this submission is an *interim* closure plan, this mitigation will be updated in the *final* closure plan.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-49
Re:	Inconsistent modelling horizons between source terms and water quality predictions		

Request Made by Interested Party:

CIRNAC recommends that AEM should extend water quality prediction results over the full source term modelling horizon (to at least 2170), or clearly demonstrate how latetime source term changes associated with deeper active layer penetration are reflected in the reported water quality outcomes and closure conclusions.

Agnico Eagle’s Response to Request:

Based on recent climate science and understanding, any modelling post year 2100 are highly speculative and not as reliable as a means of studying the effects of climate change. Regardless, as stated in Section 4.2.2 in Appendix C of Appendix 6-E, the net effect is an annual increase in loadings of 0.17%. The overall effect is negligible, therefore Agnico Eagle does not agree with extending the modelling horizon to 2170.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-50
Re:	Underground disposal of equipment, demolition debris, and contaminated soils		

Request Made by Interested Party:

CIRNAC recommends that AEM only dispose of equipment, demolition waste, and contaminated soils in underground locations that are proven to be stable permafrost zones, with clear criteria defining acceptable disposal locations. AEM should also confirm that the practice is consistent with prior approvals and provide documentation of any regulatory or stakeholder concurrence.

Agnico Eagle’s Response to Request:

Agnico Eagle confirms that:

- disposal of equipment is consistent with the prior Whale Tail Pit ICRP (Section 5.2.15 of December 2019 Whale Tail ICRP).
- disposal of wastes is consistent with the prior closure options as per the Meadowbank ICRP (Section 5.2.8.3 of May 2019 Meadowbank ICRP).

Disposal of contaminated soils was not in previous ICRPs; however, is not a new concept to mining in Nunavut. For example, the Lupin Mine Final Closure and Reclamation Plan includes disposal of contaminated soils in the underground (Section 4.3.2.4 of Lupin Mines Incorporated Final Closure and Reclamation Plan, Rev1, August 2020).

To address CIRNAC’s comment regarding the location in the underground, as outlined in Section 6.4.3.3 of the Meadowbank Complex ICRP: *“Contaminated soils, waste tires and other inert waste material such as pipes, culverts and sea cans could also be placed underground in sectors within permafrost ready for backfill.”*

Interested Party:	CIRNAC	Rec No.:	CIRNAC-51
Re:	Cyanide-impacted residues and demolition considerations		

Request Made by Interested Party:

CIRNAC recommends that AEM assess the potential for cyanide-impacted residues or dust within mill and process equipment and, if present, describe the required abatement, verification sampling, and approved disposal pathways.

Agnico Eagle’s Response to Request:

Section 6.8.3.1 of the Meadowbank Complex ICRP describes general infrastructure and decommissioning, stating the following:

Decommissioning of the mill will require emptying of tanks, purging the process piping and chemical lines, emptying the glycol network, and emptying the various fuel, oil, and grease tanks. All structural elements and fixed equipment will be cleaned with water to remove and recover as much as possible all the fine asbestos dust spread out across the mill. The procedures for decontamination and management of demolition waste will continue to be developed on site during the remaining part of operations. Hazardous material generated during demolition will be managed in closure following the same practices as during operations.

Though cyanide management is not explicitly stated with regards to infrastructure decommissioning, a similar approach (e.g., washing) to that used to manage asbestos could be used. Other methods will continue to be developed as part of operations. Methods developed will align with the *Meadowbank and Whale Tail Hazardous Material Management Plan*, which details safe handling of cyanide (Section 4 and Appendix B.1). Areas in the immediate vicinity of infrastructure associated with cyanide will be identified and managed as part of environmental assessment work (refer to Section 9.2 and 9.3, and Appendix 6-C of the ICRP).

Interested Party:	CIRNAC	Rec No.:	CIRNAC-52
Re:	Disposal pathways and acceptance criteria for demolition waste		

Request Made by Interested Party:

CIRNAC recommends that AEM prepare a waste disposition plan that identifies major waste streams, specifies disposal locations (including confirmation of permafrostzone disposal where applicable), and documents acceptance criteria, volume estimates, and any required approvals.

Agnico Eagle’s Response to Request:

As outlined in Appendix 6-G of the Meadowbank Complex ICRP (December 2025), Agnico Eagle is currently working on its waste management strategies for closure.

Appendix 6-G (Table 1 specifically) aimed to clarify the acceptable and unacceptable types of solid waste to be placed in the Meadowbank and Whale Tail landfills, as well as alternative disposal options for waste generated during the remaining period of operation and in closure. Appendix B (of Appendix 6-G) provides a detailed produce for decommissioning equipment of disposal in a landfill.

Further details on disposal of demolition waste will be provided through the FCRP; however, Agnico Eagle has already advanced some of the recommendations of CIRNAC, as outlined in Appendix 6-G.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-53
Re:	Confirmation of residual acid rock drainage/metal leaching (ARD/ML) and metals exposure across disturbed footprints		

Request Made by Interested Party:

CIRNAC recommends that AEM clearly define how disturbed mine-material surfaces (e.g., waste rock pads, ore pads, haul roads, mill foundations) were treated in the HHERA soil screening, and to provide closure confirmation criteria demonstrating that these surfaces are non-potentially acid generating (NPAG) and do not represent ongoing metals exposure pathways to human or ecological receptors.

Agnico Eagle’s Response to Request:

Section 5.1 of the HHERA (Appendix 6-D of the ICRP) describes the approach in the HHERA for predicting soil quality in closure. The HHERA soil screening focused on human health receptor locations as identified in the IQ Baseline Study, as well as locations of soil and vegetation monitoring from the Wildlife and Country Foods Screening Level Risk Assessment. These locations are appropriate for evaluating the exposure pathways of direct contact with soil and ingestion of plants and wild game.

As described in the ICRP, disturbed areas such as waste rock pads, ore handling areas, roads, airstrip, mill areas will be reclaimed by removing and dismantling infrastructure. Footprints of these areas will be evaluated as part of the ESA and managed accordingly, with contaminated soil reporting to the in-pit TSF or underground workings. Routine human or ecological contact with these surfaces is not anticipated. A Closure Investigation Work Plan (Appendix 6-C of the ICRP) was developed to evaluate any infrastructure that has not been remediated upon closure and to identify areas of the mines and soil volumes requiring remediation (i.e., where soils do not meet the soil quality remediation objectives).

Interested Party:	CIRNAC	Rec No.:	CIRNAC-54
Re:	Criteria for identifying “metal contamination” and adequacy of non-potentially acid generating/non-metal leaching (NPAG/NML) cover material		

Request Made by Interested Party:

CIRNAC recommends that AEM define the analytical criteria and decision rules used to classify areas as “metal contaminated” at closure, and to demonstrate that NPAG/NML cover material used for mitigation does not itself represent a metals exposure pathway under post-closure land use assumptions.

Agnico Eagle’s Response to Request:

Agnico Eagle’s site-specific soil quality reclamation objectives (SQROs) define the thresholds at which soils are deemed contaminated and which require remediation during closure. NPAG rock has been used as part of closure cover on the Portage Waste Rock Storage Facility (WRSF). Seepage from the Portage WRSF is monitored through the groundwater monitoring plan (e.g., sites along NP-2 Lake). Monitoring to date has not detected seepage water from the Portage Rock Storage Facility to NP-2 Lake. Monitoring of seepage will continue in closure (as per the Closure/Post-Closure Monitoring Plan) at station ST-16, to confirm exposure to the environment has been mitigated.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-55
Re:	Exposure scenario assumptions in the HHERA		

Request Made by Interested Party:

CIRNAC recommends that AEM confirm that Inuit organizations support the exposure scenarios used in the HHERA, including receptor selection, exposure duration, and assumptions regarding harvesting and off-site consumption of country foods, and to document how Inuit Qaujimajatuqangit informed those assumptions.

Agnico Eagle’s Response to Request:

Agnico Eagle acknowledges the importance of Inuit Qaujimajatuqangit. The assessment incorporated Inuit traditional knowledge and community input gathered through multiple engagement processes, including the 2016 FEIS, the 2018 FEIS Addenda, and the 2019 engagement activities. Building on this foundation, Agnico Eagle conducted additional closure focused engagement in 2024, including public meetings, focus groups, focused meetings and site visits. These sessions provided Inuit communities and organizations meaningful opportunities to advise on receptor locations, exposure durations, and assumptions related to harvesting practices and the offsite consumption of country foods. The information shared through these engagements directly informed the HHERA which had been reviewed and approved by Intervenors during the 2016 FEIS and 2018 FEIS Addenda; a summary table is presented in Appendix 6-D, Section 3.0, Table 1 of the HHERA.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-56
Re:	Apparent absence of soil POPCs despite widespread mine disturbance		

Request Made by Interested Party:

CIRNAC recommends that AEM should explicitly state whether mine wastes and disturbed mine-material surfaces were excluded from soil POPC screening in the HHERA, and to justify that exclusion in the context of post-closure land use and exposure assumptions.

Agnico Eagle’s Response to Request:

See response to CIRNAC-53 for further information on soil screening in the HHERA, and the application of the Closure Investigation Work Plan to identify soils requiring further remediation upon closure. The exclusion of mine wastes and disturbed mine-material surfaces from the soil screening in the HHERA is appropriate under post-closure land-use assumptions, as these mine-derived materials will be managed through engineered closure measures (e.g., covers, encapsulation, and access controls), supported by materials-specific geochemical and performance assessments. As a result, routine human or ecological contact with these surfaces is not anticipated.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-57
Re:	Chromium in sediments at Third Portage Lake		

Request Made by Interested Party:

CIRNAC recommends that AEM include a clear closure-position statement for chromium-impacted sediments at Third Portage Lake, identifying whether active management, enhanced monitoring, or acceptance with justification is proposed, and how this aligns with long-term closure objectives and liabilities.

Agnico Eagle’s Response to Request:

Elevated chromium concentrations have been observed in Third Portage Lake (TPE) sediments since 2009 (Appendix D1, 2024 CREMP Report). These exceedances triggered a targeted assessment program to evaluate sediment chromium bioavailability and potential effects within the CREMP. Follow-up sampling in 2014, along with bioavailability and toxicity testing completed in 2015, 2018, and 2019 (Appendix D1, 2024 CREMP Report), demonstrated that chromium concentrations at TPE are unlikely to adversely affect the benthic invertebrate community. This conclusion is supported by toxicity test results for *Chironomus dilutus* and *Hyalella azteca*, as well as sequential extraction analyses of sediment (Appendix D1, 2024 CREMP Report).

Sediment core and grab samples collected since 2013 have been variable however, concentrations have been declining since 2017 and remain below applicable CCME sediment quality guidelines (CCME, 1999). Based on this evidence, no active remediation is warranted at this time. Agnico Eagle will continue monitoring chromium trends at TPE to confirm ongoing improvement and ensure continued protection of aquatic life to meet closure objectives.

References:

Azimuth Consulting Group Inc. 2025. Meadowbank Complex 2024 Annual Report Appendix 26 - Meadowbank and Whale Tail 2024 CREMP Report.

Canadian Council of Ministers of the Environment. 1999. Canadian Sediment Quality Guidelines for the Protection of Aquatic Life – Chromium.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-58
Re:	Interim nature of Closure and Post-Closure Compliance Monitoring Plan (CPCMP) and Adaptive Reduction Framework		

Request Made by Interested Party:

CIRNAC recommends that AEM explicitly state that the CPCMP/Adaptive Reduction Framework are interim and to commit to a revised, CRP-ready version that includes full decision logic, evidence thresholds, and linkages to closure acceptance criteria

Agnico Eagle’s Response to Request:

Agnico Eagle confirms that the current CPCMP and its Adaptive Reduction Framework are interim documents intended to guide monitoring during the transition to closure. Also see responses to ECCC-01, ECCC-04, and ECCC-05.

The revised CPCMP will be fully aligned with, and submitted alongside, the FCRP. Consistent with Water Licence requirements for ongoing review and revision, Agnico Eagle will update the CPCMP and provide further details within the FCRP.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-59
Re:	Technical justification for any monitoring reductions		

Request Made by Interested Party:

CIRNAC recommends that AEM provide a comprehensive “monitoring change log” that lists every proposed reduction (station/parameter/frequency), the specific performance evidence required to justify the reduction, and a conservative default that no reductions occur unless the justification is met.

Agnico Eagle’s Response to Request:

In the CPCMP, Agnico Eagle proposed a process to reduce monitoring of parameters, stations, frequency, or all when criteria are met. As noted in response to ECCC-05, rationale for reduction in monitoring will be provided. No reductions will occur unless all evidence criteria are satisfied and approval from the NWB is obtained. The default monitoring station/parameter/frequency remains as outlined in Table 4.2-5 and Table 4.2-8 baseline frequencies (CPCMP 2025).

Future changes will be captured in a tracking sheet (e.g., change log) to show continuity and rationale for reduced monitoring frequencies after the new reduction has been approved by the NWB.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-60
Re:	Linkages to current operational/Water Licence monitoring		

Request Made by Interested Party:

CIRNAC recommends that AEM provide linkages from the current operational/Water Licence monitoring program to the proposed closure/post-closure program, explicitly summarizing all additions and reductions (stations, parameters, frequency) with rationale.

Agnico Eagle’s Response to Request:

As noted in response to CIRNAC-59, the default monitoring station/parameter/frequency remains as outlined in Table 4.2-5 and Table 4.2-8 baseline frequencies (CPCMP 2025); note these are the stations as currently listed in the Meadowbank and Whale Tail Type A Water licenses. The CPCMP will retain the core operational monitoring stations and parameters to ensure continuity, incorporate additional closure specific stations and analytes needed to verify performance against closure criteria (e.g., pit lake stability, seepage control), and phase out operational only elements as infrastructure is decommissioned and associated risk pathways are removed. Monitoring frequencies will be highest during early closure and will decrease as stable, protective conditions are demonstrated.

A detailed monitoring plan—defining stations, parameters, and sampling frequencies—will be submitted with the Final Closure and Reclamation Plan. As progressive reclamation is ongoing, it is premature to finalize the full set of additions and reductions at this stage.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-61
Re:	Adaptive Reduction Framework Decision Rules		

Request Made by Interested Party:

CIRNAC recommends that AEM define quantitative decision rules for adaptive reductions in monitoring, including minimum years/seasons of data, objective statistical tests (trend and equivalence), and “no-reduction” constraints for high-consequence endpoints (pit lakes, Collection Pond 23 discharge, Tailings Storage Facility (TSF) seepage, Waster Rock Storage Facility (WRSF) contact water).

Agnico Eagle’s Response to Request:

Decision rules for monitoring reductions have been proposed in the first CPCMP (sections within the CPCMP are noted):

- Water:
 - Removal of a parameter (Section 4.4.1.1)
 - Reduction in frequency at a station (Section 4.4.1.2)
 - Removal of a station (Section 4.4.2)
- Geotechnical
 - Reduction in frequency (Section 4.4.3)
 - Removal of instrumentation (Section 4.4.4)
- Reduction in TSF monitoring (water and geotechnical) (Section 4.4.5)
- Reduction in soil contaminant monitoring (Section 4.4.6)

No reductions will occur unless all evidence criteria are satisfied and regulatory approval from the NWB is obtained (Section 4.4.7 of the CPCMP). Further details will be provided in the FCRP.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-62
Re:	Seepage monitoring needs explicit trigger-response linkages		

Request Made by Interested Party:

CIRNAC recommends that AEM link seepage monitoring to a decision tree with defined triggers and actions, including escalation thresholds and how seep outcomes constrain other closure decisions (e.g., reconnection/discharge timing).

Agnico Eagle’s Response to Request:

Agnico Eagle is developing TARPs, communication processes and decision-making processes to be included into the FCRP, or its appendices, and subject to NWB review and approval. TARPs will be updated adaptively as new performance data become available. This approach ensures seepage monitoring directly informs timely actions and transparently constrains key decisions, including reconnection and discharge timing, until performance criteria are met.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-63
Re:	Workshop to advance the monitoring/reduction framework		

Request Made by Interested Party:

CIRNAC recommends that AEM convene a workshop with key reviewers to walk through the CPCMP network, proposed reductions, adaptive decision rules, and how monitoring supports closure acceptance and security release decisions, and to incorporate outcomes into the CRP-ready CPCMP.

Agnico Eagle’s Response to Request:

Agnico Eagle acknowledges CIRNAC’s recommendation and will evaluate the need for a workshop with key reviewers as part of developing the FCRP.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-64
Re:	Proposed Interim Closure and Reclamation Plan (ICRP) scope changes		

Request Made by Interested Party:

CIRNAC recommends that AEM clearly identify which components of the revised security estimate are based on approved closure concepts versus proposed (unapproved) revisions, and to explicitly flag any portions of the estimate that rely on assumptions that remain subject to regulatory review and approval.

Agnico Eagle’s Response to Request:

As presented in Table 8.3-3 of the ICRP, Meadowbank direct costs with larger changes based on activities of the ICRP are related to two components 1) Tailings Storage Facility; 2) Surface and Groundwater Management.

Table 8.3-3: Meadowbank RECLAIM Version 7.0 Comparison

Item	Component	Current Cost	2019 Cost	Difference
Open Pit	Portage	\$75,240	\$3,240	\$72,000
	Goose	\$73,080	\$1,080	\$72,000
	Vault	\$1,080	\$1,080	\$0
	Phaser	\$1,080	\$1,080	\$0
Underground Mine	-	\$0	-	\$0
Tailings Facility	-	\$32,121,068	\$38,680,308	-\$6,559,240
Rock Pile	Portage	\$2,707,534	\$1,378,767	\$1,328,767
	Vault	\$30,000	\$30,000	\$0
Buildings and Equipment	Meadowbank	\$8,121,236	\$8,029,508	\$91,728
	Baker Lake	\$1,685,266	\$1,660,670	\$24,596
	AWAR	\$749,930	\$993,078	-\$243,148
Chemicals and Contaminated Soil Management	-	\$1,316,981	\$1,316,981	\$0
Surface and Groundwater Management	-	\$25,409,069	\$7,997,222	\$17,411,847
Interim Care and	-	\$847,800	\$847,800	\$0

As presented in Table 8.3-4 of the ICRP, Whale Tail direct costs with larger changes based on activities of the ICRP are related to Surface and Groundwater Management.

Table 8.3-4: Whale Tail RECLAIM Version 7.0 Comparison

Item	Component Name	Current Cost	2019 Cost	Difference
Capital Costs				
Open Pit WT	-	\$35,345	\$35,345	\$0
Open Pit IVR	-	\$7,550,316	\$8,401,400	-\$851,084
Underground Mine	-	\$775,689	\$786,699	-\$11,010
Tailings Facility	-	\$0	\$0	\$0
Rock Pile WT	-	\$6,129,757	\$5,932,400	\$197,357
Rock Pile IVR	-	\$2,921,227	\$3,441,000	-\$519,773
Buildings and Equipment	-	\$3,774,657	\$3,774,657	\$0
Chemicals and Contaminated Soil Management	-	\$899,779	\$899,779	\$0
Surface and Groundwater Management	-	\$22,750,756	\$6,495,673	\$16,255,083
Interim Care and Maintenance	-	\$947,781	\$947,781	\$0

Interested Party:	CIRNAC	Rec No.:	CIRNAC-65
Re:	Security release framework		

Request Made by Interested Party:

CIRNAC recommends that AEM proactively engage with regulators, CIRNAC and the KivIA to collaboratively develop and document a clear framework for closure security release, including information requirements (e.g., as-built documentation, quality assurance/quality control (QA/QC) records, monitoring duration), decision criteria, sign off requirements, timing, and any holdback provisions, and to reflect that framework in future closure and security submissions.

Agnico Eagle’s Response to Request:

Agnico Eagle feels there is a framework in place to ensure that Agnico Eagle receives a reduction in security for the work that would be progressively reclaimed. Progressive reclamation and reduction of security is normal requirement of our license and also associated policies (refer to KivIA-04 for additional details). We have listed the activities with closure as per our applications to NIRB and NWB and security was approved by all parties during the licensing phase. It is our understanding that the concept of closure was approved and that all parties knew that progressive reclamation would occur and be supported by all parties to ensure the activities at the site would reduce the activity at time of final closure. This would be the incentive for companies to achieve that. Based on this the direct and indirect costs from the security calculation, that is approved, would be reduced based on the activities highlighted in the costing, as per this case RECLAIM.

The schedule of activities was outlined in Section 10 of the ICRP, and Figure 10.2-1 and 10.2-2: Capping of the TSF will occur from 2026 to 2028. A reduction of security associated with this work was outlined in Section 8.5 and Table 8.5-1.

Based on this, Agnico Eagle has initiated discussions with NWB and will provide a framework that is aligned with the license and existing policies for future discussions.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-66
Re:	Evidence requirements to support security reduction		

Request Made by Interested Party:

CIRNAC recommends that AEM develop component-specific acceptance and evidence packages that define measurable performance criteria, minimum monitoring or observation periods, and documentation requirements that must be met before security associated with each major closure component can be reduced.

Agnico Eagle’s Response to Request:

Agnico Eagle will be placing rock on the closed north and south cell TIA. The cost is directly related to the volume of rock, and the time and materials needed to place the rock. This will be the amount we will request for reduction of security in 2028. See KivIA-04 for additional details.

The monitoring will continue as per the ICRP. The monitoring will show, as per the criteria already noted in the ICRP, that the facility will be chemically and physically stable and will validate our Water Quality predictions.

The information has been provided to CIRNAC since November 2024.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-67
Re:	Escalation, inflation, and timing of security updates		

Request Made by Interested Party:

CIRNAC recommends that AEM immediately update the closure and reclamation security estimate to reflect current unit rates and inflation, independent of unresolved ICRP scope changes, and to commit to a subsequent update once the revised ICRP scope is finalized and the updated RECLAIM 8 framework has come into effect.

Agnico Eagle’s Response to Request:

Agnico Eagle will not use RECLAIM 8 as this version is not complete, plus there needs to be a policy discussion as well, prior to any use or publication. It is important proper consultation continues with all parties to ensure that all concerns have been addressed and properly communicated. Agnico Eagle has used RECLAIM 7 for the updated costs that have been provided in the ICRP.

Through CIRNACs email request for a “final” RECLAIM 8 review, Agnico Eagle completed a preliminary review of recent updates made and filed comments on April 17. Again, Agnico Eagle is concerned with the lack of clarity and consultation on RECLAM 8. Agnico Eagle feels strongly that the Reclaim 8 version is not ready for publication.

ENVIRONMENT AND CLIMATE CHANGE CANADA (ECCC)

Interested Party:	ECCC	Rec No.:	ECCC-01
Re:	Closure criteria - stability		

Request Made by Interested Party:

ECCC recommends the Proponent:

1. *describe how stability in water quality monitoring will be assessed to determine whether closure objectives have been achieved; and*
2. *discuss whether stability criteria should be included as part of the closure criteria or in the monitoring plan, and update the documents accordingly.*

Agnico Eagle’s Response to Request:

Response to bullet 1)

Water quality monitoring will be completed at designated locations within the Meadowbank (Table 4.2-5) and Whale Tail (Table 4.2-8) complexes. Closure objectives will be considered met when stability demonstration methods (Appendix 6A, Section 4.4) have been achieved.

Response to bullet 2)

Agnico Eagle defines chemical stability criteria as

- when COPC concentrations at compliance locations meet applicable numerical closure criteria and show no increasing or decreasing trend over the most recent five-year¹ period.

This definition can be added to the next update of the CPCMP.

¹ Typical five-year period sampling consists of annual sampling for three years, followed by a fourth sampling event within the next two-year interval.

Interested Party:	ECCC	Rec No.:	ECCC-02
Re:	Water quality – tailings cover configurations		

Request Made by Interested Party:

ECCC recommends the Proponent clarify which parameters may exceed water licence criteria in the no cover scenario.

Agnico Eagle's Response to Request:

Agnico Eagle would like to clarify that the North and South Cell TSF will be covered, and that a no cover scenario was only included for comparison to the preferred option.

Interested Party:	ECCC	Rec No.:	ECCC-03
Re:	Water quality results for post-flushing period tailings storage facility runoff		

Request Made by Interested Party:

ECCC recommends the Proponent provide interpretation and discussion of the results presented in Table 2.2-2 for total cyanide and aluminum.

Agnico Eagle's Response to Request:

In reference to aluminum, these results are due to the higher potential for loading of aluminum in the NPAG cover than in the tailings. However, concentrations are predicted to remain well below the water license criteria of 1 mg/L and CCME guideline of 0.1 mg/L, before factoring in mixing with the regional watershed.

In reference to total cyanide, the water quality model predicts decreasing concentrations with cover placement, however there are no noticeable differences between a 1 m and 2 m cover. Please find the corrected table below, all in mg/L.

Table ECCC-03: Corrected values for table 2.2-2 in Appendix 6J-B

Parameter	WLC	SSP2-4.5					
		0 m Cover		1 m Cover		2 m Cover	
		Avg	Max	Avg	Max	Avg	Max
TDS	1400	842.5	955.7	147.7	179.7	147.3	171.0
NH3-N	16	1.411	1.601	0.072	0.135	0.071	0.118
NO3-N	20	3.507	3.978	0.400	0.545	0.398	0.506
T-CN	0.5	0.017	0.019	0.004	0.004	0.004	0.004
Cl	1000	15.1	17.1	2.2	2.8	2.2	2.6
Al	1	0.0099	0.0113	0.0108	0.0123	0.0108	0.0123
As	0.3	0.044	0.050	0.004	0.006	0.004	0.005
Cd	0.002	0.00008	0.00009	0.00001	0.00001	0.00001	0.00001
Cu	0.1	0.010	0.011	0.004	0.004	0.004	0.004
Hg	0.0004	0.000005	0.000006	0.000010	0.000011	0.000010	0.000011
Parameter	WLC	SSP5-8.5					
		0 m Cover		1 m Cover		2 m Cover	
		Avg	Max	Avg	Max	Avg	Max
TDS	1400	853.7	929.0	149.7	181.3	150.1	176.6
NH3-N	16	1.430	1.556	0.073	0.136	0.073	0.128
NO3-N	20	3.554	3.867	0.407	0.550	0.407	0.530
T-CN	0.5	0.017	0.018	0.004	0.004	0.004	0.004
Cl	1000	15.3	16.7	2.2	2.8	2.2	2.7
Al	1	0.0101	0.0110	0.0109	0.0121	0.0110	0.0119
As	0.3	0.044	0.048	0.004	0.006	0.004	0.005
Cd	0.002	0.00008	0.00009	0.00001	0.00001	0.00001	0.00001
Cu	0.1	0.010	0.011	0.004	0.004	0.004	0.004
Hg	0.0004	0.000005	0.000006	0.000010	0.000011	0.000010	0.000011

Interested Party:	ECCC	Rec No.:	ECCC-04
Re:	Monitoring timelines		

Request Made by Interested Party:

ECCC recommends the Proponent clarify that the timelines and dates provided in Tables 2.3-1, 4.2-5 and 4.2-8 are guides, but that any reductions in monitoring efforts will be based on monitoring results that support achievement of closure objectives.

Agnico Eagle’s Response to Request:

Agnico Eagle confirms that the timelines and dates in Tables 2.3-1, 4.2-5, and 4.2-8 from the CPCMP are guides. Any reduction in monitoring frequency, scope, or duration will only occur when monitoring results demonstrate closure criteria have been met (e.g., on a parameter or station perspective).

Interested Party:	ECCC	Rec No.:	ECCC-05
Re:	Removal of water monitoring parameters		

Request Made by Interested Party:

ECCC recommends the Proponent:

1. *provide additional information on the three-year assessment period for non-detects; and*
2. *clarify the process for approval of monitoring reductions and whether it is the Proponent's intention to transition removal of water monitoring to pre-defined triggers in management plans.*

Agnico Eagle's Response to Request:

Response to bullet 1)

Non-detect analytical results for any given parameter at a defined station reported below the applicable method detection limit (MDL), will be removed only where all validated results for that parameter are non-detect across three consecutive monitoring years at the relevant station(s) under the same matrix (e.g., surface water or groundwater) and seasonal program. If MDLs change over time, the assessment will use the most conservative MDL applied during the period. Where detections are isolated and attributable to an identified, corrected cause (e.g., sampling artifact), the dataset will document the root cause and corrective action such as removal or continuation of monitoring.

Response to bullet 2)

Agnico Eagle will (i) provide the rationale for monitoring reduction in the annual report or in a technical evaluation memo, that includes a summary of datasets, trends, and rationale; and (ii) seek formal approval via notification of change to Schedule I. An update to the CPCMP would be provided.

Interested Party:	ECCC	Rec No.:	ECCC-06
Re:	Reduction in frequency of water monitoring at a station		

Request Made by Interested Party:

ECCC recommends the Proponent discuss:

1. *whether the conditions presented in Section 4.4.1.2 are considered individually or holistically to determine whether a reduction of water monitoring frequency may be appropriate; and*
2. *why the absence of both an increasing and decreasing trend would be required over five years to reduce monitoring frequency.*

Agnico Eagle’s Response to Request:

Response to bullet 1)

The conditions in Section 4.4.1.2 are evaluated holistically. Each condition functions as a safeguard; a reduction in monitoring frequency would only be considered when all conditions are satisfied together. If any single condition is not met, the current frequency is maintained.

Response to bullet 2)

The intent is to demonstrate stability before reducing effort. Showing no upward or downward trend for at least five years indicates the station is not undergoing directional change. A five-year window spans multiple hydrologic seasons and inter-annual climatic variability typical of the Arctic, and reduces the chance of acting on short-term anomalies.

Interested Party:	ECCC	Rec No.:	ECCC-07
Re:	Closed mine status		

Request Made by Interested Party:

The Closure and Post-Closure Monitoring Plan states that since “...the Meadowbank Complex may achieve ‘closed mine status’ under the MDMER during Closure, it is not expected that Post-Closure monitoring will be required. Should the Meadowbank Complex not achieve ‘closed mine status’ then CREMP [Core Receiving Environment Monitoring Program] monitoring will occur at reduced intervals.”

ECCC notes that required monitoring under the MDMER and the Water Licence are not necessarily tied together. Even if the Proponent receives closed mine status under the MDMER, the Water Board may still require monitoring under the water licence.

If closed mine status is achieved during closure, please note that any effluent discharged to any water or place referred to in subsection 36(3) of the Fisheries Act from the recognized closed mine is subject to the pollution prevention provisions of the Fisheries Act, including subsection 36(3) which states:

“Subject to subsection (4), no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water.”

N/A – Comment for information

Agnico Eagle’s Response to Request:

Agnico Eagle thanks ECCC for their comments.

Interested Party:	ECCC	Rec No.:	ECCC-08
Re:	Meadowbank Tailings Storage Facility		

Request Made by Interested Party:

ECCC recommends the Proponent clarify whether the closure plan for the Meadowbank TSF will be revisited as part of the FCRP for all facilities, given that the TSF would still be within the mine site footprint.

Agnico Eagle’s Response to Request:

Agnico Eagle confirms that the closure plan for the Meadowbank TSF will not be revisited because it is considered final. Please refer to CIRNAC-02 and CIRNAC-08 for additional information.

Interested Party:	ECCC	Rec No.:	ECCC-09
Re:	Encapsulation of tailings by permafrost		

Request Made by Interested Party:

ECCC recommends the Proponent clarify whether there are contingency plans for tailings and seepage management in case the anticipated encapsulation of the tailings by permafrost does not occur as planned.

Agnico Eagle's Response to Request:

See response to KivIA-03 for details on cover design and performance.

Interested Party:	ECCC	Rec No.:	ECCC-10
Re:	Closure activities for quarries		

Request Made by Interested Party:

ECCC recommends the Proponent explain how they would manage any overflow of ponded water from the quarry during periods of high precipitation.

Agnico Eagle's Response to Request:

Quarry sites with seasonal ponding will have the base of the quarry graded to provide unrestricted drainage of runoff to the surrounding tundra, and to prevent ponding or collection of water. Please refer to DFO-03 for further information regarding quarry water management.

Interested Party:	ECCC	Rec No.:	ECCC-11
Re:	Disposal of surplus fuel		

Request Made by Interested Party:

ECCC recommends the Proponent clarify whether surplus fuel not sold or returned to suppliers during closure and reclamation activities will be disposed of in the same manner as waste oil (i.e., burned progressively for energy).

Agnico Eagle’s Response to Request:

Agnico Eagle will prioritize preventing surplus fuel via inventory drawdown. Remaining volumes will be evaluated for quality and, where appropriate, used for on-site energy recovery in equipment. Progressive burning practices referenced for waste oil apply only where the material and equipment meet the above criteria; otherwise, surplus fuel will not be burned and will be shipped off site. Agnico Eagle will maintain records of volumes, testing, disposition, and approvals.

Interested Party:	ECCC	Rec No.:	ECCC-12
Re:	Disposal of contaminated soil		

Request Made by Interested Party:

ECCC recommends that, where landfarming does not achieve applicable soil quality objectives, the Proponent consider alternative or complementary remediation methods rather than disposing of contaminated soils in the Whale Tail underground. The following remediation options may be appropriate for the project soil conditions and should be evaluated based on site-specific characteristics:

1. **Biopiles (engineered bioremediation cells):** Excavated contaminated soils arranged in engineered piles with controlled aeration, nutrient addition, and moisture management to enhance biodegradation.
2. **Nutrient biostimulation and bioaugmentation:** Enhancement of indigenous microbial activity through nutrient amendments and/or the introduction of cold-adapted hydrocarbon-degrading microbial consortia.
3. **Soil vapor extraction (SVE) and air sparging:** SVE applies a vacuum to remove volatile and semi-volatile hydrocarbons from unsaturated soils, while air sparging injects air into saturated zones to volatilize contaminants for subsequent capture via SVE.
4. **Low-temperature thermal desorption (LTTD) or in-situ thermal enhancement:** Application of heat, either ex situ or in situ, to volatilize or desorb hydrocarbons for capture and treatment.
5. **Soil amendments (e.g., biochar or compost):** Addition of amendments to improve soil physical properties and microbial habitat, potentially enhancing degradation processes, including within frozen or partially frozen soil environments.

Agnico Eagle’s Response to Request:

Agnico Eagle thanks ECCC for their feedback and comments of the key technical considerations to consider during the design of the contaminated soil containment and remediation plan. Further details will be provided in the FCRP.

FISHERIES AND OCEANS CANADA (DFO)

Interested Party:	DFO	Rec No.:	DFO-01
Re:	All-Weather Access Road (AWAR) and Whale Tail Haul Road (WTHR) Fish Bearing Water Crossings		

Request Made by Interested Party:

If the roads are removed:

- *Each fish bearing water crossing will require design for fish passage and long term physical stability. DFO will require a request for review for these crossings along with the designs.*
- *Monitoring will be required at these locations post closure and reclamation to ensure they remain stable.*
- *What will be the schedule for providing general design of fish bearing water ways?*

If the roads remain in place:

- *What will be the long term plan for maintaining culverts along the these roads?*
- *Which party will be responsible for maintaining these water crossings?*

What contingencies will be put in place under both scenarios if the fish bearing water crossings are structurally unstable and/or causing obstruction to fish passage.

Agnico Eagle’s Response to Request:

Agnico Eagle’s base case is that roads will be removed and have addressed this response based on removal of roads. Discussions on whether the roads will remain are ongoing with relevant parties. Should roads remain, the maintenance of culverts (and road) would belong to the party who takes ownership, and not Agnico Eagle. The owner would have to adhere to applicable DFO practices and procedures for routine maintenance, or eventual removal.

The following responses to DFO’s comments pertain to the base case, that the roads will be removed.

Bullet 1:

As outlined in Section 6.11.3 of the Meadowbank Complex ICRP:

Cross-drain structures (cross-ditches) will be installed where necessary between culvert sites. Where armouring rock is required, this rock will be NPAG/NML for the protection of aquatic life. In-stream works will be excavated to the level of the original channel bed. Where affected watercourses are fish-bearing, fish passage will be maintained. Work at fish-bearing sites will consider appropriate timing for in-stream works and will be completed in accordance with DFO operational statements.

Based on the details of the Meadowbank Complex ICRP, watercourse crossing infrastructure removal at fish-bearing sites will be completed in accordance with DFO practices. A typical design for culvert removal, bridge removal, and stabilization will be submitted prior to the activity.

Bullet 2:

As outlined in Section 4.2.2 of the Closure and Post-Closure Monitoring Plan (CPCMP; Appendix 6-A of the ICRP), annual geotechnical inspection of facilities are required under the Water Licenses and will continue into Closure. Table 4.2-1 (of the CPCMP) provides the components that are routinely inspected by geotechnical engineers and includes roads, including culverts and bridges.

Section 4.5 of the CPCMP discusses monitoring during the post-closure period which will be undertaken each year. Agnico Eagle will aim to schedule the inspections components to coincide, where possible, with any regulatory site inspections. Further details on post-closure monitoring will be addressed through the FCRP.

Bullet 3:

The schedule for providing typical designs for fish passage and stability at fish bearing waterway crossings along the AWAR and WTHR will be addressed through the FCRP.

Interested Party:	DFO	Rec No.:	DFO-02
Re:	Fish Habitat Exposure to PAG/ML Rock Run-Off		

Request Made by Interested Party:

Please provide a list of potential mitigations to be used if PAG/ML rock leaches to fish bearing surface waters?

Agnico Eagle’s Response to Request:

PAG/ML rock is not anticipated along the AWAR or the WTHR since roads were constructed using NPAG/NML material; however, the following mitigation measures could be applied, as needed:

- Isolate and contain any contact water: build temporary berms and install silt curtains at culverts/outfalls to limit downstream sediment and contaminant transport.
- Intercept and divert clean water around PAG/ML sources using diversion ditches/berms to reduce infiltration and runoff contact.
- Encapsulate exposed PAG/ML rock with NPAG cover.
- Implement erosion and sediment controls (e.g., silt fences, riprap armoring, surface stabilization) to prevent mobilization of fines and metals.
- Increase monitoring frequency at culverts/stream crossings and nearest fish-bearing receivers; establish triggers for corrective actions, including temporary stop-work, additional containment, and regulator notification

Interested Party:	DFO	Rec No.:	DFO-03
Re:	Fish Access to Quarries and Borrow Sites Along the AWAR and WTHR		

Request Made by Interested Party:

Please provide a list, and map, of quarries that are likely to contain flooded floors or significant sections of flooding, and comment for each one on the likelihood to connect to waterbodies or water courses nearby during high water periods.

Agnico Eagle’s Response to Request:

A list of quarries with comments on existing flooding is available in Appendix 7 of the 2024 Annual Report (Appendix D1 and E1 for the AWAR and WTHR, respectively), with an updated list being prepared for the 2025 Annual Report.

Agnico Eagle does not intend for quarries and borrow sites along the AWAR and WTHR to become fish habitat. Closure and reclamation activities at these sites will be completed with prevention of fish passage to quarries and borrow sites as a consideration to avoid possible stranding. Access to quarry areas (including those with flooded floors or significant sections of flooding) will be blocked by placing a rock pile across the entryway to prevent access by wheeled vehicles (ICRP Section 6.12.3.1), which should also act as a barrier to fish passage at sites where the entry acts as a low point where drainage may occur. In addition, crests of quarries will be bermed off, preventing fish passage in sites where overflow may occur from locations other than the entryway (All-Weather Access Road and Whale Tail Haul Road Quarries Progressive Reclamation Plan, Table 3-1). Quarry sites with seasonal ponding will have the base of the quarry graded to provide unrestricted drainage of runoff to the surrounding tundra, and to prevent ponding or collection of water. Water quality will be monitored as per the CPMC (ICRP Section 6.12.3.2) to ensure that closure objectives related to chemical stability (ICRP Table 6.11-1) are achieved.

As reported in the Annual Reports (Most recently 2020, 2021, 2022, 2023, 2024) regular inspections of the eskers/quarries along the AWAR & WTHR on Crown Land are performed to document the presence/absence of flow, erosional concerns, and turbidity plumes and to ensure that runoff, if any, would be free of any contaminants and would not impact the environment. No issues with runoff water inside the quarries to the environment have been noted.

Interested Party:	DFO	Rec No.:	DFO-04
Re:	Post-Closure Monitoring of Fish and Fish Habitat		

Request Made by Interested Party:

DFO recommends that CPCMP include additional aspects of fish and fish habitat monitoring:

- *a list of locations where fish passage will be reestablished, how these will be deemed suitable for fish and physically stable, and how this will be monitored;*
- *a list of locations, and a map, where fish will have access to mine infrastructure (end pit lakes, quarries, drainage channels, etc.), how these features will be deemed suitable for fish, and how this will be monitored; and*
- *any other aspects deemed relevant for the protection of fish and fish habitat in the postclosure environment.*

Agnico Eagle’s Response to Request:

A list of fish-bearing crossing locations where fish passage will be maintained along the AWAR and WTHR is available in the Meadowbank Gold Project Habitat and Fisheries Assessment: All-Weather Road report (Cumberland, 2005), and the Whale Tail Phase I FEIS (Appendix 6D).

Agnico Eagle’s base case is that flooded pits and other mining areas (quarries, drainage channels, etc.) are not designed to be fish habitat at closure. Any mining areas where offsetting has been proposed (e.g., Portage, Goose, Vault, Phaser pits) will be replaced with contingency measures. Agnico Eagle will work with DFO to amend existing *Fisheries Act* Authorizations involving end pit lakes as offsets and is working to implement suitable alternative offsetting measures. This excludes offsets at Amaruq under FAA 16-HCAA-00370 and 20-HCAA-00275, where the respective offsetting plans list the monitoring that will be conducted to ensure their success.

Closure principles and criteria for both physical stability and chemical stability of transportation routes and quarries associated with the Meadowbank complex are listed in Table 6.11-1 of the ICRP. They are listed in Table 6.2-1 for open pits of the Meadowbank complex.

Where applicable, Agnico Eagle will consider updating the CPCMP with the recommendations listed by DFO in future iterations of the CPCMP.

Attachment A: Meadowbank Complex Tailings Storage Facility Thermal Cover Model



Meadowbank Complex Tailings Storage Facility Thermal Cover Model

Agnico Eagle Mines Ltd.

11600 Rue Louis Bisson, Mirabel, QC J7N 1G9

Prepared by:

SLR Consulting (Canada) Ltd.

200 - 887 Great Northern Way, Vancouver, BC V5T 4T5

SLR Project No.: 201.089631.00001

December 5, 2025

Revision: 0

Revision Record

Revision	Date	Prepared By	Checked By	Authorized By
0	December 5, 2025	K. Debnath, C. Stevens	David Ritchie	Sean Lynch



Statement of Limitations

This report has been prepared by SLR Consulting (Canada) Ltd. (SLR) for Agnico Eagle Mines Ltd. (Client) in accordance with the scope of work and all other terms and conditions of the agreement between such parties. SLR acknowledges and agrees that the Client may provide this report to government agencies, interest holders, and/or Indigenous communities as part of project planning or regulatory approval processes. Copying or distribution of this report, in whole or in part, for any other purpose other than as aforementioned is not permitted without the prior written consent of SLR.

Any findings, conclusions, recommendations, or designs provided in this report are based on conditions and criteria that existed at the time work was completed and the assumptions and qualifications set forth herein.

This report may contain data or information provided by third party sources on which SLR is entitled to rely without verification and SLR does not warranty the accuracy of any such data or information.

Nothing in this report constitutes a legal opinion nor does SLR make any representation as to compliance with any laws, rules, regulations, or policies established by federal, provincial territorial, or local government bodies, other than as specifically set forth in this report. Revisions to legislative or regulatory standards referred to in this report may be expected over time and, as a result, modifications to the findings, conclusions, or recommendations may be necessary.



Table of Contents

Statement of Limitations	ii
Table of Contents	iii
Acronyms and Abbreviations	v
1.0 Introduction	1
1.1 Scope of Work.....	1
1.2 Site Location	2
2.0 Background Data	2
3.0 Thermal Modeling	3
3.1 Validation Model.....	3
3.1.1 Model Setup	3
3.1.2 Modeling Approach.....	3
3.1.3 Boundary Conditions	4
3.1.4 Material Properties	4
3.1.5 Results of Validation Model	4
3.2 Thermal Modeling with SLR Climate Data	5
3.2.1 Model Setup	5
3.2.2 Model Development.....	5
3.2.3 Material Properties	9
3.2.4 Results of SLR’s Models	10
4.0 Closure	16
5.0 References	17

Tables in Text

Table 1: Source of Site Climate Data Applied to Validation Models	4
Table 2: Summary of Material Thermal Properties.....	10
Table 3: Summary of Active Zones with Different NAG waste rock Waste Cover at 2100...	11



Figures in Text

Figure 1:	Daily Air Temperature at the Meadowbank site (2009-2022) and CanESM5 GCM under SSP2-4.5 Climate Scenario (2022-2100).	6
Figure 2:	Daily Wind Speed Recorded at Meadowbank Site (2009-2022) and Based on the CanESM5 GCM under SSP2-4.5 Climate Scenario (2022-2100).....	7
Figure 3:	Daily Relative Humidity Data Recorded at Amaruq Site (2020-2022) and Derived from CanESM5 GCM, under SSP2-4.5 Climate Scenario (2022-2100).	7
Figure 4:	Daily Solar Radiation Data Derived from CanESM5 GCM, under SSP2-4.5 Climate Scenario (2022-2100).	8
Figure 5:	Daily Surface Albedo data derived from CanESM5 GCM, under SSP2-4.5 Climate Scenario (2022-2100).	8
Figure 6:	Daily Snow Depth Data Recorded at Backer Lake Station (2020-2022) and Derived from CanESM5 GCM, under SSP2-4.5 Climate Scenario (2022-2100).....	9
Figure 7:	Thaw Depths into Tailings with Different Thickness of NAG Waste Rock Cover ...	11
Figure 8:	Thaw Depth Below Tailings Surface with no NAG Waste Rock Cover (2022–2100)	12
Figure 9:	Tailings Surface Temperature from 2022-2100 with no NAG Waste Rock Cover..	12
Figure 10:	Thaw Depth Below Surface of 2 m of NAG Waste Rock Cover (2022–2100).....	13
Figure 11:	Tailings Surface Temperature from 2022-2100 with 2 m of NAG Waste Rock Cover	13
Figure 12:	Thaw Depth Below Surface of 3 m NAG Waste Rock Cover (2022–2100).....	14
Figure 13:	Tailings Surface Temperature from 2022-2100 with 3 m of NAG Waste Rock Cover	14
Figure 14:	Thaw Depth Below Surface of 4 m NAG Waste Rock Cover (2022–2100).....	15
Figure 15:	Tailings Surface Temperature from 2022-2100 with 4 m of NAG Waste Rock Cover	15

Appended Figures

Figure A-1: Site Location

Figure A-2: Thermistor Location Plan

Appendices

Appendix A **Site Map**

Appendix B **Results of Validation Model**

Appendix C **SLR Climate Projection Data**



Acronyms and Abbreviations

~	approximately
Agnico Eagle	Agnico Eagle Mines Limited
CMIP6	Coupled Model Intercomparison Project Phase 6
GCM	Global Coupled Model
IPCC	Intergovernmental Panel on Climate Change
$\text{kJ/m}^3 \text{ }^\circ\text{C}$	kilojoules per cubic metre per degree Celsius
m	metre
mbgs	metres below ground surface
masl	metres above sea level
NAG	non-acid generating
NCIS	North Cell Internal Structure
SEB	Surface Energy Balance
SLR	SLR Consulting (Canada) Ltd.
SSP	Shared Socioeconomic Pathway
TSF	Tailings Storage Facility
W/m K	watts per metre kelvin



1.0 Introduction

SLR Consulting (Canada) Ltd. (SLR) was retained by Agnico Eagle Mines Limited (Agnico Eagle) to conduct thermal modeling of the Tailings Storage Facility (TSF) at the Meadowbank Complex (the site). The scope of work included development of a ground thermal model to estimate long-term thermal performance of a non-acid generating (NAG) waste rock cover (i.e., rockfill cover) at the site using calibrated climate change projection data (the Project). The thermal model was developed using the GeoStudio software package TMEP/W, and incorporated site data provided by Agnico Eagle such as TSF surface elevations and the material properties of cover materials. Climate change projections for variables used in the thermal model were developed by ClimSystems (part of SLR) using the latest, and scientifically reliable sources for these data.

For the Project, climate change data from the Coupled Model Intercomparison Project Phase 6 (CMIP6) were used to determine the potential climate conditions at the site to the year 2100. Climate change scenario Shared Socioeconomic Pathway (SSP) 2-4.5 (i.e., SSP2-4.5: “Middle of the Road”) was used to consider a future with an estimated increase of 2.7°C in global mean temperature by the end of the century when compared to the historical global mean temperature. Projections of the future climate for the site were calibrated using available site meteorological data, and regional climate data. In total, six CMIP6 models were used based on the availability of climate variables (i.e., air temperature), temporal coverage, and representation of the study region. These six models are included in the Canadian Downscaled Climate Scenarios-univariate dataset for CMIP6 (CanDCS-U6) ensemble.

The results of this analysis are meant to assist Agnico Eagle in evaluating the reliability of previous thermal assessments of the TSF.

1.1 Scope of Work

The primary objective of the Project was to evaluate the potential thaw depth beneath a NAG waste rock cover thicknesses of 2 m, 3 m, and 4 m. SLR completed the work in accordance with the terms and conditions outlined in the requested scope of work provided by Agnico Eagle on July 4, 2025.

The scope of work for the Project included the following:

- Validate material thermal properties using site-specific climate data and available ground temperature records.
- Develop a thermal model for a rockfill cover using the climate series developed by SLR.
- Provide estimated thaw-depths, maximum tailings surface temperatures, and time-series thermal results to the year 2100 in conjunction with climate with projections under scenario SSP2-4.5.



1.2 Site Location

The Meadowbank TSF is located within the dewatered portion of the northwestern arm of Second Portage Lake. It consists of two main cells: the North Cell and the South Cell. The site location is illustrated in **Appendix A-1**.

- **North Cell:** Includes Saddle Dams 1 and 2, the Stormwater Dike, the North Cell Internal Structure (NCIS), and two rock-filled access roads (RF1 and RF2). All structures, except the NCIS (constructed to an elevation of 154 meters above sea level [masl]), are built to 150 masl.
- **South Cell:** Includes the Central Dike and Saddle Dams 3, 4, and 5, constructed to an elevation of 145 metres above sea level (masl).

Since 2019, Agnico Eagle has incorporated in-pit tailings deposition into its management strategy. Portage Pit E serves as the primary active tailing's repository, with the TSF North and South Cells used intermittently. Portage Pit A, although designed for tailings, is currently used mainly for water management. Goose Pit, which briefly received tailings from 2019 to 2020, now holds submerged tailings and is actively aerated to manage water quality.

2.0 Background Data

A review of available documentation was undertaken to support the development of a thermal model for the Meadowbank TSF. Two key sources were considered:

Meadowbank TSF Closure Design Data (Agnico Eagle 2023a)

Data held on file by Agnico Eagle were provided as part of closure design planning for a concept for the TSF. The concept emphasizes the use of a thermal cover system composed of non-acid generating (NAG) rockfill to maintain the tailings in a frozen state or in a condition of high saturation to minimize oxidation.

Included in the data provided by Agnico Eagle were preliminary thermal modeling results completed using GeoStudio (TEMP/W and SEEP/W) evaluated long-term performance of 2 m and 4 m cover scenarios under climate change projections extending to 2122. Calibration was undertaken using site thermistor data and trial cell results. Results indicate that a 4 m cover is generally sufficient to maintain frozen conditions, while 2 m covers are more sensitive to thawing but may still achieve performance objectives if adequate saturation (greater than 85%) is maintained.



Meadowbank Thermal Monitoring Report (Agnico Eagle 2023b)

This report summarizes thermistor monitoring results for the TSF and Rockfill Storage Facilities. Installed thermistors show that freeze-back is progressing in the North Cell, with frozen conditions near surface and unfrozen zones remaining at depth in proximity to the former reclaim pond. Thermistors installed below progressive capping demonstrate that the active layer is contained within the rockfill, supporting the effectiveness of the cover system. Monitoring confirms that freeze-back is occurring faster than originally predicted by Golder (2008), which had anticipated full freeze-back within approximately (~) 40-years post-operations. The monitoring program is designed to validate thermal modeling predictions and to inform ongoing closure design. The data indicates that capping enhances containment of the active layer and promotes permafrost aggradation. However, unfrozen conditions remain beneath some parts of the TSF, underscoring the importance of robust cover design and long-term monitoring.

3.0 Thermal Modeling

The modeling was carried out using TEMP/W software (Version 2025.1.1.182) (Bently Systems Incorporated 2025), with climate boundary conditions established by SLR using site climate data, long-term climate change projections, and software-generated temperature-dependent functions for the input materials.

3.1 Validation Model

Validation models were established to verify the thermal properties, specifically the thermal conductivity and specific heat capacity, of NAG waste rock and tailings.

3.1.1 Model Setup

A one-dimensional thermal model was developed using TEMP/W, following the material layering (i.e., 25 m of tailings, and 33 m of bedrock) described in Agnico Eagle (2023a).

The model domain included tailings overlain by NAG waste rock cover with a thickness of 3.3 m.

Initial temperature conditions were established using thermistor data for NC17-07 on January 1, 2020, and for NCIS04 on September 7, 2020. The data were provided by Agnico Eagle.

Thermistors installed in north and south cell are illustrated in **Appendix A-2**.

3.1.2 Modeling Approach

Validation models were run for an exposed tailings surface and with a NAG waste rock cover 3.3 m thick over tailings. The model with an exposed tailings surface used initial temperature measured from NC17-07. The initial temperature for the model with NAG waste rock covers was based on NCIS-04. Both these thermistors are located in the north cell. The validation models were run for the period of available ground temperature data (NCIS04 from September 7, 2020, to December 31, 2022, and NC17-07 from January 1, 2020, to December 31, 2022).

The short-term simulation period, extended from 2020 to 2022, was used to compare the temperature at known thermistor depths. Output included temperature changes in time at each sensor depth.



3.1.3 Boundary Conditions

The SEB boundary conditions were applied to the upper surface of the model and a constant geothermal flux of 3.024 kJ/day/m² was applied to the bottom. The validation model SEB boundary conditions used site-specific climate data from the Meadowbank, Baker Lake, and Amaruq sites for the period of 2020 to 2022. The source of the site climate data by parameter is summarized in Table 1.

Table 1: Source of Site Climate Data Applied to Validation Models

Parameter	Source Location	Year	Notes
Air Temperature	Meadowbank	2020–2022	Daily Average Data (Degrees Celsius[°C])
Wind Speed	Meadowbank	2020–2022	Daily Average Wind Speed (m/day)
Relative Humidity	Amaruq	2020–2022	Fraction
Snow Depth	Baker Lake	2020–2022	Daily snow depth on ground (m)
Solar Radiation	Software Generated	2020–2022	Solar radiation data was generated by the TEMP/W software at Latitude 65.02°
Albedo	Assumed	2020–2022	Albedo is assumed

3.1.4 Material Properties

The material properties applied to the validation models were based on laboratory test data, historical reports provide by Agnico Eagle (2023a), and SLR’s professional experience.

3.1.5 Results of Validation Model

Ground temperature data from thermistors NC-17-07 and 2020-NCIS-04, installed at different depths, were compared with modeled temperature profiles for an exposed tailings surface and with a rockfill cover, respectively. The ground surface elevations of thermistors NC-17-07 and 2020-NCIS-04 are 147.89 m and 152.15 m respectively.

For thermistor NC-17-07, the measured temperatures were compared with model outputs at elevations of 147.88 m, 145.88 m, 143.88 m, and 141.88 m, which correspond to the ground surface and depths of 2 m, 4 m, and 6 m below the tailings surface. The measured and modeled temperatures at these selected elevations are plotted against time and attached in **Appendix B**.

For thermistor 2020-NCIS-04, the measured temperatures were compared with model results at elevations 152.0 m, 151.0 m, 150.0 m, 149.0 m, 148.5 m, and 147.5 m. These depths represent conditions within the NAG waste rock cover at approximately 0.15 m, 1.15 m, 2.15 m, and 3.15 m, as well as within the tailings at depths of 0.35 m and 1.35 m. The measured and modeled temperatures at these selected elevations are plotted against time and provided in **Appendix B**.

The modeled ground temperature has good agreement with observed temperature, providing confidence in the model setup and parameterization. Based on the properties obtained from the validation model, the input material thermal properties were applied to the subsequent model simulations. The long-term thermal models were developed using the SLR derived climate change projection data and material properties determined for the validation models.



3.2 Thermal Modeling with SLR Climate Data

The main objective of the long-term models was to determine the thaw depth under varying thicknesses of NAG waste rock cover, thereby assessing the ability of the rock cover to mitigate permafrost thaw under projected climate change.

3.2.1 Model Setup

One dimensional thermal model was developed in TEMP/W, following the material layering (i.e., variable rock cover, 25 m of tailings, and 33 m of bedrock).

The model domain included tailings overlain by NAG waste rock cover with thickness consistent with the closure design scenarios.

Initial temperature conditions were established using thermistor data from NC17-07 on January 1, 2022, provided by Agnico Eagle.

3.2.2 Model Development

To evaluate the effect of NAG waste rock cover thickness on the ground thermal regime and thaw depth under future climate conditions, the thermal models were developed for five scenarios representing no cover, 2 m, 3 m, and 4 m of NAG waste rock cover.

3.2.2.1 Climate Change Model Projections

For the Project, global climate change models (GCMs) from CMIP6 were used. The CMIP6 GCMs were used to determine potential future changes through multi-model climate projections under standardised experimental protocols. Climate change projections under CMIP6 were released in 2022 and represent the most current global climate model data included in the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report.

Six GCMs were reviewed for the Project. Model selection was restricted to those models that offered complete coverage of the required variables and temporal coverage, and that provided reasonable representation of the study region. These six models included: ACCESS-CM2, ACCESS-ESM1-5, CanESM5, CMCC-ESM2, EC-Earth3, and INM-CM4-8. A memorandum on the methodology used to develop the climate change data for the Project is provided in **Appendix C**.

Climate change scenario SSP2-4.5 was selected by Agnico Eagle to offer a “middle of the road” consideration of future climate change (i.e., global warming). This scenario projects moderate global warming with global surface air temperatures rising by approximately +2.7°C by the year 2100 relative to the historic average global temperatures from the years 1850 to 1900.

Daily climate variables were extracted for each model to support the analysis. In cases where air temperature was not directly provided in an individual GCM, it was derived as the average of the simulated daily maximum and minimum temperatures. For snow depth, projections relied on the direct output available from the CMCC-ESM2 model. For the remaining five models, snow depth was estimated using simulated surface snow water equivalent values in combination with assumed snow density parameters to approximate depth.



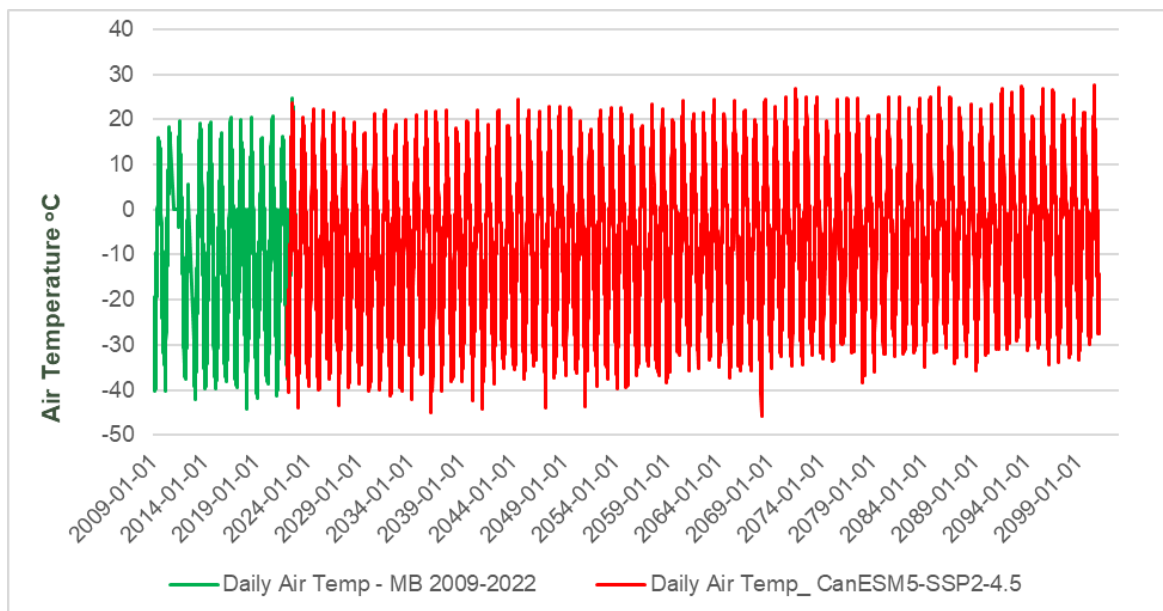
3.2.2.2 Top Boundary

A Surface Energy Balance (SEB) was applied using the TEMP/W climate boundary condition module to simulate heat flux at the ground surface. The SEB boundary condition incorporated daily values of air temperature, wind speed, relative humidity, solar radiation, albedo, and snow depth.

The climate projection dataset under the SSP2-4.5 scenario for the period January 1, 2022, to December 31, 2100, was incorporated into the TEMP/W program. Daily climate inputs were used to drive the thermal model, as they provide higher temporal resolution better representation of local climate variability. This approach is used to provide the model with greater granularity in comparison to percentile-based results (i.e., 5th, 50th, and 95th or 99th percentile) for the GCM under the SSP2-4.5 scenario. The use of daily projections was confirmed with Agnico Eagle prior to use in the thermal model.

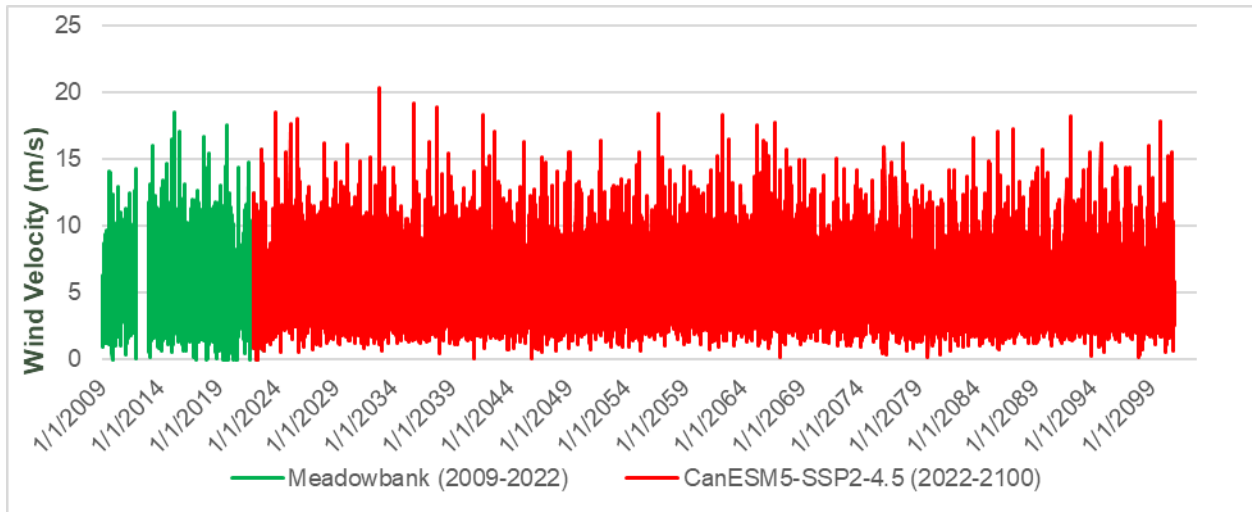
- **Air Temperature:** Daily air temperature data for 2022–2100 from the CanESM5-SSP2-4.5 model were used for the long-term thermal modeling. This GCM represents a ‘mid-range’ in air temperature data in comparison to the other five GCMs reviewed for the Project. Using the daily data projections for this specific GCM was an attempt to limit potential overestimations of air temperature increases over the time period considered for the Project.
- Air temperature measurements from the Meadowbank site (2009–2022) were used to establish the base temperature conditions and to align the projected climate model data with observed site conditions. The Quantile Delta Mapping Method was used to bias-correct model simulations with observed site conditions while preserving long-term changes in quantiles, thereby maintaining projected trends (see Appendix B). The resulting dataset was then used to project future air temperatures at the site. A comparison of the measured site temperatures and the climate-model temperatures is provided in Figure 1.

Figure 1: Daily Air Temperature at the Meadowbank site (2009-2022) and CanESM5 GCM under SSP2-4.5 Climate Scenario (2022-2100).



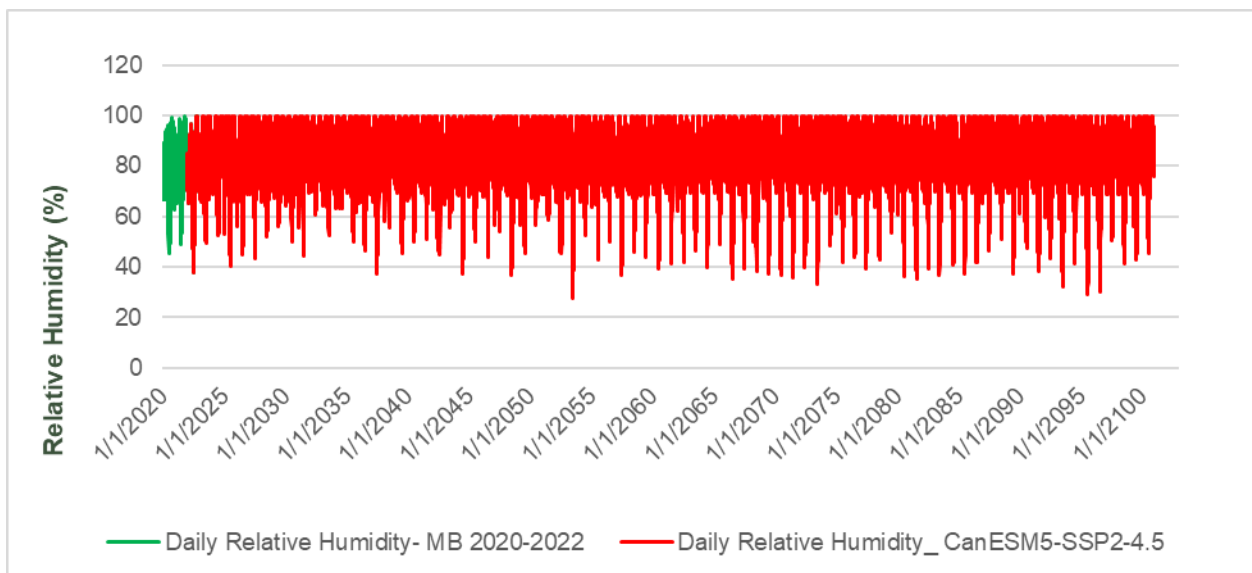
Wind Speed: 2022-2100 daily wind data was derived based on the CanESM5 and SSP2-4.5 climate scenario and was calibrated using Meadowbank site data for the period from 2009 to 2022. The Meadowbank site and projected daily wind speed data are illustrated in Figure 2.

Figure 2: Daily Wind Speed Recorded at Meadowbank Site (2009-2022) and Based on the CanESM5 GCM under SSP2-4.5 Climate Scenario (2022-2100)



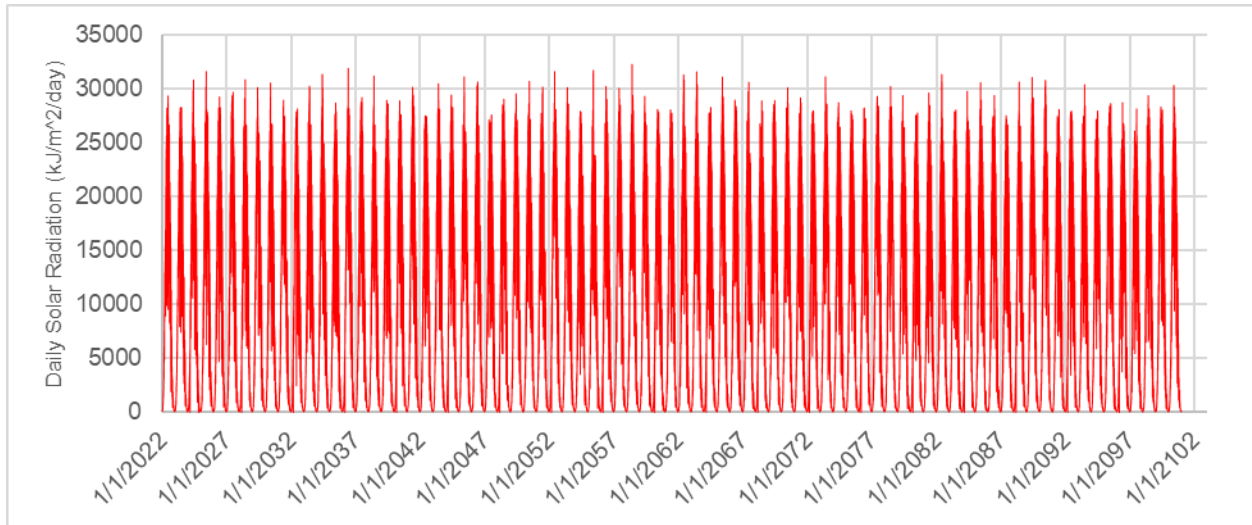
Relative Humidity: 2022-2100 daily relative humidity data was derived according to CanESM5 CGM under the SSP2-4.5 climate scenario and calibrated based on the Amaruq site data for the period from 2020 to 2022. The site and projected relative humidity data are illustrated in Figure 3.

Figure 3: Daily Relative Humidity Data Recorded at Amaruq Site (2020-2022) and Derived from CanESM5 GCM, under SSP2-4.5 Climate Scenario (2022-2100).



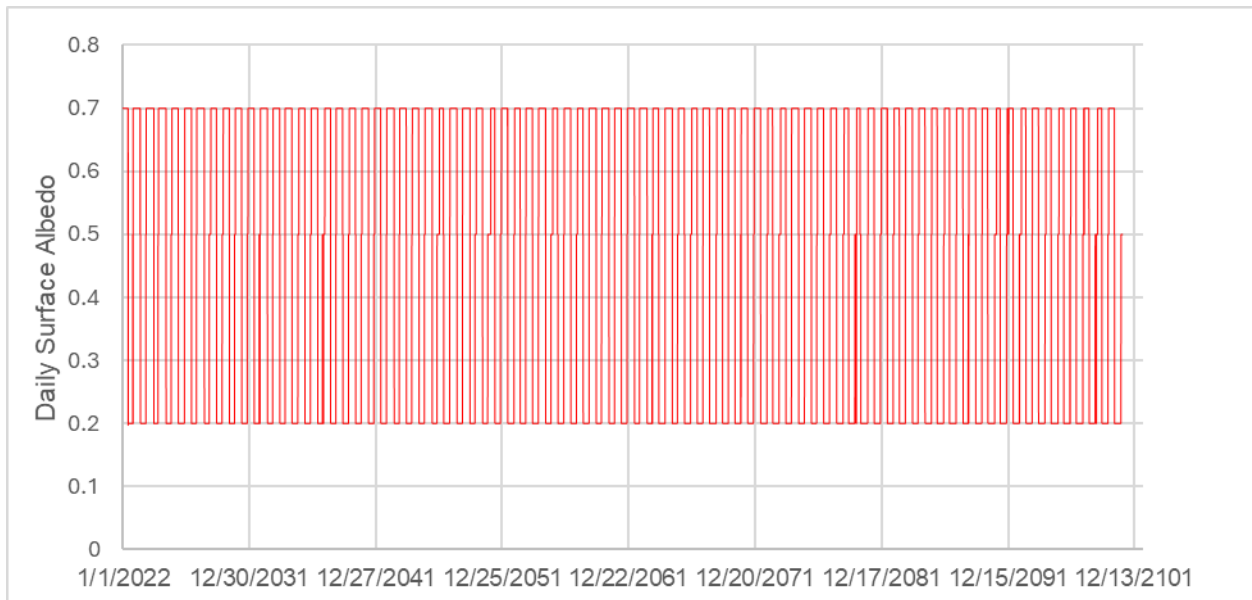
Solar Radiation: 2022-2100 daily solar radiation data was derived according to the CanESM5-GCM under scenario SSP2-4.5. The solar radiation data are illustrated in Figure 4.

Figure 4: Daily Solar Radiation Data Derived from CanESM5 GCM, under SSP2-4.5 Climate Scenario (2022-2100).



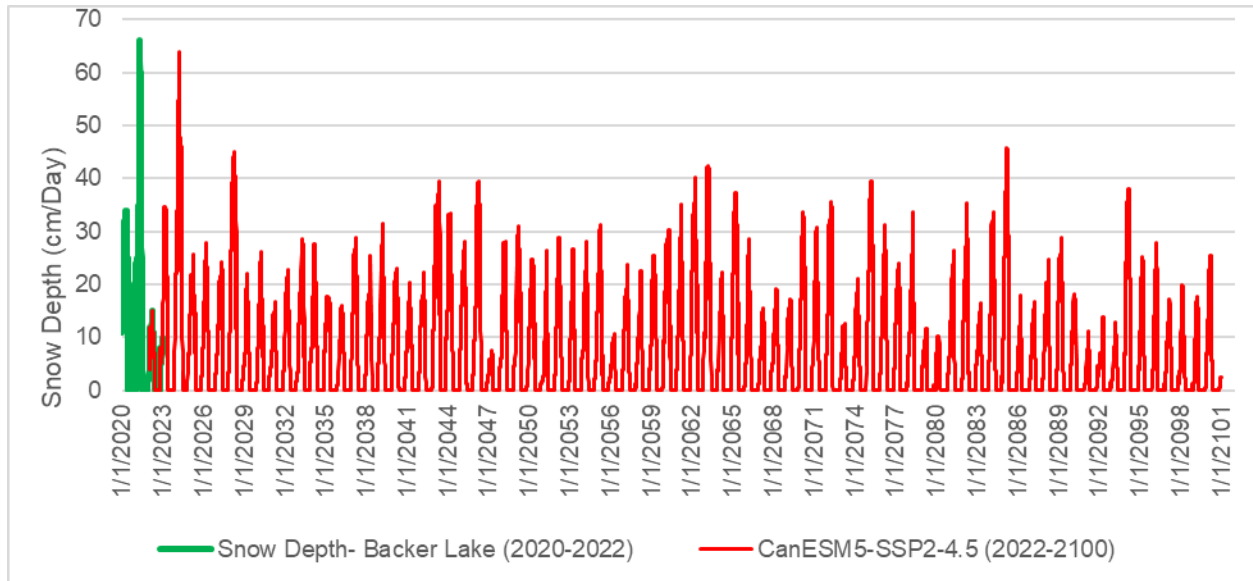
Surface Albedo: 2022-2100 daily surface albedo data derived from CanESM5, under SSP2-4.5 are illustrated in Figure 5.

Figure 5: Daily Surface Albedo data derived from CanESM5 GCM, under SSP2-4.5 Climate Scenario (2022-2100).



Snow Depth: Daily snow depth data derived from CanESM5 GCM, under SSP2-4.5 climate scenario (2022-2100) and site data recorded at the Baker Lake station (2020-2022) are illustrated in Figure 6.

Figure 6: Daily Snow Depth Data Recorded at Backer Lake Station (2020-2022) and Derived from CanESM5 GCM, under SSP2-4.5 Climate Scenario (2022-2100)



Bottom Boundary:

- A heat flux of 3.024 kJ/day/m² is applied at the bottom model to incorporate the geothermal effect.

Freezing Point Depression:

- A freezing point depression of 0.17 °C below zero was applied to represent the influence of chemical constituents within the tailings. Freezing point depression is calculated based on the Raoult's equation (Raoult 1882) that consider molality of chemical in dilute solutions. The chemical content in tailings is taken from the 2022 Water Management Plan Report (SNC Lavalin 2023).
- The freezing point depression of – 0.17 °C was incorporated into the volumetric unfrozen water content curve and thermal conductivity functions of the tailings.
- The thaw depth is reported using the 0°C isotherm within the NAG waste rock cover and -0.17 °C based on the freezing point depression of the tailings.

3.2.3 Material Properties

Material properties were developed for thermal analysis included porosity, degree of saturation, thermal conductivity, and volumetric heat capacity.

- Thermal properties for tailings, NAG waste rock, and foundation materials were adopted directly from the previous design basis and calibration work.



- Where available, properties were informed by field trial results and laboratory testing results provided by Agnico (Agnico Eagle Mines Limited, Meadowbank Division Nov 3, 2023).
- The tailings material included a soil-water characteristics curve based on silt.

Thermal material properties that are used in the model are summarized in Table 2.

Table 2: Summary of Material Thermal Properties

Material	Condition	Porosity (%)	Degree of Saturation (%)	Thermal Conductivity (W/m °K ¹)	Volumetric Heat Capacity (kJ/m ³ °C ²)
NAG Waste Rock	Frozen	32.8	25	2.22	1300
	Unfrozen	32.8	25	2.12	1500
Tailings	Frozen	40.0	100	3.46	2100
	Unfrozen	40.0	100	2.12	2759
Bedrock	Frozen	5.0	100	2.99	2500
	Unfrozen	5.0	100	2.99	2500

Notes:

¹ W/m K = watts per metre kelvin

² kJ/m³ °C = kilojoules per cubic metre per degree Celsius

Source: (Agnico Eagle Mines Limited, Meadowbank Division Nov 3, 2023)

Snow Properties:

- Density: 300 kg/m³ (Agnico Eagle 2023a)
- Thermal Conductivity: 12 kJ/day/m/°C (0.14 W/m K) (Assumed)

3.2.4 Results of SLR's Models

Long-term thaw depths estimated using the SLR thermal model are summarized in Table 3. The maximum thaw depths for the exposed tailings surface and for tailings covered with 2 m, 3 m, and 4 m of NAG waste rock for the period 2022 to 2100 are shown in Figure 7. As the thickness of the NAG waste rock cover decreases, thaw progresses into the underlying tailings.

The evolution of thaw at five-year intervals for the exposed tailings surface and for NAG waste rock cover thicknesses of 2 m, 3 m, and 4 m are presented in Figures 8, 10, 12, and 14. Whether thaw will penetrate the tailings for a given cover thickness can be evaluated using the tailings surface temperature. Surface temperature profiles for the exposed tailings and for the 2 m, 3 m, and 4 m NAG waste rock cover scenarios are shown in Figures 9, 11, 13, and 15.



Table 3: Summary of Active Zones with Different NAG waste rock Waste Cover at 2100

NAG Waste Rock Cover (m)	Projected Thaw Depth in NAG Waste Rock Cover by the Year 2100	Projected Thaw Depth in Tailings by the Year 2100
0	NA	2.47
2	2.00	0.97
3	3.00	0.45
4	4.00	0.01

Figure 7: Thaw Depths into Tailings with Different Thickness of NAG Waste Rock Cover

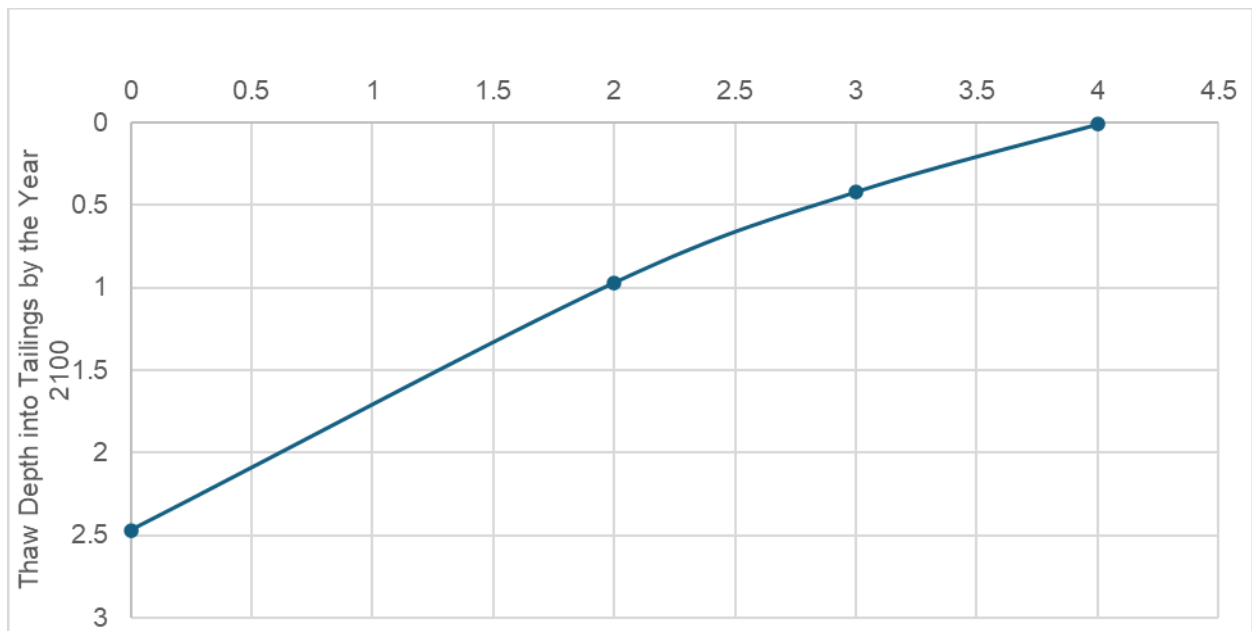


Figure 8: Thaw Depth Below Tailings Surface with no NAG Waste Rock Cover (2022–2100)

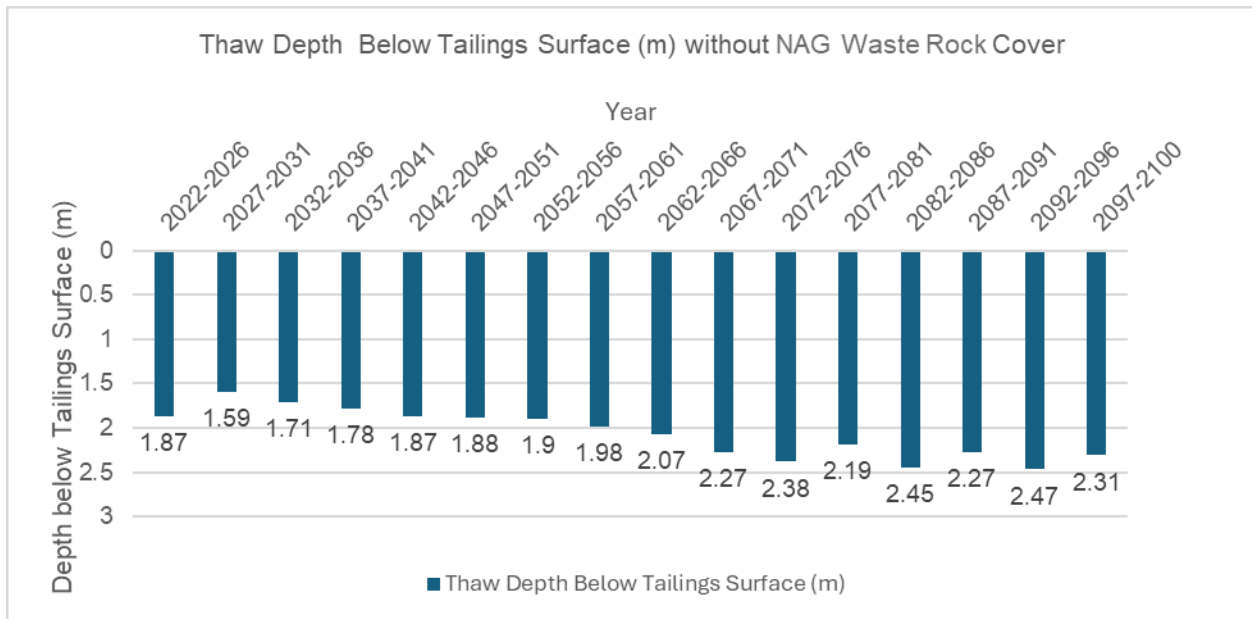


Figure 9: Tailings Surface Temperature from 2022-2100 with no NAG Waste Rock Cover

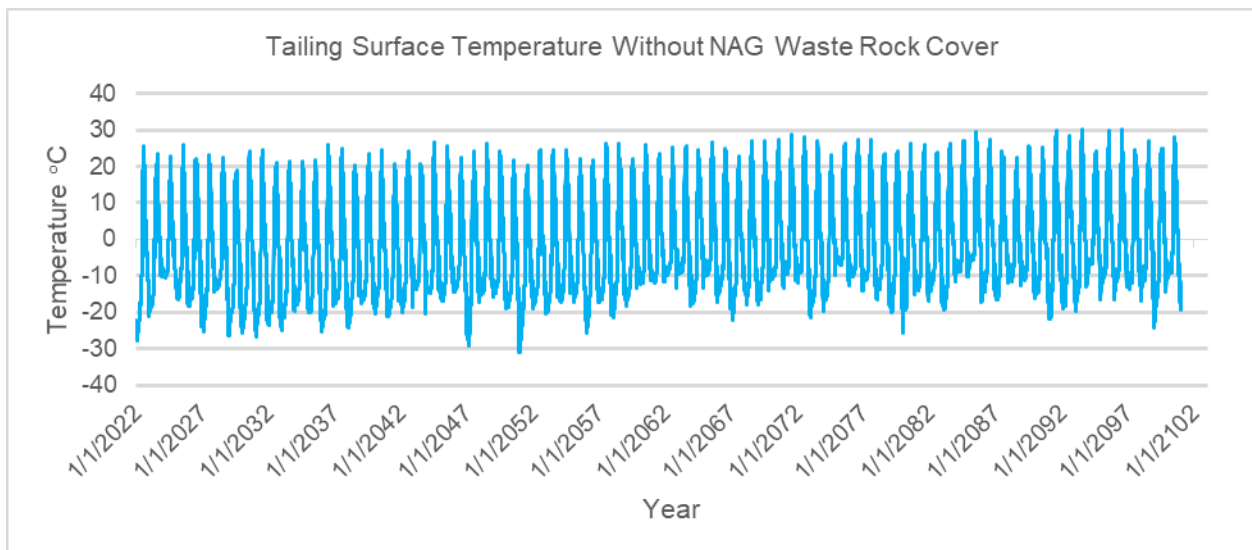


Figure 10: Thaw Depth Below Surface of 2 m of NAG Waste Rock Cover (2022–2100)

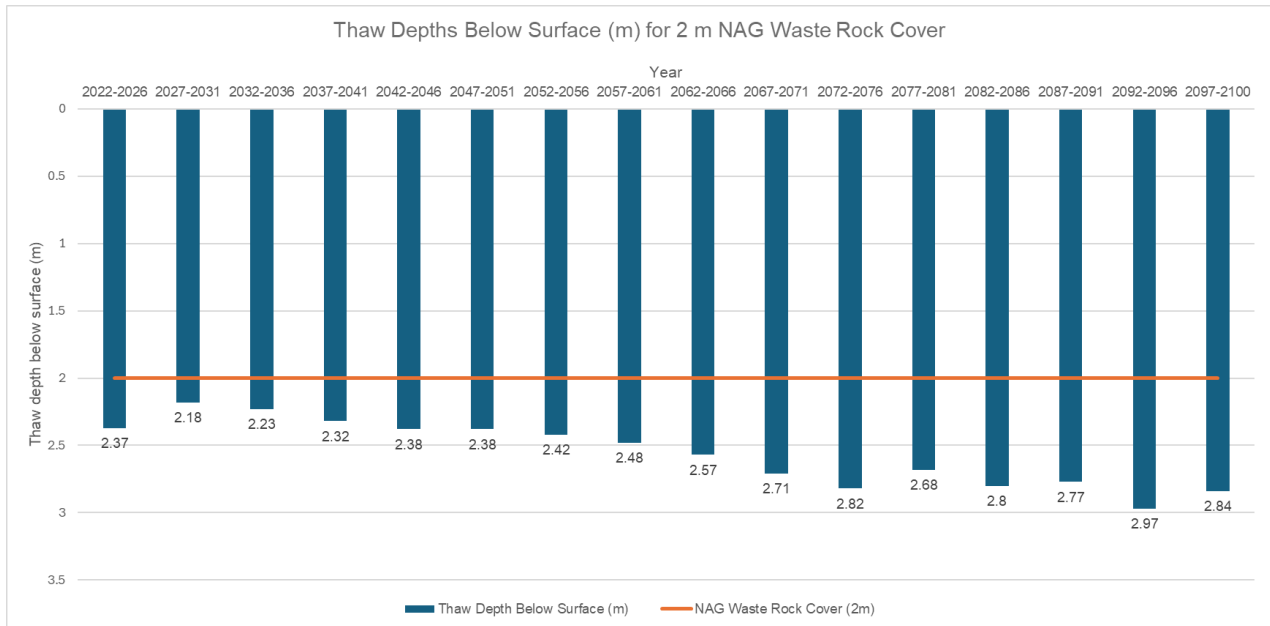


Figure 11: Tailings Surface Temperature from 2022-2100 with 2 m of NAG Waste Rock Cover

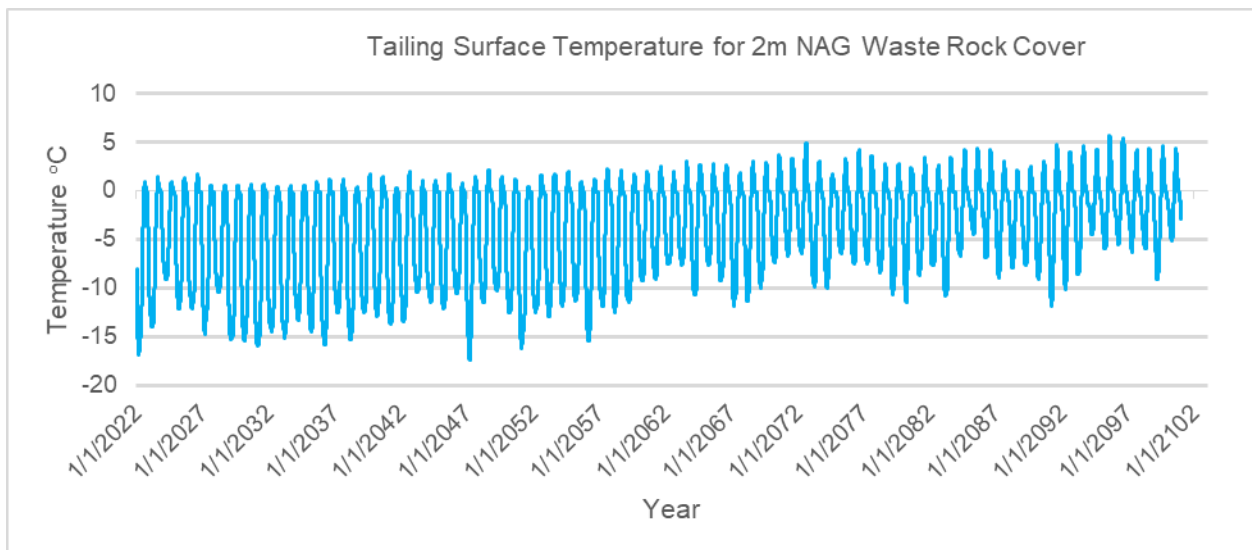


Figure 12: Thaw Depth Below Surface of 3 m NAG Waste Rock Cover (2022–2100)

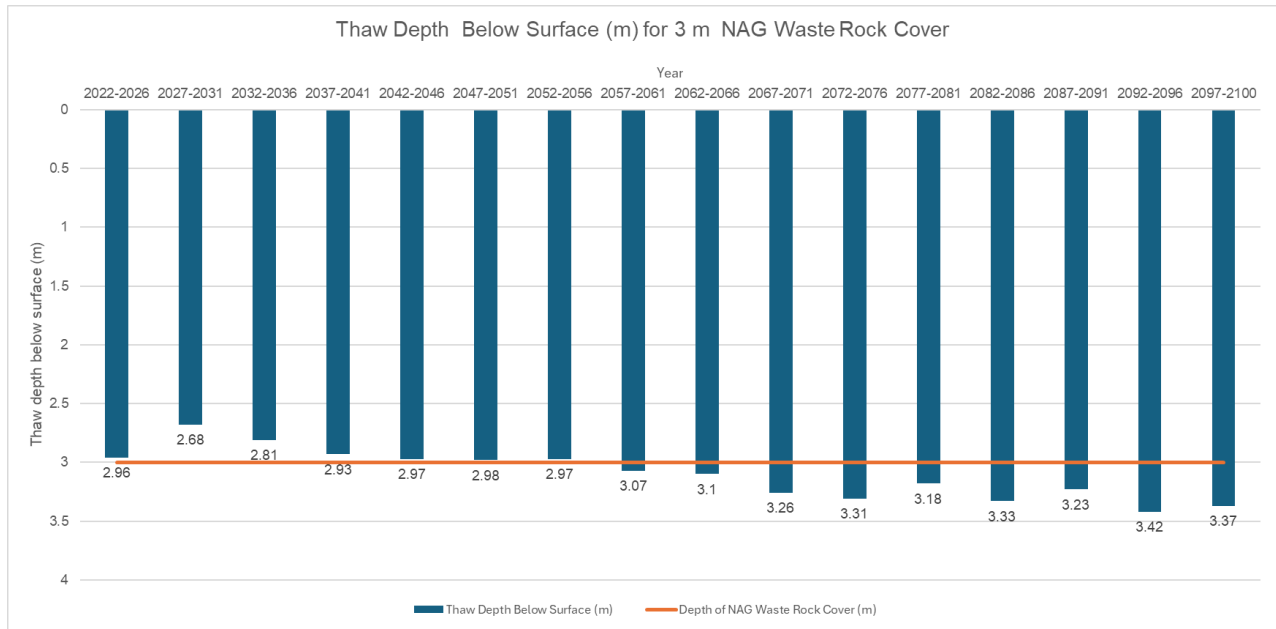


Figure 13: Tailings Surface Temperature from 2022-2100 with 3 m of NAG Waste Rock Cover

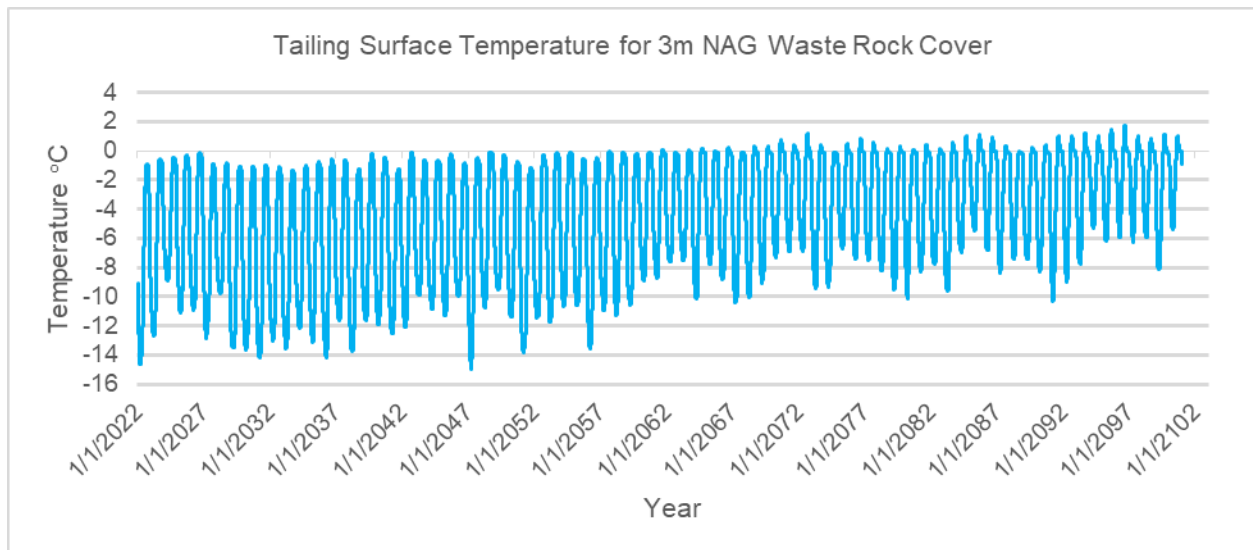


Figure 14: Thaw Depth Below Surface of 4 m NAG Waste Rock Cover (2022–2100)

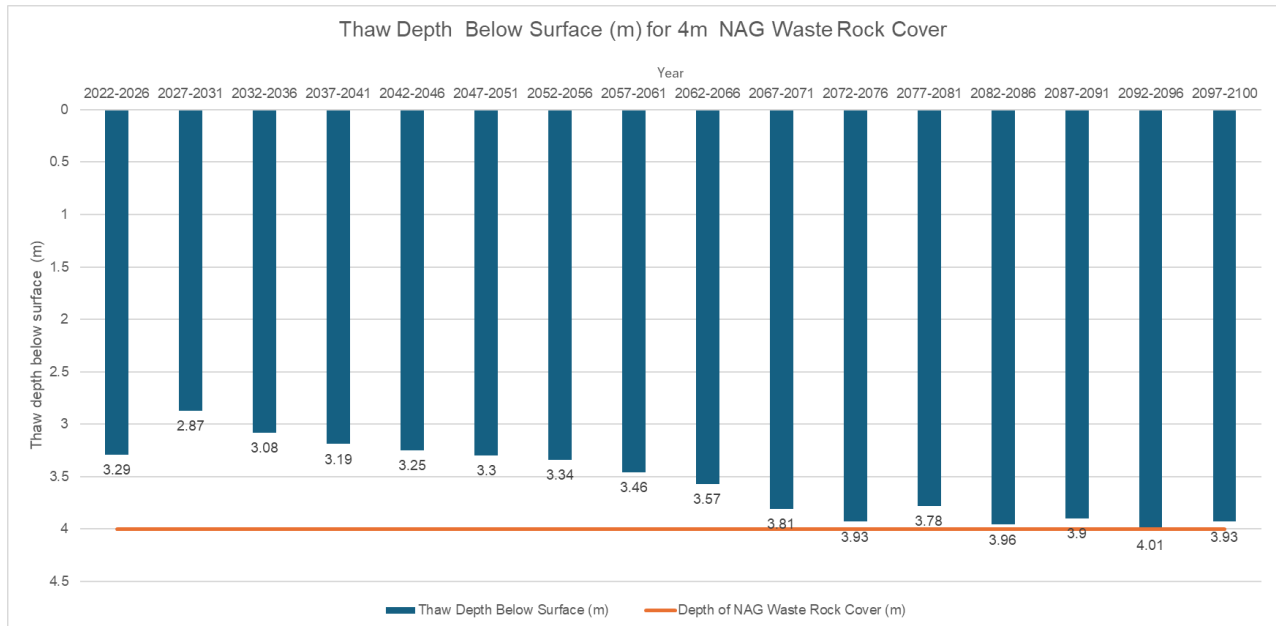
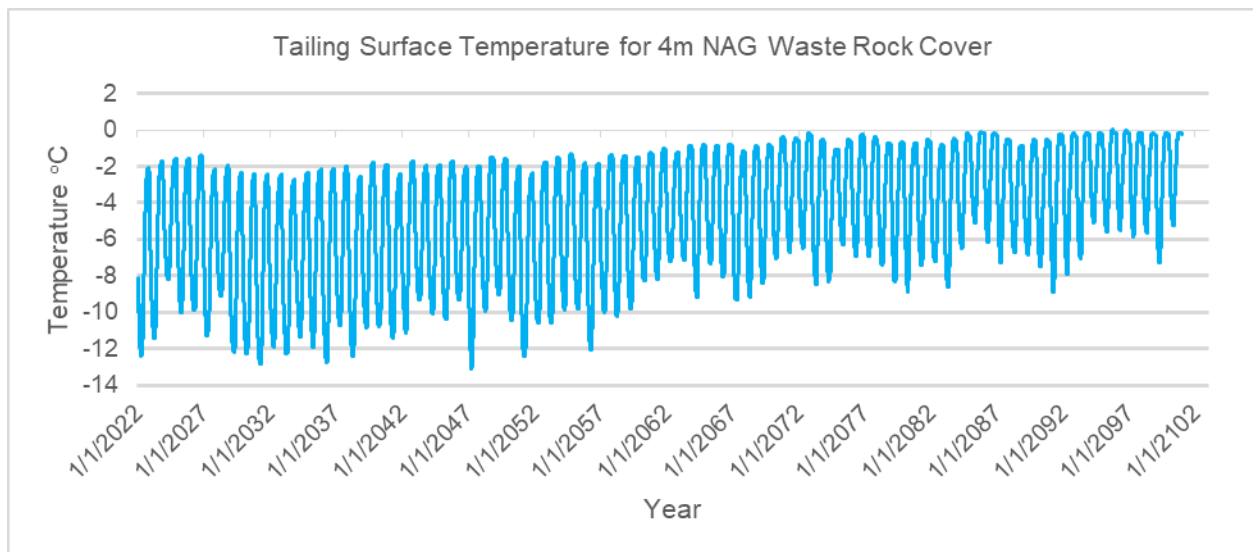


Figure 15: Tailings Surface Temperature from 2022-2100 with 4 m of NAG Waste Rock Cover



4.0 Closure

This report was prepared by Khokan Debnath of SLR, and it has been reviewed by Christopher Stevens, PhD., from Northern Permafrost Consulting, an independent thermal modeling expert. We trust the above information meets your current requirements. Please contact the individuals noted below if you have any questions or comments.

Regards,

SLR Consulting (Canada) Ltd.



Khokan Debnath, M.Sc., P.Eng.
Senior Geotechnical Engineer



David Ritchie, M.Eng., P.Eng.
Service Line Director,
Engineering and Design, Canada



5.0 References

- Agnico Eagle Mines Limited - Meadowbank Division. January 2023b. Meadowbank Project, Thermal Monitoring Project- Version 4. Technical, Nunavut: Agnico Eagle Mine Limited.
- Agnico Eagle Mines Limited, Meadowbank Division. Nov 3, 2023a. Meadowbank Tailing Storage Facility Closure Design - Working Copy. Technical, Nunavut: Agnico Eagle.
- Bently Systems Incorporated. 2025. "TEMP/W ." Geostudio, 2025.1.1. Version 25.1.1.182. Seequent, 1 1.
- Raoult, François Marie. 1882. On the Freezing Points of Aqueous Solutions of Organic Substances. *Comptes Rendus de l'Académie des Sciences*, 104.
- SNC Lavalin. 2023. Meadowbank Water Quality Forecasting Update for the 2022 Water Management Plan. Technical, Agnico Eagle.





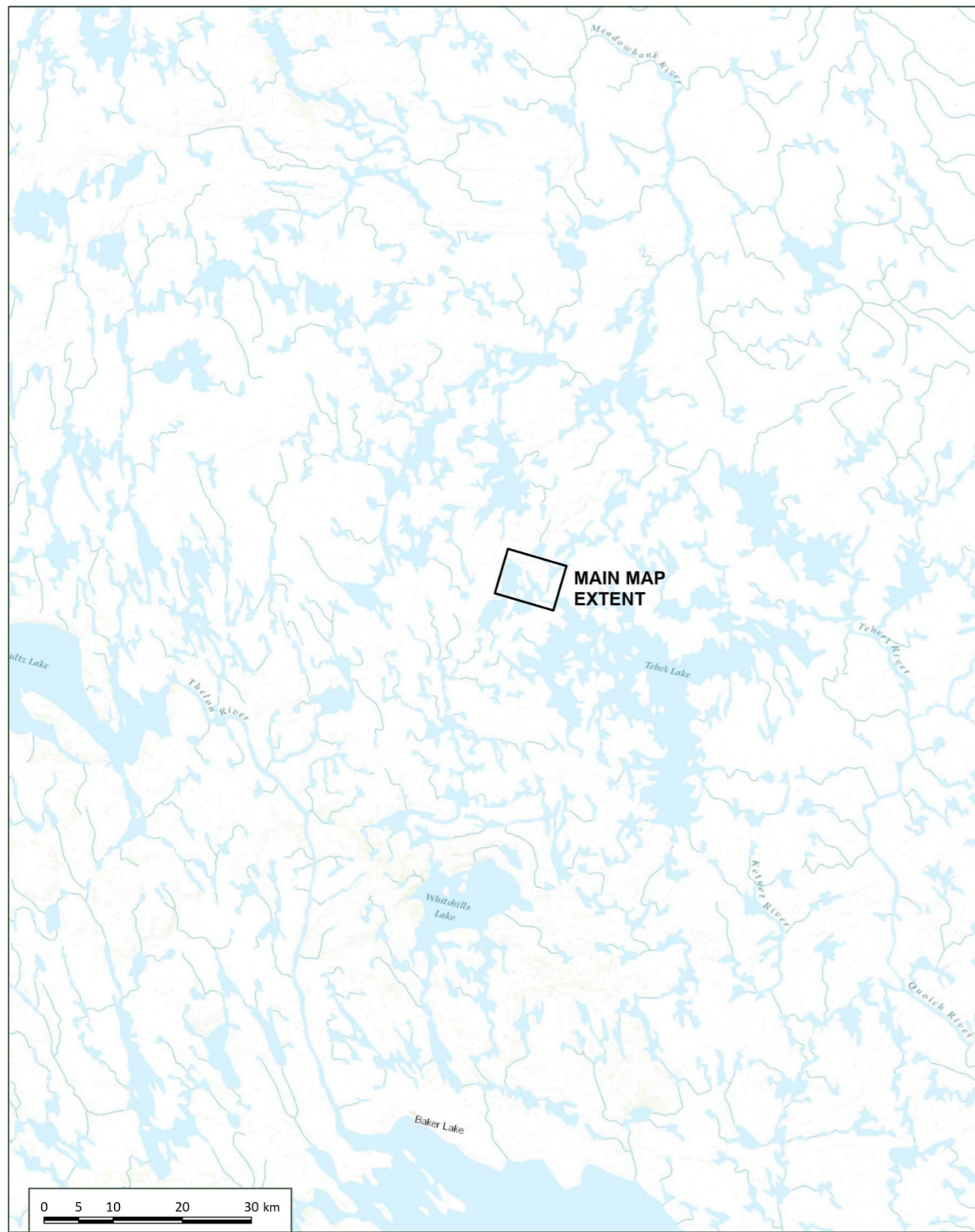
Appendix A Site Map

Meadowbank Complex Tailings Storage Facility Thermal Cover Model

Agnico Eagle Mines Ltd.

SLR Project No.: 201.089631.00001

December 5, 2025



NOTES:
NOTE1 - WATER DATA PROVIDED BY NATURAL RESOURCES CANADA (CANVEC)

SERVICE LAYER CREDITS: VANTOR, ESRI, © OPENSTREETMAP CONTRIBUTORS, HERE, GARMIN, FAO, USGS, NGA, EPA, NPS, AAFC, NRCAN



SCALE 1:35,000
PAGE SIZE 11 x 17
NAD 1983 UTM Zone 14N
THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY
AND SHOULD NOT BE USED FOR NAVIGATION

AGNICO EAGLE MINES LTD.
MEADOWBANK COMPLEX
KIVALLIQ REGION, NUNAVUT, CANADA

MEADOWBANK COMPLEX TAILINGS STORAGE
FACILITY THERMAL COVER MODEL

SITE LOCATION



FIGURE NO:
A-1



LEGEND:
 THERMISTOR LOCATION

NOTES:
 NOTE1 - WATER DATA PROVIDED BY NATURAL RESOURCES CANADA (CANVEC)
 SERVICE LAYER CREDITS: VANTOR



SCALE: 1:14,162
 PAGE SIZE: 11 x 17
 NAD 1983 UTM Zone 17N
 THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY
 AND SHOULD NOT BE USED FOR NAVIGATION

AGNICO EAGLE MINES LTD.
 MEADOWBANK COMPLEX
 KIVALLIQ REGION, NUNAVUT, CANADA

MEADOWBANK COMPLEX TAILINGS STORAGE
 FACILITY THERMAL COVER MODEL

THERMISTOR LOCATION PLAN



FIGURE NO:
A-2



Appendix B Results of Validation Model

Meadowbank Complex Tailings Storage Facility Thermal Cover Model

Agnico Eagle Mines Ltd.

SLR Project No.: 201.089631.00001

December 5, 2025

Appendix B: Results of Validation Models

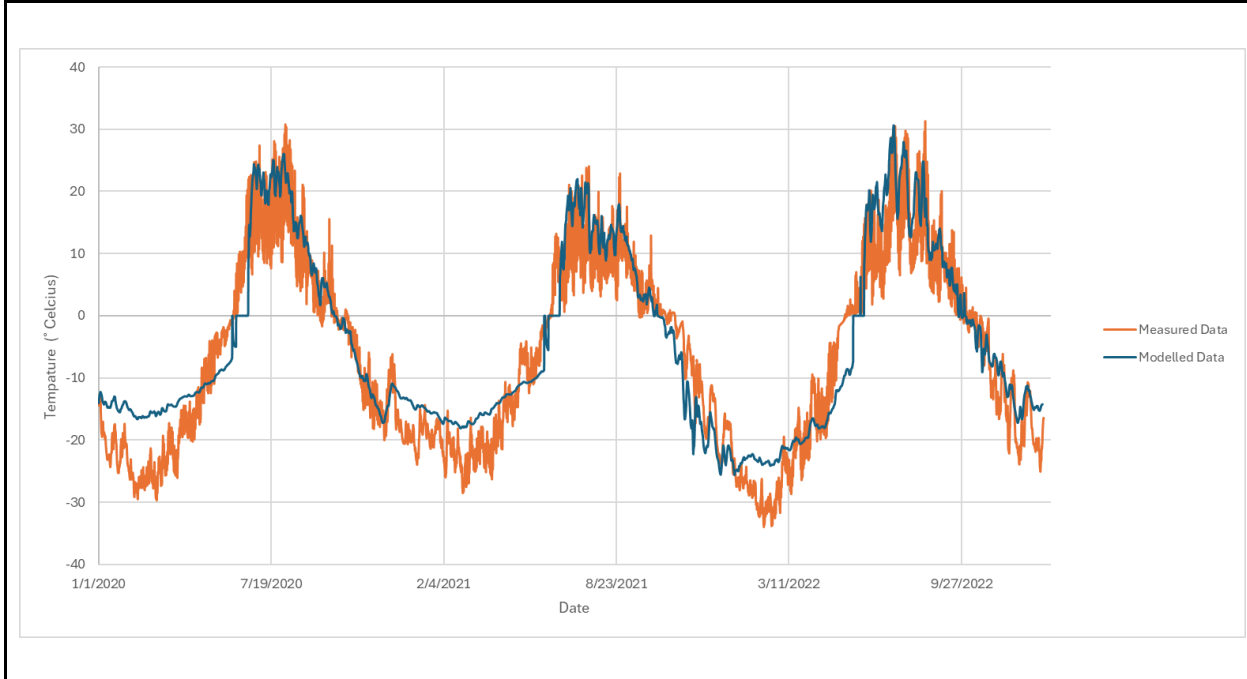


Figure B-1: Tailing surface Temperature (without NAG Waste Rock Cover)

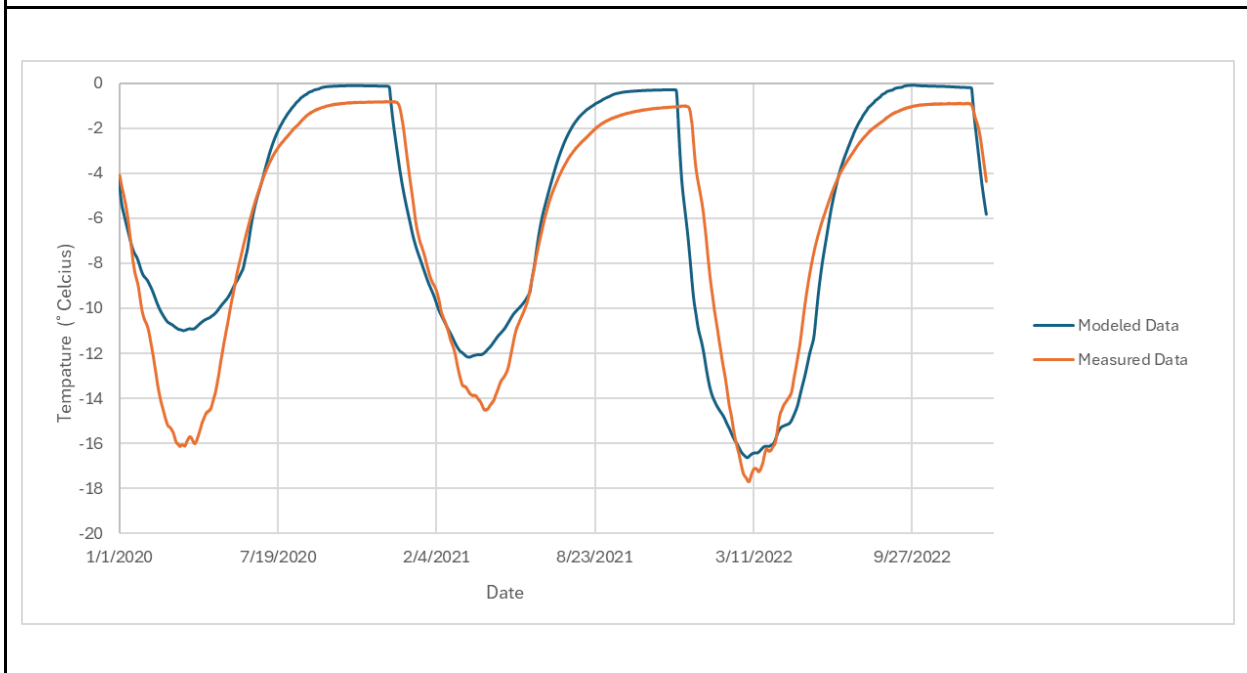


Figure B-2: Temperature at 2 m Below Ground Level (without NAG Waste Rock Cover)



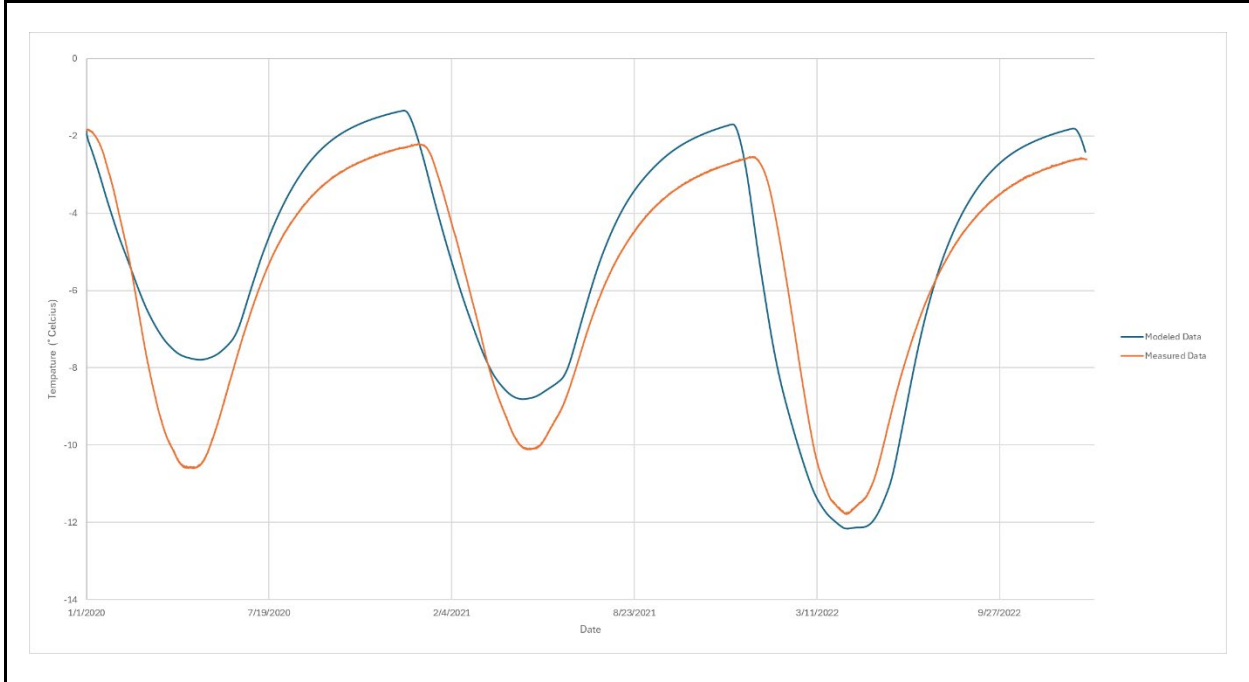


Figure B-3: Temperature 4 m Below Ground Level (without NAG Waste Rock Cover)

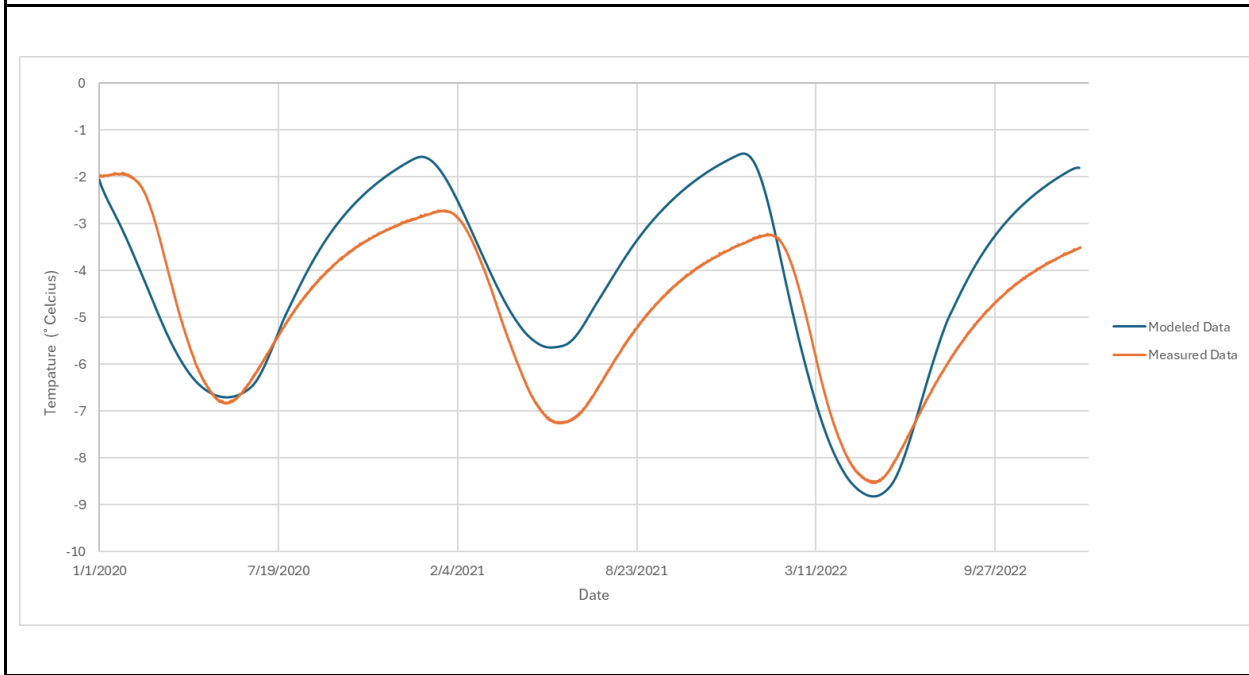


Figure B-4: Temperature at 6 m Below Ground Level (without NAG Waste Rock Cover)



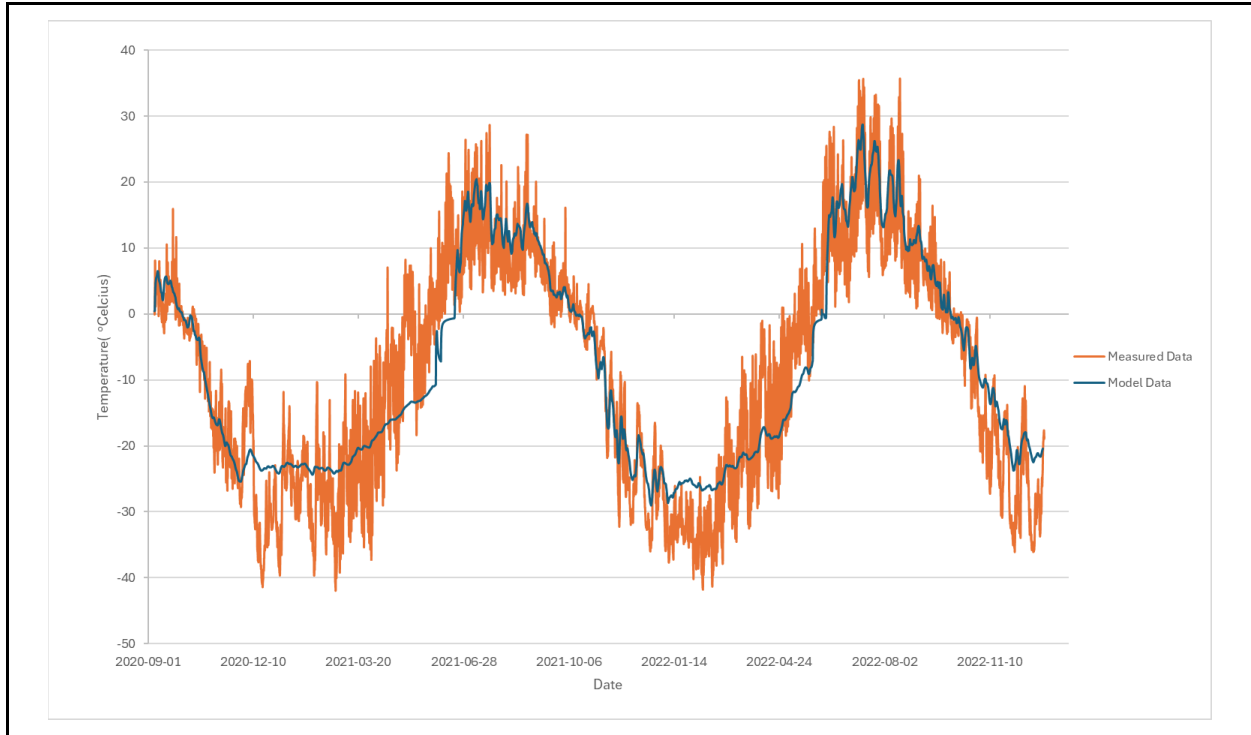


Figure B-5: Temperature at 0.15 m Below Ground Level (with 3.3 m NAG Waste Rock Cover)

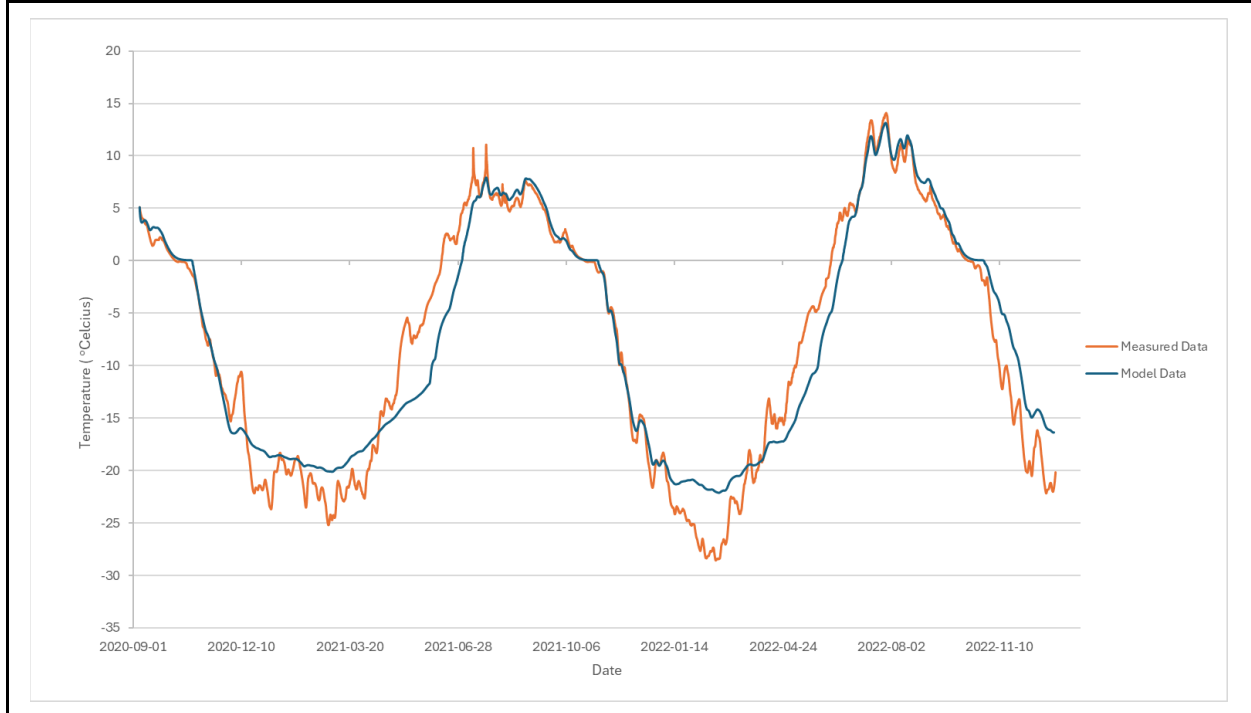


Figure B-6: Temperature at 1.15 m Below Ground Level (with 3.3 m NAG Waste Rock Cover)



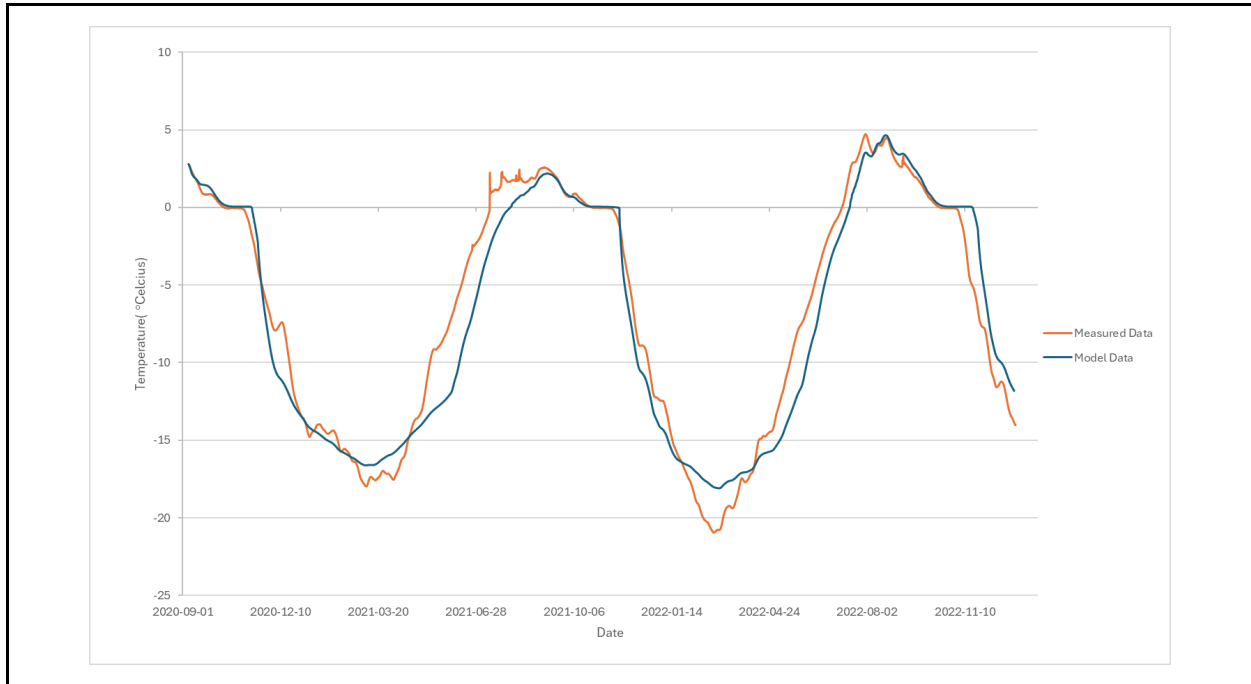


Figure B-7: Temperature at 2.15 m Below Ground Level (with 3.3 m NAG Waste Rock Cover)

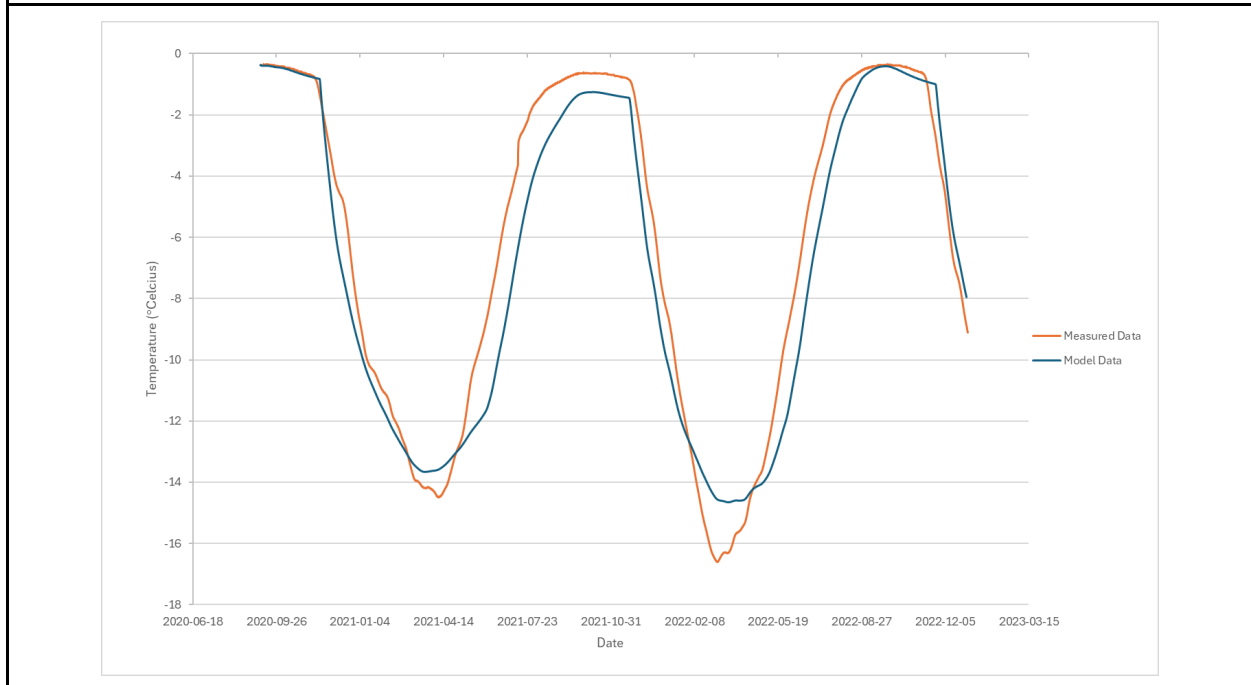


Figure B-8: Temperature at 3.15 m Below Ground Level (with 3.3 m NAG Rock Cover)



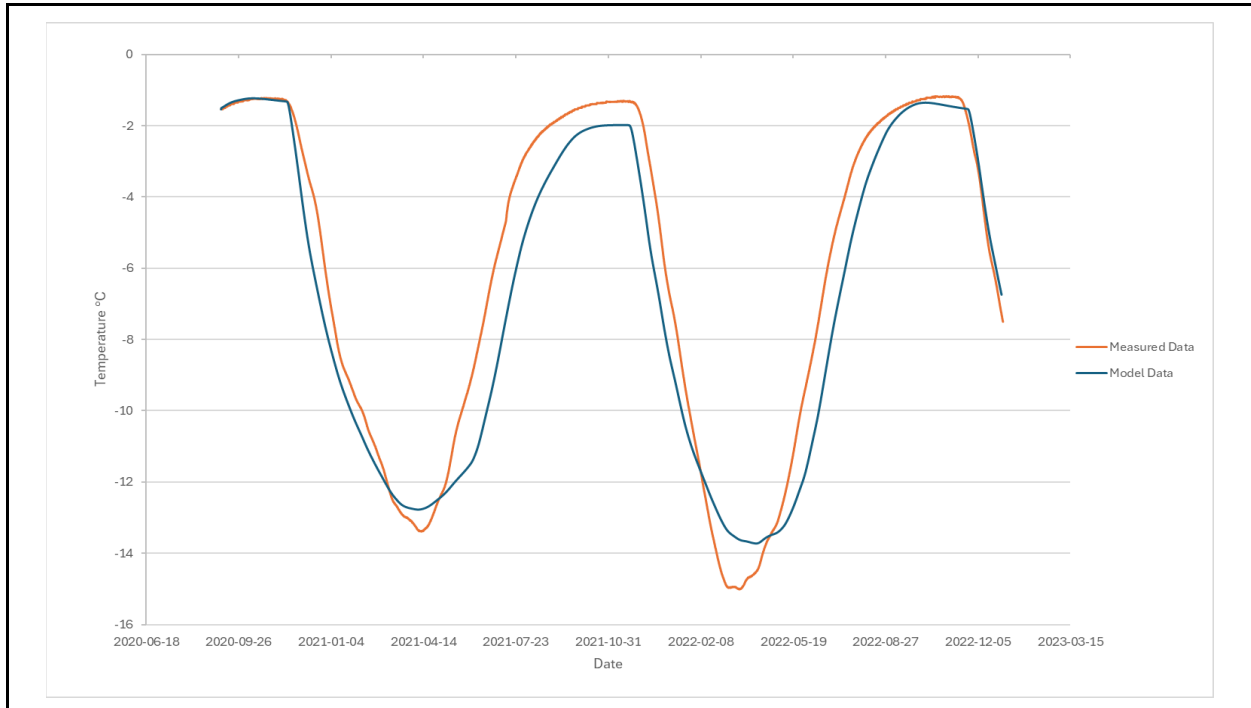


Figure B-9: Temperature at 3.65 m Below Ground Level (with 3.3 m NAG Waste Rock Cover)

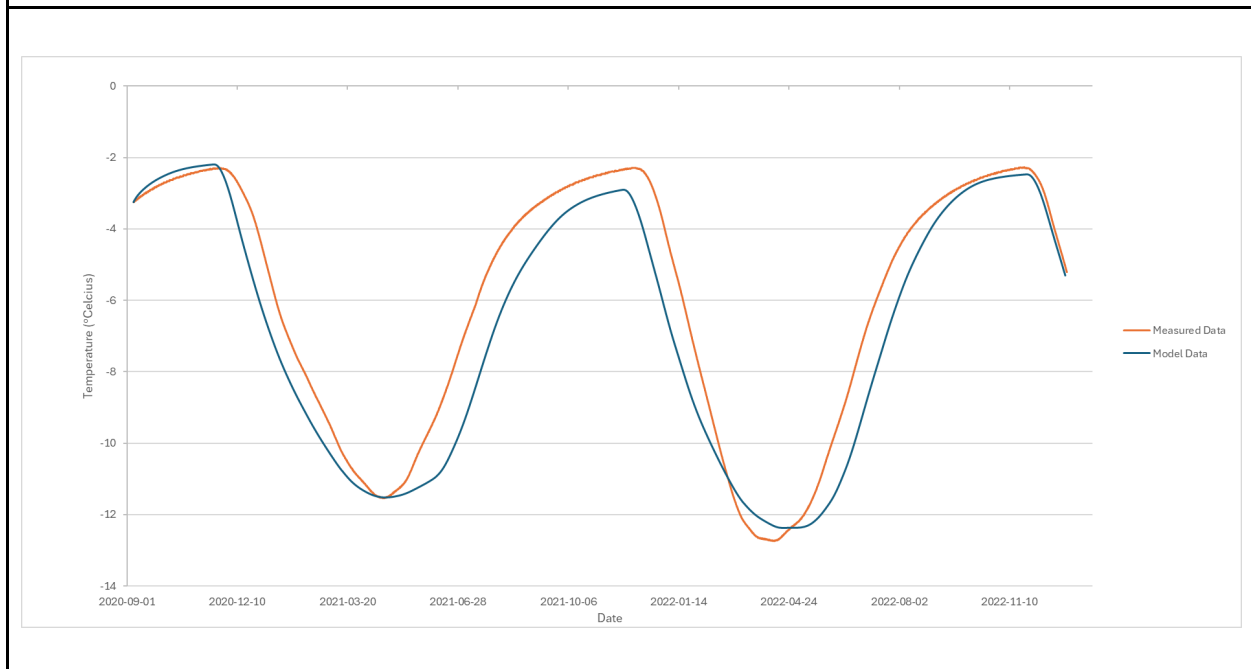


Figure B-10: Temperature at 4.65 m Below Ground Level (with 3.3 m NAG Waste Rock Cover)



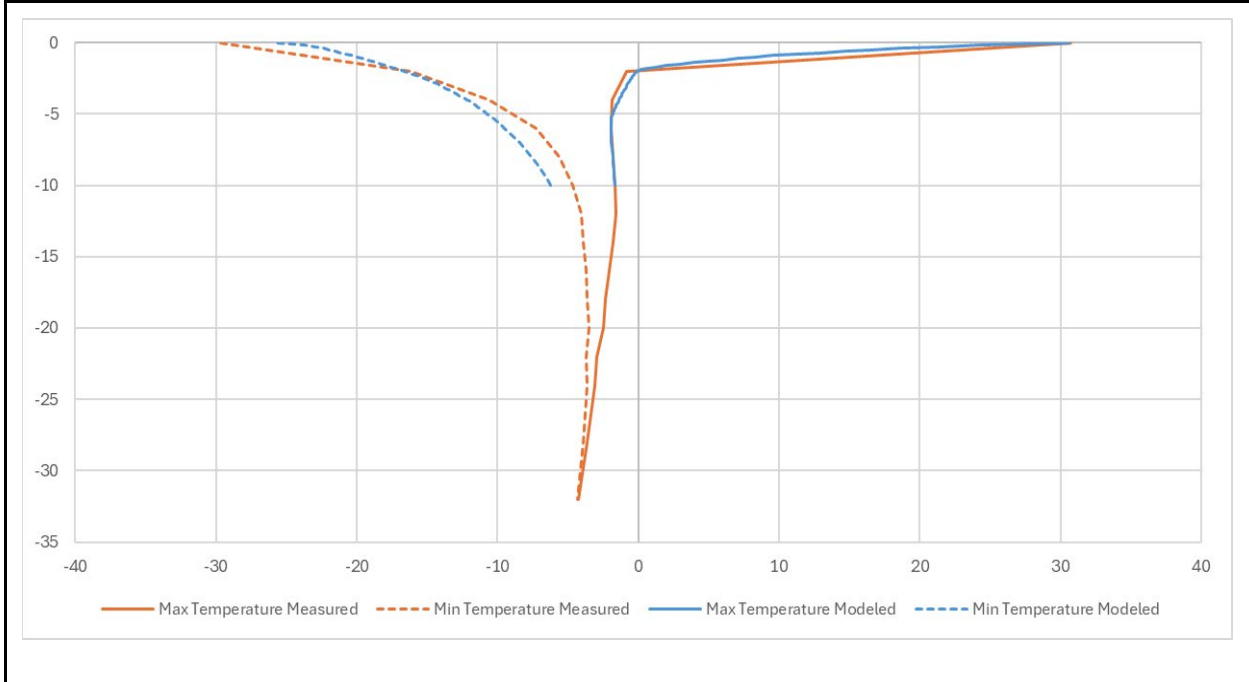


Figure B-11: Max and Min Temperature Comparison (without NAG Waste Rock Cover)

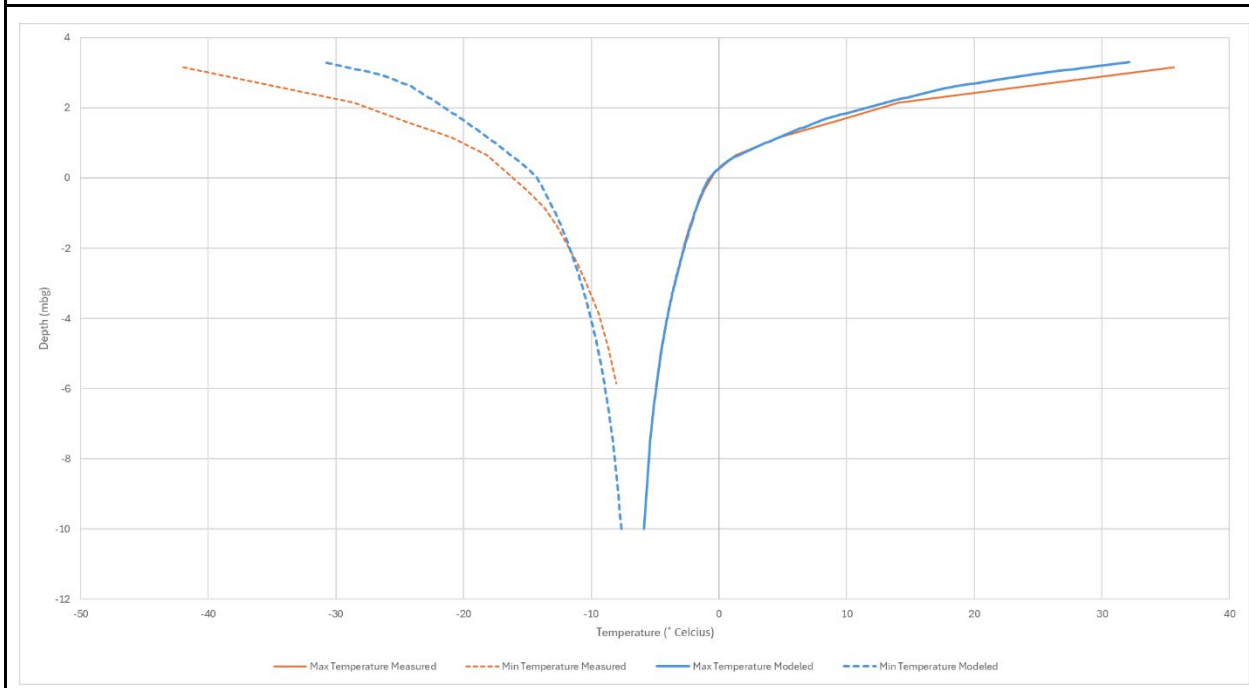


Figure B-12: Max and Min Temperature Comparison (with 3.3 m NAG Waste Rock Cover)





Appendix C SLR Climate Projection Data

Meadowbank Complex Tailings Storage Facility Thermal Cover Model

Agnico Eagle Mines Ltd.

SLR Project No.: 201.089631.00001

December 5, 2025

Appendix B – SLR Climate Model Data and Methodology

Nunavut, Canada – Mine Project

Author:

Dr. Wenyu Qiu

Reviewer:

Dr. Chonghua Yin

Original Release: August 2025

Last Updated: November 2025

Disclaimer – Limitations

This report was prepared by ClimSystems ('the Consultants') following the scope of work as outlined by the ('the Recipient') and subsequent communications. The conclusions presented in this report represent the consultants' professional judgment based on data made available during this assignment. The conclusions are true and correct to the best of the consultants' knowledge as at the date of the assessment.

This report is based on conditions encountered at the nominated site of climate data at the time of the report, and the Consultants disclaim responsibility for any changes that may have subsequently occurred.

The Consultants did not independently verify either written or oral information provided during this investigation. While the Consultants have no reason to doubt the accuracy of the information provided, the report is complete and accurate only to the extent that the information provided was itself complete and accurate.

The Consultants take great care to ensure that the climate change information in this assessment and products is as accurate and correct as possible. The climate change information provided is subject to the uncertainties inherent in scientific and technical research. It may not be accurate, current, or complete, and may be subject to change without notice. This information is not a substitute for independent professional advice. Users should seek any necessary professional advice relevant to their specific circumstances. The Consultants do not guarantee the information provided and accept no legal liability whatsoever arising from or connected to the use of any material contained therein.

As the climate change projections used are approximate by nature, it is possible that the climate change and ensuing consequences that occur may not be an exact fit to those assumed in this exercise. Climate change assessment, by its nature, is a dynamic and ongoing process. Therefore, it is recommended that the Recipient routinely incorporate the latest knowledge on climate change impacts into all future planning.

It is recognised that there may be other impacts from climate change that could not be fully assessed in this process due to the limitations of the exercise.

The Consultants recommend that the Recipient exercise their skill and care when using the climate change information, and that users carefully evaluate the accuracy, currency, completeness, and relevance of the material for their specific purposes. Any use of the data is solely at the Recipient's own risk. We understand that no party can rely upon the results of the assessments and plans.

To the extent permitted by law, the Consultants make no representation or warranty (expressed or implied) as to the merchantability or performance of the data; about the fitness of the data for the permitted use; or that the data does not infringe the intellectual property rights or any other right of any person. The Recipient indemnifies and releases the Consultants against all claims, demands, suits, liability, loss, or expenses arising directly or indirectly from the Recipient's use of the data or any breach of this agreement by the Recipient. This report does not purport to give legal advice. This advice can only be given by qualified legal advisors.

This report has been prepared exclusively for **the Nunavut Mine project** and may not be relied upon by any other person or entity without the Consultants' express written permission.

Table of Contents

Disclaimer - Limitations.....	2
Acronyms	4
1 Requirement.....	5
2 Data sources.....	5
2.1 Reference data	6
2.2.1 Daymet	6
2.2.2 ERA5-land	6
2.2.3 CERES	6
2.2.4 Station data	6
2.2 CMIP6 data	7
3 Methodology.....	8
3.1 Data preparation	8
3.2 Introduction to Quantile Delta Mapping Method (QDM)	9
4 Reference	11

Acronyms

CERES - the Clouds and the Earth's Radiant Energy System

CMIP6 - Coupled Model Intercomparison Project Phase 6

ERA5 - ECMWF Reanalysis v5 (ERA5)

FOV - Field of View

GCM - General Circulation Model

QDM - Quantile Delta Mapping Method

SSP - Shared Socio-economic Pathways

1 Requirement

To drive the TEMP/W model, the following climate variables are required for the Nunavut Mine location (65.033457, -96.063167) from 2022 to 2100:

- Air Temperature (°C)
- Albedo (unitless, range: 0-1)
- Relative Humidity (%)
- Wind Speed (m/s)
- Snow Depth (m)
- Solar Radiation ($\text{MJ m}^{-2} \text{ day}^{-1}$)
- Precipitation
- Snowfall

Although the general input requirements specify monthly values, the dataset has been prepared at a daily time scale to provide greater temporal resolution. For model integration, the daily series includes specific time steps (e.g., Day 1, Day 15, Day 45, Day 75, Day 105, and so on).

Providing daily values rather than monthly averages ensures that the dataset captures intra-month variability and short-term climatic fluctuations that may influence ground temperature and snow cover dynamics. This finer resolution enables the TEMP/W model to simulate seasonal transitions, extreme events, and other short-duration phenomena more accurately, which are critical for accurate permafrost and surface process modelling.

All variables are generated for the SSP2-4.5 future climate scenario, representing moderate greenhouse gas emissions and their associated climate change impacts.

2 Data sources

Two sets of datasets were prepared to accomplish this project:

- Reference Data - representing the current and recent past climate for all required variables. These datasets are essential for bias correction of future projections from CMIP6 models. Because no single product provides all six variables with sufficient quality, multiple datasets from numerical models, reanalysis products, and satellite observations were combined.
- CMIP6 Model Data - providing continuous daily values for all required variables, covering both the "historical" period and the "SSP2-4.5" future scenario. Model selection was restricted to those models that offered complete coverage of the required variables, resulting in the inclusion of six models: ACCESS-CM2, ACCESS-ESM1-5, CanESM5, CMCC-ESM2, EC-Earth3, and INM-CM4-8.

2.1 Reference data

The following datasets were selected to represent the past and current climate. The intersection of all datasets spans 1 March 2000 to 31 December 2023, which was adopted as the reference period for training the quantile mapping bias correction applied to CMIP6 data. Available site data from the Meadowbank Complex were also used for bias correction of the CMIP6 data.

2.2.1 Daymet

The Daymet dataset provides daily, gridded surface weather parameters over North America at a spatial resolution of 1 km × 1 km (Thornton et al., 2023). Variables used in this project include temperature, precipitation, shortwave radiation, vapour pressure, snow water equivalent, and day length. Data are derived from meteorological station observations interpolated using a regression-based approach that accounts for topography and other spatial features.

2.2.2 ERA5-land

ERA5-Land is a global reanalysis dataset produced by the European Centre for Medium-Range Weather Forecasts (ECMWF) at 0.1° (~9 km) spatial resolution and hourly temporal resolution (Muñoz-Sabater et al., 2021). It provides a broad range of land-focused variables, including air temperature (K), wind speed (m/s), dew point (K), precipitation (m), and surface snow depth (m). The dataset combines model simulations with a large volume of observational data, ensuring physically consistent and spatially complete records over the target region.

2.2.3 CERES

The Clouds and the Earth's Radiant Energy System (CERES) Synoptic Radiative Fluxes and Clouds (SYN1deg-1Hour) product provides global, 1° × 1° hourly surface and top-of-atmosphere radiative fluxes. (Doelling, 2017). In this project, this dataset was used to obtain incoming and reflected shortwave solar radiation ($\text{MJ m}^{-2} \text{day}^{-1}$) at the surface level. CERES products combine satellite observations from multiple platforms with meteorological data to ensure consistent global radiation estimates

2.2.4 Station data

Supplementary station data were obtained from Environment and Climate Change Canada ([Historical Climate Data](#)). The two closest stations to the target site, Baker Lake Airport and Baker Lake Climate Station, are approximately 80 km away. They provide observations of air temperature (°C) and snow depth (m), which were used for additional validation of reanalysis and gridded datasets.

Some observations are also provided at the sites Amaruq, MB and Baker Lake from the Meadowbank Complex. However, most of these observations only cover the period from 2017 to 2022. The variables include temperature, precipitation, wind, relative humidity, solar radiation, snow depth, and albedo.

2.2 CMIP6 data

Global climate models (GCMs) from the Coupled Model Intercomparison Project (CMIP6) were applied to analyse potential future changes, providing multi-model climate projections under standardised experimental protocols. The CMIP6 GCM data were obtained from <https://esgf-node.llnl.gov/search/cmip6>. For more information on these CMIP models, please refer to <https://esgf-node.llnl.gov/search/cmip6/>.

CMIP6 consists of the ‘runs’ from around 100 distinct climate models produced across 49 different modelling groups. Several new scenarios are also being used in CMIP6 to provide scientists with a broader range of futures to simulate. These scenarios are outlined in the chart below, which illustrates the radiative forcing levels up to 2100. The scenarios that can be applied for risk and vulnerability assessments are limited to the following five SSPs: SSP1-1.9, SSP1-2.6, SSP2-4.5, SSP3-7.0 and SSP5-8.5 (Figure 1).

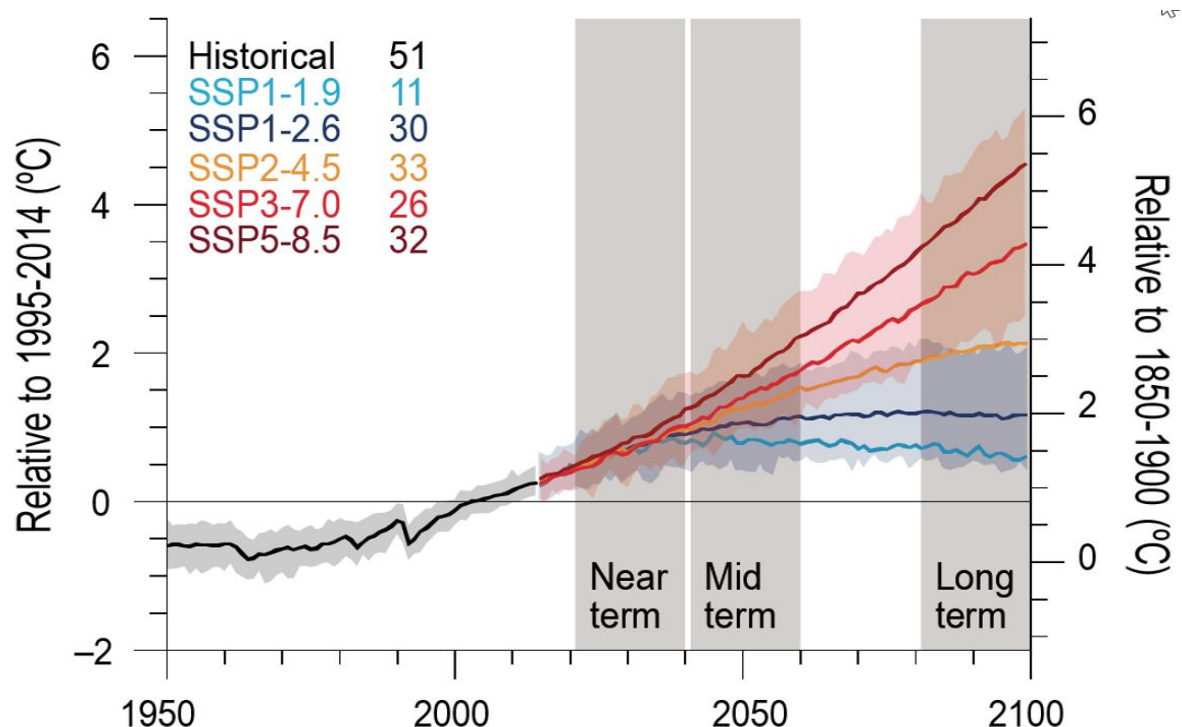


Figure 1: Global surface air temperature changes relative to the 1995–2014 average (left axis) and relative to the 1850–1900 average (right axis; offset by 0.82°C, which is the multi-model mean and close to the observed best estimate (source: IPCC, 2021).

This project used:

- Historical experiments – covering 1850–2014, representing past climate forced by observed natural and anthropogenic drivers.
- ScenarioMIP SSP2–4.5 experiment – a “Tier 1” priority experiment representing a medium-range greenhouse gas emissions pathway (Riahi et al., 2017), spanning 2015–2100.

For each model, daily values of the required variables were extracted. The air temperature was computed as the average of the daily maximum and minimum temperatures. Snow

depth was directly available only from CMCC-ESM2; for the other five models, snow depth was estimated from surface snow water equivalent using density assumptions.

The six CMIP6 models selected for this project were:

- ACCESS-CM2
- ACCESS-ESM1-5
- CanESM5
- CMCC-ESM2
- EC-Earth3
- INM-CM4-8

These models were selected based on the availability of variables, temporal coverage, and representation of the study region. These six models are also included in the CanDCS-U6 ensemble¹.

3 Methodology

3.1 Data preparation

The grid cell closest to the target site was extracted from each reference and CMIP6 dataset. To best represent the historical climate, variables were first extracted from the following datasets:

- Air Temperature, Dewpoint, Precipitation, Surface Wind Speed and Snow Depth from ERA5-land
- Max (Min) temperature, Precipitation, vapour pressure, Solar Radiation, and Surface Snow Depth from Daymet
- Surface Downwelling Shortwave Radiation and Surface Albedo from CERES.

It is worth noting that relative humidity is not available directly from ERA5-Land and Daymet. Therefore, it was calculated based on dewpoint or vapour pressure, depending on the availability of input variables.

However, after validation against available station data, adjustments were made, and to maintain the consistency between variables, a target variable is selected from a single source as much as possible:

- Air Temperature was ultimately taken from ERA5-Land due to better agreement with station observations.
- Surface Wind Speed remained from ERA5-Land as it was the most reliable source available.

¹ <https://climatedata.ca/about-candcs-u6/>

- Radiation Variables (surface downwelling shortwave radiation, surface albedo) remained from CERES, given its high accuracy in global (regional) radiation estimates.
- Relative humidity values were taken from ERA5-Land. When compared to observations, relative humidity derived from both ERA5-Land and Daymet did not adequately reflect the observed seasonal patterns. Despite this limitation, the two datasets are generally consistent with each other.
- Daily precipitation is utilized from ERA5-Land. However, ERA5-Land overestimates the number of precipitation days compared to site observations. Therefore, its precipitation frequency is adjusted based on Daymet data and observations.
- Snowfall was derived from total precipitation using a simple temperature-based separation (e.g., SNOW-17, Anderson, 2006). Specifically, days with mean temperatures below 0 °C were assumed to have all precipitation occur as snowfall.
- Snow depth, expressed in centimeters, represents the depth of the snowpack and is derived using ERA5-Land temperature and adjusted precipitation inputs. The snow water equivalent (SWE) is first estimated based on a simple temperature-based model of snow accumulation and melt (Thornton et al., 2000). Subsequently, SWE is converted to snow depth by dividing it by the snowpack density, which is estimated based on the site observation data.
- Albedo was derived from snowpack information. The analysis from site observations revealed a strong dependence of albedo on snowpack depth. When the snowpack depth was greater than or equal to 3 cm, albedo values were typically around 0.7. Under snow-free conditions, albedo decreased to approximately 0.2, and for snowpack depths between 0 and 3 cm, albedo averaged about 0.5.

As Albedo, snowfall, and snowpack can be estimated from other variables, the variables of temperature (maximum, minimum, and mean), precipitation, relative humidity from ERA5-Land, and solar radiation from CERES are used to construct the historical reference data, covering the period from 1991 to 2023. This dataset is also used to adjust CMIP6 GCM projections.

For GCM data preparation, most CMIP6 models did not directly provide daily mean air temperature. As a result, the air temperature was calculated from daily maximum and minimum temperatures:

$$T_{air} = (T_{max} + T_{min})/2$$

To address systematic errors in the GCM outputs, the Quantile Delta Mapping (QDM) bias-correction method was applied to all six models.

3.2 Introduction to Quantile Delta Mapping Method (QDM)

The QDM method (Cannon et al., 2015) It is designed to bias-correct model simulations while preserving long-term changes in quantiles, thereby maintaining projected trends. QDM operates on three datasets:

- Observation or reference data (OBS)

- Model simulations during the same period as the observation data (Sim_B)
- Model projection for the future period (Sim_F).

The method adjusts Sim_B and Sim_F using the observed distribution while maintaining the model-projected relative changes in each quantile. This approach corrects both the central tendency and the distributional shape of climate variables without distorting future variability. The biggest advantage of QDM is that it can preserve quantile trends of GCM simulations. The idea underlying QDM is presented in Figure 2.

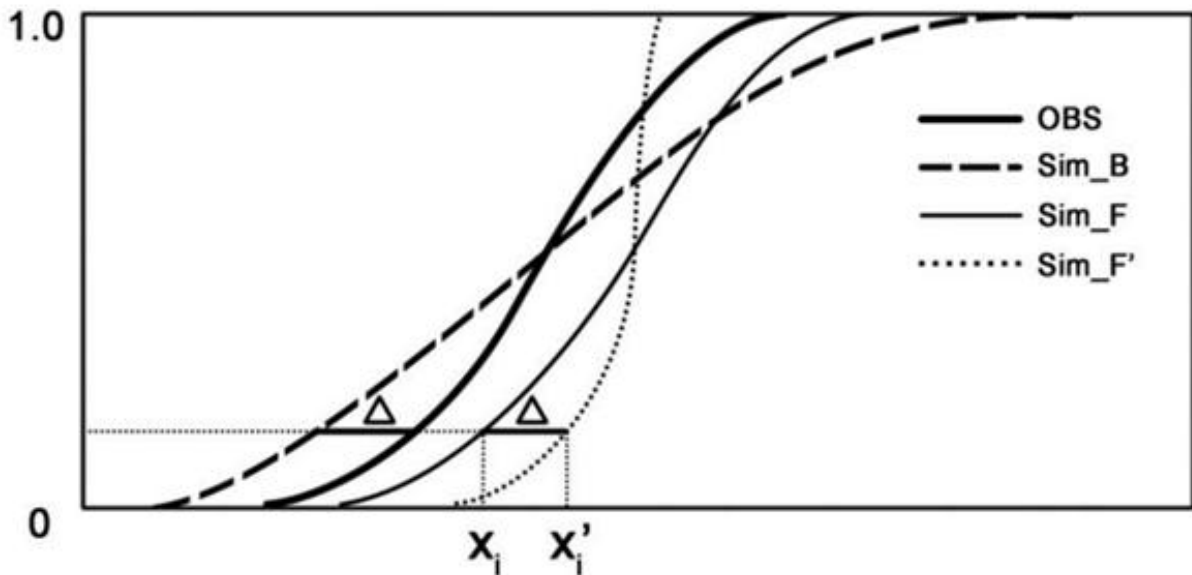


Figure 2: Illustration of the quantile delta mapping method (QDM). Image created by Yin (2011).

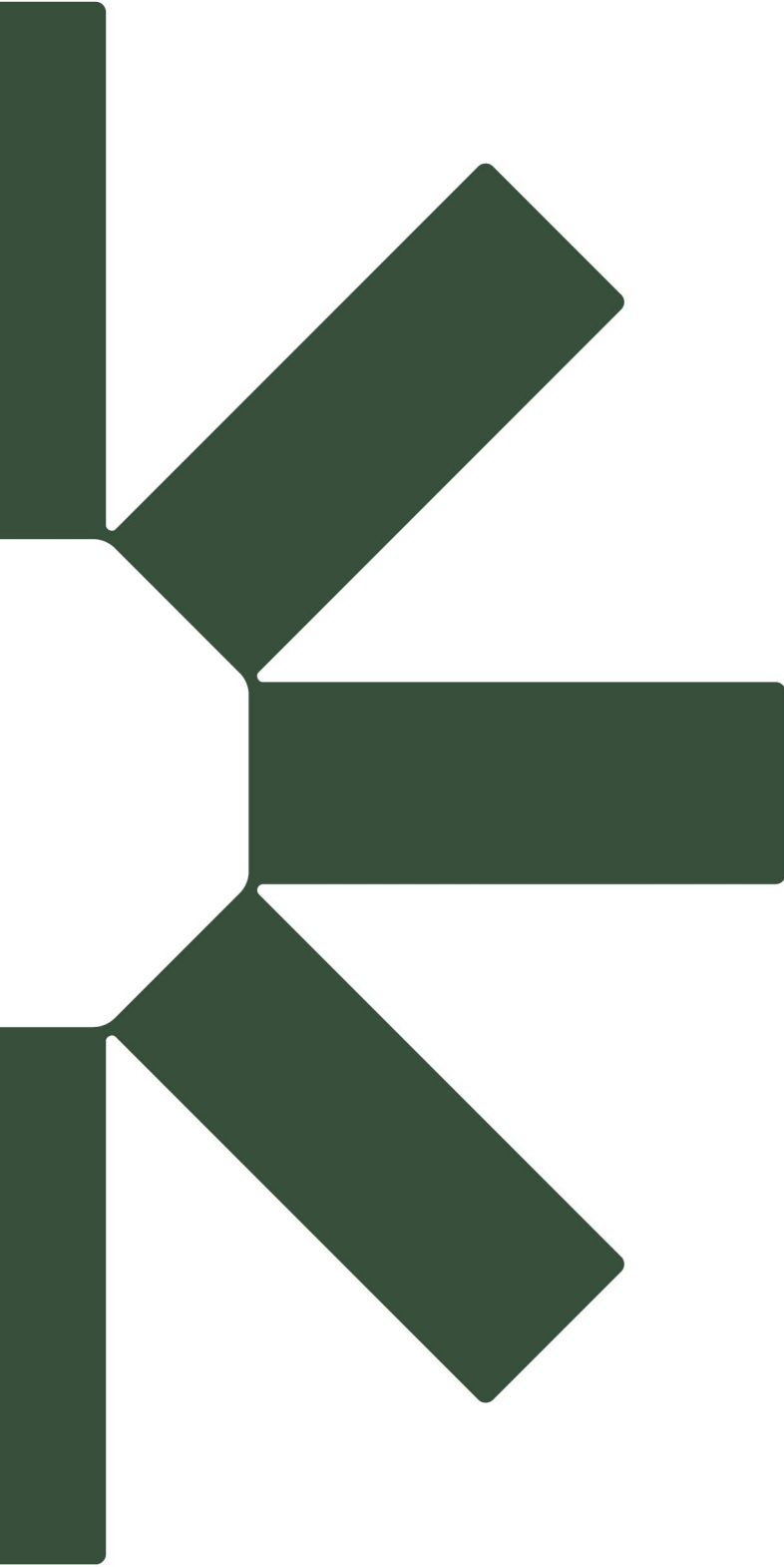
In this study, the Quantile Delta Mapping (QDM) approach was applied on a monthly basis to incorporate the seasonal variability of climate variables. Historical (1850–2014) and SSP2–4.5 future (2015–2100) simulations from six CMIP6 models were merged into continuous time series. Bias correction was performed for the 1991–2100 period using data from 1995 to 2014 as the reference training period. The corrected outputs were then used to calculate snowfall, snowpack, and albedo, which were subsequently further adjusted using available site observations.

To construct the final climate input dataset for the TEMP/W model, the 2022 observational data from the Meadowbank Complex were combined with the bias-corrected and derived data from 2023 to 2100.

4 Reference

- Anderson EA. (2006). Snow Accumulation and Ablation Model – SNOW 17. US National Weather Service, Silver Spring, MD
- Cannon, A. J., Sobie, S. R., & Murdock, T. Q. (2015). Bias correction of GCM precipitation by quantile mapping: How well do methods preserve changes in quantiles and extremes? *Journal of Climate*, 28(17), 6938–6959. <https://doi.org/10.1175/JCLI-D-14-00754.1>
- Doelling, D. (2017). CERES Level 3 SYN1deg-1Hour Terra-Aqua-MODIS HDF4 file – Edition 4A [Data set]. NASA Langley Atmospheric Science Data Center Distributed Active Archive Center. https://doi.org/10.5067/TERRA+AQUA/CERES/SYNIDEG-1HOUR_L3.004A
- IPCC (2021). *Climate Change 2021: The Physical Science Basis*. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L.Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R.Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 2391 pp. doi:10.1017/9781009157896.
- Muñoz-Sabater, J., Dutra, E., Agustí-Panareda, A., Albergel, C., Arduini, G., Balsamo, G., et al. (2021). ERA5-Land: A state-of-the-art global reanalysis dataset for land applications. *Earth System Science Data*, 13(9), 4349–4383. <https://doi.org/10.5194/essd-13-4349-2021>
- Riahi, K., Van Vuuren, D. P., Kriegler, E., Edmonds, J., O'Neill, B. C., Fujimori, S., et al. (2017). The Shared Socioeconomic Pathways and their energy, land use, and greenhouse gas emissions implications: An overview. *Global Environmental Change*, 42, 153–168. <https://doi.org/10.1016/j.gloenvcha.2016.05.009>
- Thornton, P. E., Hasenauer, H., & White, M. A. (2000). Simultaneous estimation of daily solar radiation and humidity from observed temperature and precipitation: An application over complex terrain in Austria. *Agricultural and Forest Meteorology*, 104, 255–271. [https://doi.org/10.1016/S0168-1923\(00\)00170-2](https://doi.org/10.1016/S0168-1923(00)00170-2)
- Thornton, P. E., & National Center for Atmospheric Research Staff (Eds.). (2023, August 12). *The Climate Data Guide: Daymet—Daily surface weather and climatological summaries*. National Center for Atmospheric Research. Retrieved August 10, 2025, from <https://climatedataguide.ucar.edu/climate-data/daymet-daily-surface-weather-and-climatological-summaries>.

Yin, C. (2011). Applications of self-organising maps to statistical downscaling of major regional climate variables. Thesis, Doctor of Philosophy (PhD), University of Waikato, Hamilton, New Zealand.



Making Sustainability Happen

Attachment B: Response to the Kivalliq Inuit Association's Comments (March 2, 2026) and Meadowbank TSF Thermal Model Temperature Contour Plots

To: Bobby Doroudiani, Colleen Prather **From:** Khokan Debnath, Sean Lynch
Company: Agnico Eagle Mines Limited **SLR Consulting (Canada) Ltd.**
cc: Rob Frizzell, Jennifer Range **Date:** April 8, 2026
Project No. 201.089793.00001
Revision 0

RE: Response to the Kivalliq Inuit Association’s Comments (March 2, 2026) and Meadowbank TSF Thermal Model Temperature Contour Plots

1.0 Introduction

At Agnico Eagle Mines Limited’s (Agnico Eagle) request SLR Consulting Canada Ltd. (SLR) has reviewed the comments presented in the Kivalliq Inuit Association (KIA), KIA comments on the Agnico Eagle updated Interim Closure and Reclamation Plan (ICRP) for the Meadowbank Complex. The KIA memorandum is dated March 2, 2026, and relates to Agnico Eagle’s Water Licence 2AM-WTP1830, 2AM-MEA1530.

SLR has prepared responses related to the thermal modelling completed for Agnico Eagle. As the comments provided by KIA in the memorandum dated March 2, 2026 were not individually numbered or itemized, SLR and Agnico Eagle have identified the relevant sections of the memorandum where comments pertaining to the thermal model and the previous thermal cover for the Meadowbank TSF are presented.

SLR was previously retained by Agnico Eagle to undertake thermal modeling of the Tailings Storage Facility (TSF) at the Meadowbank Complex (the Site). The objective of the work was to develop a ground thermal model to evaluate the ground thermal regime for various non-acid generating (NAG) waste rock (rockfill) cover system under projected climate conditions.

SLR’s responses to the KIA’s comments are based on the results presented in its thermal modelling reports dated October 8, 2025, and December 5, 2025.

SLR understands Agnico Eagle’s current preferred closure design for the Meadowbank TSF is based primarily on maintaining saturated conditions within the tailings to limit oxygen ingress and thereby control the potential for acid generation and metal leaching. This approach provides a conservative basis for evaluating long-term geochemical stability and does not rely solely on the preservation of frozen conditions within the tailings.

The responses provided below address comments related to model

- boundary conditions;
- quantification of thaw;
- model calibration;
- sensitivity analyses; and
- thaw consolidation.

2.0 Response to the Kivalliq Inuit Association's Comments (March 2, 2026)

2.1 Lower Boundary Variation (GeoChange Section 2.2)

KIA Comment:

Clarification was requested regarding the variation of the lower boundary condition in the modelling.

Response:

The lower boundary condition adopted in the thermal modelling represents the long-term geothermal gradient and is consistent with typical practice for permafrost and ground thermal analyses.

The results of SLR's thermal modelling report indicate that the predicted thaw depth within the cover system is primarily governed by atmospheric boundary conditions, snow cover, and thermal properties of the cover materials, rather than the assumed lower boundary condition. Consequently, modest variations in the lower boundary temperature do not materially affect the predicted thermal performance of the cover system or the design thickness required to maintain frozen conditions in the underlying tailings.

Therefore, the adopted lower boundary condition is considered appropriate for the purposes of the thermal modelling assessment.

2.2 Lack of Quantification of Thaw (GeoChange Section 5.2)

KIA Comment:

Additional quantification of thaw conditions requested.

Response:

To address the comment regarding the lack of thaw quantification, SLR developed temperature contour plots for both the 2 m and 4 m NAG waste rock cover options based on the thermal modelling results presented in its report dated December 5, 2025.

The contour plots are based on thermal model outputs spanning January 1, 2022, to December 31, 2100, and illustrate the temporal evolution of ground temperature, with particular emphasis on thaw depth within the NAG waste rock cover and the underlying tailings.

The contour plots were generated from temperature time-series outputs of the thermal-only model using projected climate data under the CMIP6 SSP2-4.5 climate scenario. Corresponding contour plots are presented in **Section 3.1**.

SLR's results presented in its report dated December 5, 2025 indicate that thaw depth increases progressively over time in response to rising temperatures. The maximum thaw depths are estimated to be approximately 2.97 m and 4.01 m below the cover surface for the 2 m and 4 m NAG waste rock cover scenarios, respectively.



2.3 Thaw Duration and Volume (GeoChange Section 5.2)

KIA Comment:

Clarification was requested on whether the modelling results could be used to determine parameters such as how long thaw persists each year, whether thaw duration increases over time, the cumulative thermal exposure of the tailings, and the effective thaw volume within the tailings profile.

Response:

Agnico Eagle has provided the KIA with an updated thermal modelling report developed by SLR and dated December 5, 2025. This report includes climate change projections using only CIMP6 SSP2-4.5 data. Based on the KIA's request during the meeting held on, March 18, 2026, Agnico Eagle requested SLR to provide thaw duration data based on the same thermal model data December 5, 2025.

The thermal modelling results presented in SLR's report dated December 5, 2025 provide sufficient temporal and spatial resolution to extract additional thaw-related metrics, including seasonal thaw duration. At the beginning of the analysis period (2022–2026), thaw within the tailings initiates as early as July 9. Towards the end of the analysis period (2083–2100), thaw onset occurs earlier in the season, beginning as early as June 23. The minimum thaw duration of 71 days is observed in 2041, while the maximum thaw duration of 159 days occurs in 2085. Detailed thaw duration for 2m NAG waste rock cover is provided in Section 3.2.

It should be noted that thaw duration is sensitive to the depth selected within the tailings. In this assessment, thaw duration is calculated at the tailings surface using a phase change temperature of -0.17 °C. If a location slightly below the tailings surface is considered, the calculated thaw duration would be lower due to delayed and reduced thaw penetration.

The preferred cover of TSF is primarily focused on sustaining a high degree of saturation to limit oxygen ingress and thereby control acid generation and metal leaching. The design does not rely on the persistence of frozen conditions, and the functional implications of thaw are addressed through this saturation-based performance approach.

Further quantification of thaw duration, cumulative thermal exposure, and thawed volume is not considered to provide significant additional value for the preferred cover design, which is based on maintaining saturated conditions within the tailings.

2.4 Model Calibration (GeoChange Section 8.0)

KIA Comment:

Clarification was requested regarding the calibration of the model.

Response:

Model calibration was conducted by SLR to establish appropriate thermal properties for both the tailings and the NAG waste rock cover under scenarios with and without a NAG waste rock cover. The calibration incorporated available site-specific climate data and thermistor measurements to refine the thermal parameters of the materials.

Details of the calibration methodology and results are provided in the updated thermal modelling report, "Meadowbank Complex Tailings Storage Facility Thermal Cover Model" dated December 5, 2025. In SLR's report dated December 5, 2025, the calibration results demonstrate that the model provides a reasonable representation of observed thermal conditions and is suitable for assessing long-term thermal performance of the cover system.



2.5 Sensitivity Analysis Under SSP5-8.5 (GeoChange Section 9)

KIA Comment:

A sensitivity analysis under the SSP5-8.5 climate scenario was requested.

Response:

SLR understands that the progressive saturation cover will be designed to achieve the required performance objectives independent of potential thaw depth.

Under more extreme climate scenarios, increased thaw depth within the tailings may occur. Accordingly, the TSF cover design does not rely on the presence of frozen conditions for its long-term performance. Even if fully thawed, tailings remain saturated at or above 85% (Okane, August 2025 presentation).

Thermal modeling under an extreme climate scenario (i.e., SSP5-8.5) was not advanced, as the currently preferred cover configuration is based on a saturation-controlled design approach.

2.6 Thaw Consolidation and Cover Settlement (GeoChange Section 9)

KIA Comment:

GeoChange noted that additional evaluation of thaw consolidation of the tailings may be required to address potential long-term cover settlement and suggested consideration of ice content within the near-surface tailings.

Response:

Settlement associated with thaw is considered low to negligible based on operational practices implemented at the Meadowbank site, as described by Agnico Eagle.

Measures applied by Agnico Eagle to limit the formation of ice lenses include:

- During the open water season, and prior to winter freezing, ponded water within the TSF is actively managed and pumped to the open pits.
- During the winter period, wind action promotes natural removal of snow from the tailings surface.
- Prior to placement of the cover system, any accumulated snow is removed from the TSF surface.

These practices are intended to minimize the formation of ice lenses within the tailings, thereby reducing the potential for thaw-induced softening and associated settlement. Based on the information provided by Agnico Eagle, SLR considers the potential for thaw-related settlement to be low.

3.0 Meadowbank TSF Thermal Model Temperature Contour Plots

The thermal modeling was completed using GeoStudio TEMP/W. The model incorporated site-specific information provided by Agnico Eagle, including TSF surface elevations and material properties of the proposed cover system. Climate projection data applied in the analysis were developed by ClimSystems (a division of SLR), based on current and widely accepted climate datasets. The results of the thermal modeling are presented in the Thermal Cover Modeling Report dated December 5, 2025.



At the request of Agnico Eagle, SLR developed supplemental contour plots to support the interpretation of model results and shall be read in conjunction with the SLR report dated December 5, 2025.

3.1 Ground Temperature Contour Plots

Temperature contour plots were developed for the 2 m and 4 m NAG waste rock cover options using model data from January 1, 2022, to December 31, 2100. These plots illustrate the temporal evolution of ground temperature, with particular emphasis on thaw depth within the NAG waste rock cover and the underlying tailings. The contours were generated from temperature time-series outputs of the thermal-only model using projected climate data under the CMIP6 SSP2-4.5 climate scenario.

The results indicate that both thaw depth and thaw duration increase over time in response to rising temperatures. Thaw duration can be qualitatively assessed by comparing temperature contour plots across different time periods, which show a progressive increase in thaw persistence over the simulation period. As stated in the SLR report dated December 5, 2025, Revision 0, the maximum thaw depths are approximately 2.97 m and 4.01 m below the cover surface for the 2 m and 4 m NAG waste rock cover scenarios, respectively. Temperature contour plots are attached with this memo in Attachments A and B.

3.2 Thaw Duration

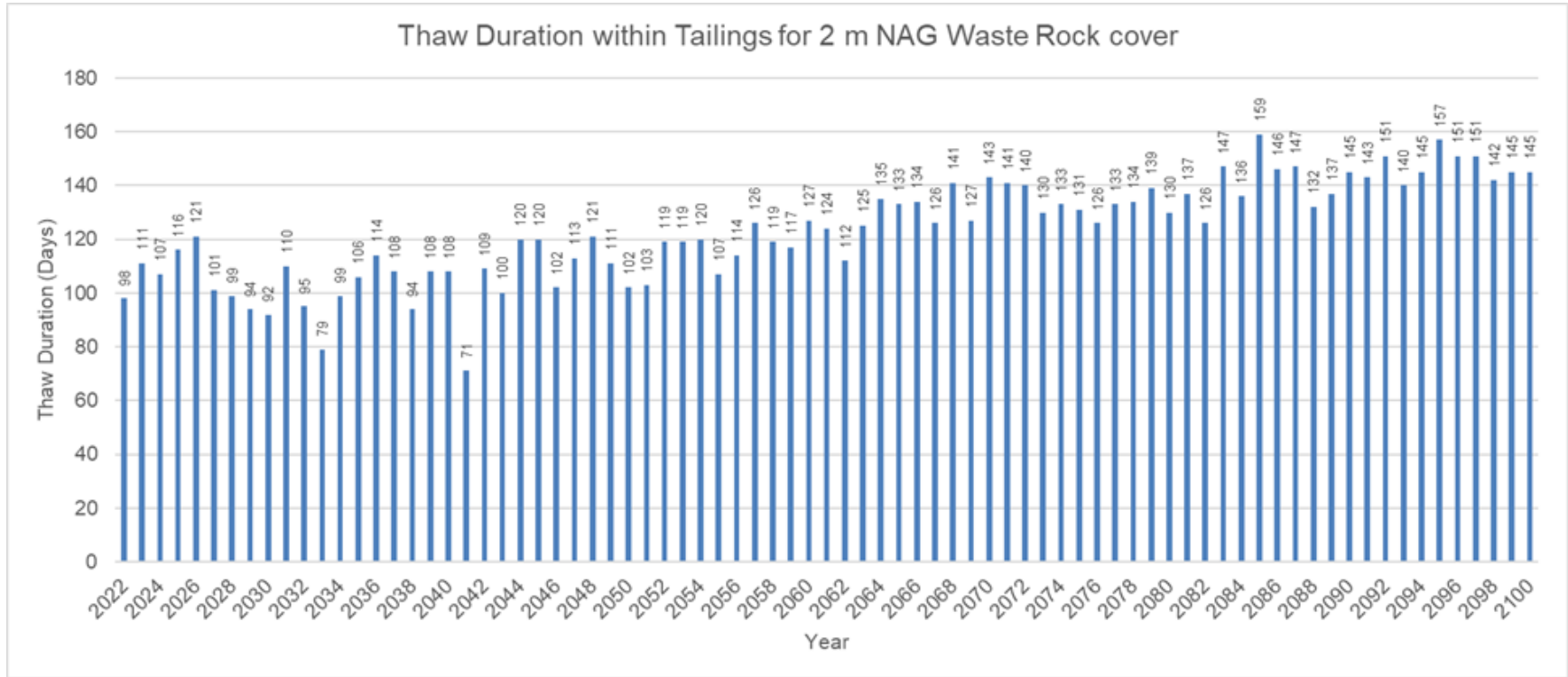
Ground thaw occurs during the summer when air temperatures remain above 0 °C for extended periods, while refreezing occurs during the winter when air temperatures remain below 0 °C. This seasonal cycle of thawing and freezing defines the active layer.

The thermal modelling results presented in SLR's report dated December 5, 2025, provide sufficient temporal and spatial resolution to extract additional thaw-related metrics, including seasonal thaw duration. Thaw duration within the tailings for the 2 m NAG waste rock cover is presented in Figure 1. At the beginning of the analysis period (2022–2026), thaw within the tailings initiates as early as July 9. Towards the end of the analysis period (2083–2100), thaw onset occurs earlier in the season, beginning as early as June 23. The minimum thaw duration of 71 days is observed in 2041, while the maximum thaw duration of 159 days occurs in 2085.

It should be noted that thaw duration is sensitive to the depth selected within the tailings. In SLR's report dated December 5, 2025, thaw duration is calculated at the tailings surface using a phase change temperature of -0.17 °C. If a location slightly below the tailings surface is considered, the calculated thaw duration would be lower due to delayed and reduced thaw penetration. Thaw duration for the 4 m NAG waste rock cover was not assessed, as thermal modelling indicates that thaw does not penetrate the underlying tailings throughout the analysis period from 2022 to 2100.



Figure 1: Thaw Duration Within the Tailings for the 2 M NAG Waste Rock Cover



4.0 Statement of Limitations

This report has been prepared by SLR Consulting (Canada) Ltd. (SLR) for Agnico Eagle Mines Limited (Client) in accordance with the scope of work and all other terms and conditions of the agreement between such parties. SLR acknowledges and agrees that the Client may provide this report to government agencies, interest holders, and/or Indigenous communities as part of project planning or regulatory approval processes. Copying or distribution of this report, in whole or in part, for any other purpose other than as aforementioned is not permitted without the prior written consent of SLR.

Any findings, conclusions, recommendations, or designs provided in this report are based on conditions and criteria that existed at the time work was completed and the assumptions and qualifications set forth herein. SLR may have used AI in the preparation of this document.

This report may contain data or information provided by third party sources on which SLR is entitled to rely without verification and SLR does not warranty the accuracy of any such data or information.

Nothing in this report constitutes a legal opinion nor does SLR make any representation as to compliance with any laws, rules, regulations, or policies established by federal, provincial, territorial, or local government bodies, other than as specifically set forth in this report. Revisions to legislative or regulatory standards referred to in this report may be expected over time and, as a result, modifications to the findings, conclusions, or recommendations may be necessary.

5.0 Closure

This memo was prepared by Khokan Debnath of SLR, and it has been reviewed by Christopher Stevens, PhD., from Northern Permafrost Consulting, an independent thermal modeling expert. We trust the above information meets your current requirements. Please contact the individuals noted below if you have any questions or comments.

Regards,

SLR Consulting (Canada) Ltd.



Khokan Debnath, M.Sc., P.Eng.
Senior Geotechnical Engineer
kdebnath@slrconsulting.com

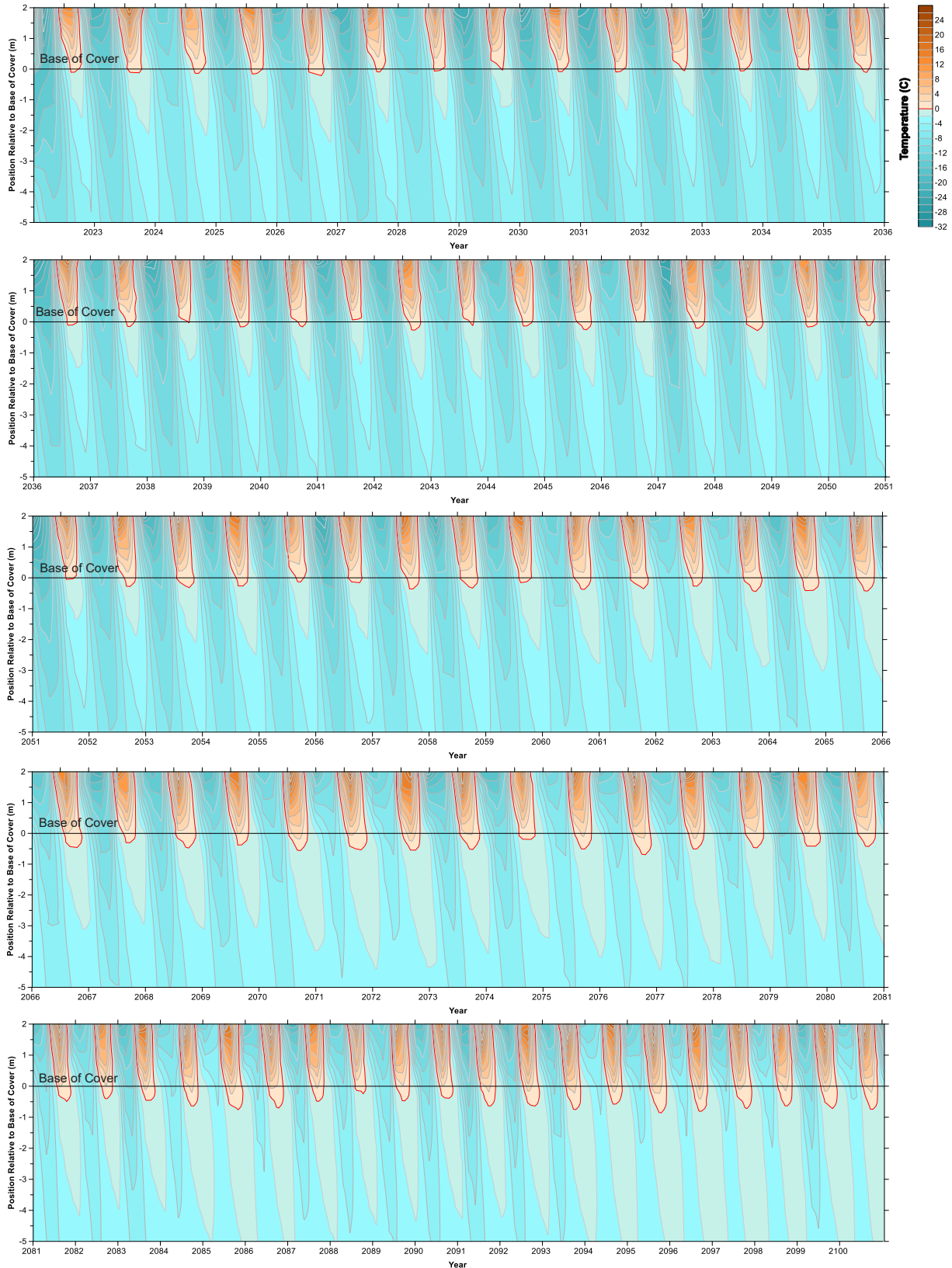


Sean Lynch
Principal Climate Resilience
and Sustainability Consultant
slynch@slrconsulting.com

Attachment: **Attachment A:** Temperature Contour Plots for 2 m NAG Waste Rock Cover Over Tailings
Attachment B: Temperature Contour Plots for 4 m NAG Waste Rock Cover Over Tailings



Attachment A: Temperature Contour Plots for 2 m NAG Waste Rock Cover Over Tailings



Attachment B: Temperature Contour Plots for 4 m NAG Waste Rock Cover Over Tailings

