



January 30, 2020

Karen Kharatyan
Technical Advisor – Nunavut Water Board
PO Box 119
Gjoa Haven, NU, X0B 1J0

Re: Response to Final Comment Submissions for Agnico Eagle Mines Limited's "Whale Tail Pit Expansion Project" Applications for Amendments to Water Licences (NWB File Numbers 2AM-WTP1826, 2AM-MEA1526, and 2BB-MEA1828) (collectively, the Whale Expansion Project Amendment Application)

Dear Mr. Kharatyan,

Agnico Eagle Mines Limited (Agnico Eagle) thanks the Nunavut Water Board (the Board) for the opportunity to respond to the Final Review Comments received by the Board as part of the Whale Tail Expansion Project Amendment Application.

As requested, please find enclosed Agnico Eagle's responses which are intended to address the Final Review Comments of the Kivalliq Inuit Association, Fisheries and Oceans Canada, Environment and Climate Change Canada, and Crown-Indigenous Relations and Northern Affairs filed with the Board on January 23, 2020. Agnico Eagle has taken care to provide detailed responses with the goal of resolving all outstanding issues in advance of the public hearing.

Agnico Eagle also encloses revised recommended drafts of Water Licences 2AM-WTP1826, 2AM-MEA1526, and 2BB-MEA1828, updated to reflect further suggested changes identified since they were filed on December 20, 2019 by Agnico Eagle and to respond to comments received from intervenors.

Since the Technical Meeting in October 2019, Agnico Eagle has continued to work with the intervenors to address technical comments and recommendations prior to the technical meetings and has been encouraged in particular by the collaboration shown by intervenors on the Adaptive Management Plan. We are pleased that a very high level of consensus has been developed on that topic, and enclose the resulting Adaptive Management Plan (January 2020) for approval of the Board with the issuance of the Amended Licence.

We look forward to continuing these discussions with the Board during the upcoming Public Hearing in Baker Lake, scheduled to begin on February 12, 2020.



AGNICO EAGLE

Should you have any questions or require further information in the meantime, please contact the undersigned Jamie Quesnel at jamie.quesnel@agnicoeagle.com.

Sincerely,

Jamie Quesnel

Jamie.Quesnel@agnicoeagle.com

819.856.0821

Superintendent – Permitting and Regulatory Affairs – Nunavut



AGNICO EAGLE

2AM-WTP1826

Final Written Comment Responses

Whale Tail Pit – Expansion Project

Submitted to:

Nunavut Water Board

Submitted by:

Agnico Eagle Mines Limited – Meadowbank Division

January 30, 2020



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Appendix A: Agnico Eagle’s Proposed Closure and Post-closure Monitoring for NWB Water Licence
2AM-WTP1826 - Whale Tail Pit Expansion Project

Appendix B: Final Adaptive Management Plan

**CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS CANADA
(CIRNAC)**

January 2020

Interested Party:	CIRNAC	Rec No.:	CIRNAC-FC1
Re:	Delayed Waste Rock Storage Facility Interflow Seepage		

Information Request / Recommendation Made By Interested Party:

CIRNAC recommends that:

- a. The timeframe for post-closure monitoring program be extended to 25 years until site stability is demonstrated or achieved by AEM.*
- b. AEM to update their Final Closure and Reclamation Plan by incorporating monitoring data and model results obtained during mine operations before closure.*
- c. AEM to conduct geochemical assessment of the placed WRSF covers prior to final closure to confirm that the cover contains less than 1.0 wt% of waste rock types with elevated arsenic leaching potential.*

Agnico Eagle's Response to Request / Recommendation:

Response a

The 25 years of post-closure monitoring recommendation was introduced to Agnico Eagle by CIRNAC December 2, 2019 based on the Abandoned Military Site Remediation Protocol (INAC 2009) policy which applies to DEW Line sites on Crown Land and does not apply to mining (see Appendix A of this response package dated December 20, 2019 for detailed rationale).

There is already an accepted post-closure monitoring duration by CIRNAC, providing for a three year post-closure monitoring period for the Whale Tail Approved Project (refer to Approved Water Licence 2AM-WTP1826) and there is no basis to extend the post-closure monitoring for the Whale Tail Expansion Project. Table 1 below summarizes the Approved Project duration for all monitoring plus the monitoring for the Expansion Project. The Expansion Project for all monitoring is approximately double the Approved Project duration.

Table 1: Approved Project and Expansion Project Monitoring Duration

	Operations	Closure	Post-closure	Total
Approved Project (July 2018)	4	8	3	15
Expansion Project	6	18	3	27

As mentioned by CIRNAC in their recommendation, water quality modelling does not show exceedances in post-closure and shows that site stability is achieved. During the operations and closure window for the Expansion Project, a duration of 24 years, Agnico Eagle has committed to undertake annual water quality modelling updates and to adaptively manage and deviations from predictions.

Based on this, Agnico Eagle feels we have developed a monitoring plan that will demonstrate site stability and refers CIRNAC to ECCC-FC11 for additional detail.

Response b

Agnico Eagle agrees to update their Final Closure and Reclamation Plan by incorporating monitoring data and model results obtained during mine operations.

Response c

An extensive geochemical monitoring program is already in place at Whale Tail (> 40,000 samples per year) for segregation of PAG-ML and non-PAG-ML material, which includes QA/QC measures. This monitoring program mitigates the risk that rock with significant arsenic leaching potential will be found in the cover material. This data will be used to confirm the WRSF cover material meets predictions. Agnico Eagle refers CIRNAC to the Operational ARD-ML Sampling and Testing Plan for further details.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-FC2
Re:	Waste Rock Storage Facility Closure Designs		

Information Request / Recommendation Made By Interested Party:

CIRNAC recommends that the current WRSF cover designs be approved with the following commitments:

- a. Current WRSF cover designs are to be approved in concept only.*
- b. AEM is to finalize the WRSF cover designs by incorporating all monitoring data and additional thermal and seepage modelling results prior to full closure.*

Agnico Eagle's Response to Request / Recommendation:

Response a

Agnico Eagle disagrees with the recommendation to approve cover system designs in concept only.

Previous site-wide water quality modelling included conservative assumptions that were not reflective of the conceptual performance of the WRSF. Firstly, the assumption that runoff from the entire WRSF landform will report to Mammoth Lake has been updated to be consistent with the WRSF water management structures. Secondly, the simplifying assumption that interflow will occur in a stepwise fashion has been replaced by the more conservative assumption that interflow rates will increase gradually over time. As a result, the water quality modelling results provided for the RCP8.5 climate scenario continue to represent "book-end" expectations for water quality in Mammoth Lake. Should the same modelling under average climate conditions be repeated with the updated assumptions, predicted water quality from the WRSF would be improved as a result of cooler temperatures in the cover system and waste rock, and a decreased depth of interaction below the cover system.

Adaptive management plans have been developed and implemented in the event that the WRSF cover systems do not perform as expected. Mitigation identified include not only monitoring, sampling, and updated thermal and seepage modelling, but also construction measures up to and including increasing cover system thickness or altering configuration if necessary. Given the specific commitments to update cover system design through cover system amendments or additions if required, Agnico Eagle considers that the continued uncertainty regarding the effectiveness of the WRSF covers has been addressed to the extent practicable.

However, given the nature of the Expansion Project mine-life, the desire to complete progressive reclamation, and to validate the scale-dependent mechanisms affecting performance of the cover system, monitoring in situ is the best approach. As a result, Agnico Eagle have implemented a robust monitoring plan to confirm the performance of the WRSF cover system during operations and implement adaptive management plan (which includes commitments to amend the design if needed) meets the same objectives as those proposed by CIRNAC.

For additional clarity this approach has been approved at Meadowbank and for the Approved Project. Agnico Eagle is suggesting a more proactive approach with the Expansion Project by submitting a Final Design as part of the Application. Agnico Eagle refers CIRNAC to the Final Design document submitted (December 20, 2019; Whale Tail WRSF Expansion and IVR WRSF Design Report and Drawings).

Response b

Agnico Eagle disagrees with the recommendation as the Final Design has already been submitted (December 20, 2019; Whale Tail WRSF Expansion and IVR WRSF Design Report and Drawings). Monitoring data would be used to validate performance of the final design.

Interested Party:	CIRNAC	Rec No.:	CIRNAC-FC3
Re:	Adaptive Management		

Information Request / Recommendation Made By Interested Party:

CIRNAC supports the adaptive management plan and recommends that:

- a. The Adaptive Management Plan be incorporated into all aspects of AEM's operations;*
- b. The site reclamation security includes provisional allowances for adaptive management mitigations that may be required in the future.*

Agnico Eagle's Response to Request / Recommendation:

Response a

Agnico Eagle agrees with CIRNAC.

Response b

Agnico Eagle does not agree that security allowances should be deposited for contingency measures that may never be implemented. Before initiating all actions and management strategies described in the Adaptive Management Plan, Agnico Eagle will evaluate whether the action may change overall reclamation liability and if applicable will circulate an estimate of any reduction or increase to CIRNAC, KivIA, and NWB.

ENVIRONMENT AND CLIMATE CHANGE CANADA (ECCC)

Interested Party:	ECCC	Rec No.:	ECCC-FC1
Re:	Flood Pit Reconnection		

Information Request / Recommendation Made By Interested Party:

ECCC recommends that future versions of the ICRP include commitments made by the proponent, such as:

- *The ICRP specify closure water quality objectives that represent baseline conditions or national water quality objectives (Canadian Council of Ministers of the Environment [CCME]) or site-specific water quality objectives.*
- *The ICRP include a map showing post-closure drainage conditions, with connectivity between surface waters and water management structures identified including potential for fish passage.*

Agnico Eagle's Response to Request / Recommendation:

Per Agnico Eagle's suggested Water Licence Part E, Item 9,

“The Licensee may include appropriate Site Specific Water Quality Objectives within the receiving environment applicable during Construction and Operations in the approved Water Quality and Flow Monitoring Plan, which plan may be further modified by the Licensee and approved by the Board from time to time.”

Based on this, Agnico Eagle's view is that it is not necessary to identify Site Specific Water Quality Objectives in the ICRP.

Agnico Eagle stands by its commitment made at the NWB Technical Meeting on November 26, 2019 to identify Site Specific Water Quality Objectives for the pit waters and thresholds for implementing treatment prior to the end of operations (i.e., 2026) within the Final Closure and Reclamation Plan.

Agnico Eagle will include a map in the Final Closure and Reclamation Plan illustrating post-closure drainage conditions to and from the pit lakes. This map will also identify connectivity between surface waters and remnant water management structures in post-closure, and highlight connecting streams with potential for fish passage.

Interested Party:	ECCC	Rec No.:	ECCC-FC2
Re:	Flooded Pit Lake Closure Objective		

Information Request / Recommendation Made By Interested Party:

ECCC recommends the proponent revise the second water closure objective in Table 5.2-2: Closure Objectives and Criteria – Open Pits Workings, as follows (edits in bolded text):

Closure Objectives	Closure Criteria	Actions/ Measurements
Ensure outflow from the flooded area consistently meets water license criteria quality objectives, and is predicted to continuously meet water quality objectives over the short to long-term future.	Following completion of flooding of the open pits, the water quality of the flooded pit lake (in profile) must demonstrate stability and continuously meet water quality objectives, p P rior to breaching the Mammoth Dike and the Whale Tail Dike, the water quality will be profiled to confirm it is suitable for release. Treatment options will be investigated, if necessary (e.g., in-situ treatment or through the O-WTP)	Routine monitoring and sampling; Seasonal post-flooding water quality results (including under ice) must demonstrate inter-annual stability and continuity in meeting water quality objectives. Update site and receiving environment water quality predictions, and ensure that water quality is predicted to consistently meet water quality objectives over the short, medium and long-term. In-situ or water treatment at the O-WTP if required

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle proposes the following revision to ECCC's recommendation to the water component closure objective in Table 5.2-2: Closure Objectives and Criteria – Open Pits Workings:

Closure Objectives	Closure Criteria	Actions / Measurements
<p>Ensure outflow from the Whale Tail pit lake flooded area consistently meets water licence criteria quality objectives, and is predicted to continuously meet water quality objectives over the short to long term future.</p>	<p>Following completion of flooding of the open pits, the water quality of the flooded pit lake (in profile) must will demonstrate stability and continuously meet water quality objectives and demonstrates steady state conditions to confirm the pit lake can be reconnected to the downstream receiving environment,</p> <p>Prior to breaching the Mammoth Dike and the Whale Tail Dike, the water quality will be profiled to confirm it is suitable for release.</p> <p>The pits must display seasonal water column profile conditions consistent with pit lake modelling predictions (i.e., dimictic circulation or spring and fall turnover).</p> <p>Treatment options will be investigated, if necessary (e.g., insitu treatment or through the O-WTP)</p>	<p>Routine monitoring and sampling: pit lake water quality monitoring will be undertaken during closure, and for three years into post closure. Monitoring will include physico-chemical water column profiling and water sample collection in the surface water and at depth in the pits. Collected data will be compared to modelling predictions and to closure water quality objectives.</p> <p>Seasonal postflooding water quality results (including under ice) must demonstrate interannual stability and continuity in meeting water quality objectives.</p> <p>Update site and receiving environment water quality predictions, and ensure that water quality is predicted to consistently meet water quality objectives over the short, medium and long term.</p> <p>Collected data will be used to calibrate and update the pit lake water quality model.</p> <p>In-situ or water treatment at the O-WTP, if required.</p>

Interested Party:	ECCC	Rec No.:	ECCC-FC3
Re:	Containment of Water in Closed Underground Mine		

Information Request / Recommendation Made By Interested Party:

ECCC recommends that the proponent confirm that underground workings will be sealed off and that minewater will not daylight (e.g., come to surface from underground) and potentially reach surface waters. The ICRP should include a contingency plan and water quality monitoring if there could potentially be surface flows of groundwater.

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle confirms that the portal and vent raise to the underground workings will be sealed off and that as a result mine water will not come to surface from underground (i.e., daylight) and potentially reach surface waters.

Pre-mining hydraulic head monitoring at the Westbay well indicates a downward vertical hydraulic gradient is present near the Whale Tail Pit and underground mine workings. This downward gradient is expected to re-establish with the flooding of the pit and underground, and underground minewater would not be expected to flow up and discharge to Whale Tail Lake but would rather discharge to the deeper sub-permafrost groundwater flow system. Therefore, a contingency plan and water quality monitoring is not required.

Interested Party:	ECCC	Rec No.:	ECCC-FC4
Re:	Closure Objective for Attenuation Ponds		

Information Request / Recommendation Made By Interested Party:

ECCC recommends the proponent add the following new water closure objective to Table 5.2-2: Closure Objectives and Criteria – Open Pits Workings, as follows:

Closure Objectives	Closure Criteria	Actions/ Measurements
Ensure attenuation pond contents are managed appropriately	Ensure remaining attenuation pond contents will not compromise the water quality of the flooded pit lake or receiving environment.	Evaluate/characterize contents (including residual water and sediments) of attenuation ponds. Evaluate effect of residual attenuation pond contents on water quality of the flooded pit lake over the short to long-term. Determine appropriate management methods.

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle proposes the following revision to ECCC's recommendation for a new water closure objective related to the IVR and Whale Tail attenuation ponds, but proposes the following revision:

Closure Objectives	Closure Criteria	Actions / Measurements
Ensure IVR and Whale Tail attenuation ponds contents are closed out with no risk to the flooded pit lake or receiving environment managed appropriately	Ensure remaining attenuation pond contents will not compromise the water quality of the flooded pit lake or receiving environment. Sediment quality meets closure objectives to be defined in the Final Closure and Reclamation Plan	Evaluate/characterize contents (including residual water and sediments) of Sediment quality in the attenuation ponds will be characterized. Evaluate effect of residual attenuation pond contents on water quality of the flooded pit lake over the short to longterm. Determine appropriate management methods, if required.

Interested Party:	ECCC	Rec No.:	ECCC-FC5
Re:	Waste Rock Storage Facility Closure Criteria		

Information Request / Recommendation Made By Interested Party:

ECCC recommends the proponent include the following revisions to Table 5.2-3 Closure Objectives and Criteria – Waste Rock Storage Facility (edits in bolded text):

Closure Objectives	Closure Criteria	Actions/Measurements
Reduce Prevent water impacts	A thermal cover to limit prevent acid generating reactions and migration of contaminants	Place thermal cover of NPAG/NML rock on the Whale Tail and IVR WRSF surface during progressive reclamation and at closure. Install thermistors to verify the predicted performance of the cover.
Confirm runoff and seepage from the WRSFs meet water licence criteria	As above for runoff and seepage A thermal cover to prevent acid generating reactions and migration of contaminants	Routine monitoring and sampling of runoff and seepage to verify that water licence criteria are met.

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle proposes the following revision to ECCC's recommendation (in ***bold italics***) to ensure clarity for the intent for each heading.

Closure Objectives	Closure Criteria	Actions/Measurements
Reduce Prevent Water <i>quality</i> impacts	A thermal cover to <i>limit</i> -acid <i>rock drainage</i> generating reactions and migration of contaminants	Place thermal cover of NPAG/NML rock on the Whale Tail and IVR WRSF surface during progressive reclamation and at closure. Install thermistors to verify the predicted performance of the cover.
Confirm runoff and seepage <i>contact water</i> from the WRSFs <i>comply with</i> meet -water licence criteria	As above for runoff and seepage A thermal cover to <i>limit</i> acid <i>rock drainage</i> and migration of contaminants	Routine monitoring and sampling of <i>contact water to comply with the water licence.</i>

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Interested Party:	ECCC	Rec No.:	ECCC-FC6
Re:	Waste Rock Storage Facilities - Contingencies		

Information Request / Recommendation Made By Interested Party:

ECCC recommends that the proponent identify contingencies to address the possibility that the WRSF cover(s) does not perform as expected.

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle proposes to change the wording in the ICRP, Section 5.2.3.9 Contingencies to the following:

“The Adaptive Management Plan for closure will be updated to revisit contingencies to address the possibility that the WRSF cover(s) does not perform as expected. This will occur as part of the Final Closure and Reclamation Plan as mentioned in the ICRP, Section 9.0.”

It is noted that the Adaptive Management Plan already includes WRSF cover contingencies that will apply during operations.

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Interested Party:	ECCC	Rec No.:	ECCC-FC7
Re:	Transportation Routes – Closure Objectives and Criteria		

Information Request / Recommendation Made By Interested Party:

ECCC recommends the following additions to Table 5.2-5 Closure Objectives and Criteria – Transportation Routes:

- *Add a closure objective to prevent degradation of surface waters including from acidification and sedimentation, as well as from the migration of contaminants ;*
- *Identify appropriate closure criteria and actions/measurements to support the above recommended closure objective;*
- *Identify methods to prevent potentially acid generating (PAG) bedrock from becoming exposed along the corridor of the Project haul road; and,*
- *Identify erosion prevention methods.*

In addition, ECCC recommends adding the following element to Section 5.2.7.5 (Engineering Work Associated with Selected Closure Activity):

- *Erosion prevention with respect to any in-stream work*

Agnico Eagle’s Response to Request / Recommendation:

Agnico Eagle has already implemented these recommendations in the Whale Tail Pit - Expansion Project Haul Road Management Plan. In version 3 of the ICRP (Section 4.5.6) Agnico Eagle has included cross-references to the Whale Tail Pit - Expansion Project Haul Road Management Plan.

The management plan was developed to ensure surface waters are not degraded by the construction of the haul road. Any overburden or quarry material used for construction will be (or has been) tested prior to use and any material with the potential to cause acid rock drainage or leach contaminants will be avoided. Further, this approach has been approved by intervenors for the Approved Project.

Sedimentation will also be managed through the borrow material principles outlined in Section 6.2 and in Section 12 of the Whale Tail Pit - Expansion Project Haul Road Management Plan (Appendix G.9). Some examples include prioritization of borrow areas at least 30 m from water bodies, ensuring pits drain naturally, and scarifying the haul road at closure to impede most traffic and minimize erosion potential.

Interested Party:	ECCC	Rec No.:	ECCC-FC8
Re:	Transportation Routes – Acid Rock Drainage Prevention		

Information Request / Recommendation Made By Interested Party:

With respect to preventing potential road-related acidification, ECCC recommends that the ICRP provide the following additional information:

- *identify how the haul road corridor and surface waters will be monitored;*
- *describe how impacts would be assessed; and*
- *Identify mitigation and contingency options.*

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle has already implemented these recommendations in the Whale Tail Pit - Expansion Project Haul Road Management Plan.

In version 3 of the ICRP (Section 4.5.6) Agnico Eagle has included cross-references to the Whale Tail Pit - Expansion Project Haul Road Management Plan.

Interested Party:	ECCC	Rec No.:	ECCC-FC9
Re:	Water Management Facilities – Closure Objectives and Criteria		

Information Request / Recommendation Made By Interested Party:

ECCC recommends the following revision to Table 5.2-7 Closure Objectives and Criteria - Water Management Facilities (edits in bold text):

Closure Objectives	Closure Criteria	Actions/ Measurements
Ensure collected runoff and seepage consistently meets water licence criteria, and is predicted to continuously meet water licence criteria over the short to long-term future.	Collected runoff and seepage will be treated through the O-WTP or S-WTP (brackish) until water quality consistently meets licence criteria for direct discharge, and is predicted to continue to do so.	Routine monitoring and sampling Demonstrate runoff and seepage consistently meet licence criteria for direct discharge Update water quality predictions, and ensure runoff and seepage is predicted to consistently meet water licence criteria over the short, medium and long-term.

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle proposes the following revision to ECCC's recommendation to the Water component closure objective in Table 5.2-7: Closure Objectives and Criteria – Water Management Facilities:

Closure Objectives	Closure Criteria	Actions / Measurements
Ensure collected runoff and seepage runoff and seepage to the receiving environment consistently meets will comply with water licence conditions criteria, and is predicted to continuously meet water licence criteria over the short to long term future.	Collected runoff and seepage Runoff and seepage to the receiving environment during closure with or without treatment will comply with water licence conditions will be treated through the O-WTP or S-WTP (brackish) until water quality consistently meets licence criteria for direct discharge, and is predicted to continue to do so.	Routine monitoring and sampling Demonstrate Runoff and seepage consistently meet licence criteria for direct discharge during closure will be collected and treated until it complies with water licence conditions. Once water licence conditions are met collection and treatment will no longer be required and runoff and seepage will flow directly to the receiving environment. Collected runoff and seepage data during closure will be used to calibrate and update site and receiving environment water quality models predictions, and ensure runoff and seepage is predicted to consistently meet water licence criteria over the short, medium and long-term.

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Interested Party:	ECCC	Rec No.:	ECCC-FC10
Re:	Water Management Facilities - Contingencies		

Information Request / Recommendation Made By Interested Party:

ECCC recommends that the ICRP include a discussion of whether and how in-situ treatment of the flooded pit lake would be feasible, and how long in-situ treatment could be provided.

ECCC also recommends that the ICRP identify and describe any alternative water management contingency options in the event that water quality monitoring indicates water in the flooded area is not suitable for direct discharge/reconnection to surface waters. Include short, medium and long-term contingency options.

Agnico Eagle's Response to Request / Recommendation:

If water quality monitoring during the closure phase indicates a potential exceedance that would inhibit the connection of the pit lake back to the receiving environment, either re-starting the existing treatment plant would be required or other in-situ treatment methods could be used. For example, in-pit examples for other mine sites have demonstrated large volume treatment for acid rock drainage by adding a neutralizing agent to the water (e.g., Houston et al. 2005; Harrington et al. 2012; and Ulrich et al. 2012). Similarly, ferric sulphate, a known reagent for removal of arsenic, could also be mixed with pit waters to remove arsenic.

However, as noted in previous discussions, the point in the mine life that water quality concentrations will be at their highest in the pit is likely at the beginning of closure. This is due to full exposure of the pit surfaces prior to flooding. As flooding progresses, the mineral reactions leading to potential water quality exceedances will cease once the pit surfaces are submerged by water. This is advantageous in terms of managing water quality risks as the water treatment plant on site will be able to continue treating the low volume, high concentration water, if necessary, immediately at closure; the risk of continued high mass loadings from the pit surfaces will diminish thereafter as flooding progresses. Monitoring and treatment (if necessary) would be completed during filling to ensure the trajectory of water quality was within project predictions for post-closure.

If needed, the duration of in-situ treatment would extend to meet the water licence requirements.

References:

- Harrington, Joe; Gobla, Mike; Francendese, Leo; Bates, Ed. 2012. Low cost treatment of a highly contaminated pit lake using innovative technology: Barite Hill Mine McCormick, SC, Final draft summary of findings, US EPA On Scene Coordinator
- Houston, KS; Milionis, PN; Eppley, RL; Harrington JM; Harrington JG; 2005. Field demonstration of in-situ treatment and prevention of acid mine drainage in the abandoned Tide Mine, Indiana County, Pennsylvania; EPA report.

Ulrich, Kai-Uwe; Bethge, Christian; Guderitz, Ina; Heinrich, Ben; Neumann, Volker; Nitsche, Claus; Benthaus, Friedrich-Carl. 2012. In-lake neutralization: quantification and prognoses of the acid load into a conditioned pit lake (Lake Bockwitz, Central Germany), Mine Water and the Environment, Volume 31.

Interested Party:	ECCC	Rec No.:	ECCC-FC11
Re:	Post-Closure Monitoring		

Information Request / Recommendation Made By Interested Party:

ECCC recommends that the post-closure monitoring period be open-ended, defined by conditions rather than a pre-set time period.

Agnico Eagle's Response to Request / Recommendation:

The post-closure phase is the period of time that would commence upon completion of the agreed closure activities set out in the FCRP. The projected duration of the closure period is 18 years. As per the ICRP a three year post-closure monitoring phase is anticipated to confirm site stability.

For clarity, the post-closure period (i.e., at the time of reconnection) will not begin until closure criteria are met. While based on site data, and extensive water quality modelling efforts, a three year monitoring period will be sufficient to demonstrate long-term site stability. This was confirmed through the application of a variety of models which includes:

- operations, closure, and post-closure site and downstream receiving environment water quality models with varying optimization conditions
- pit lake and receiver hydrodynamic models
- climate change scenarios RCP6.0 and RCP8.5
- 1-10 and 1-100 year flood event scenarios
- cryo-concentration effects
- contamination of the WRSF thermal cover with high arsenic leachable material

During the operations and closure phase, site monitoring data will be used to recalibrate and update the site water quality models on an annual basis, which will validate projected post-closure conditions. At that point, taking into account monitoring during the operations and closure phases, Agnico Eagle will have at least 24 years of data and updated water quality predictions before entering the post-closure phase.

The Adaptive Management Plan has proposed mitigation strategies in the event water quality forecast results do not meet predictions during operations, which will further ensure closure and post-closure water quality predictions are met. This Adaptive Management Plan has been developed with intervenors through a series of workshops and will be an effective tool to manage operations to help alleviate risk to post-closure water quality.

Based on the above, Agnico Eagle is confident that a three year post-closure monitoring program is sufficient.

Interested Party:	ECCC	Rec No.:	ECCC-FC12
Re:	Potential Water Management Exceedance (Freshet June 2020)		

Information Request / Recommendation Made By Interested Party:

ECCC recommends that the proponent provide details on managing potential excess flows at Quarry 1 during June 2020, and discuss whether Quarry 1 would provide sufficient retention time to allow storage of potential excess flows, pending treatment at the Water Treatment Plant (WTP).

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle appreciates this comment. The reader is referred to KivIA-WL-TC#4 as it pertains to the same issue.

Interested Party:	ECCC	Rec No.:	ECCC-FC13
Re:	Mitigating Potential Water Quality Exceedances		

Information Request / Recommendation Made By Interested Party:

ECCC recommends that the proponent identify and discuss: (1) opportunities to improve source control and (2) options to improve the WTP effluent quality, in order to minimize the risk of potentially exceeding CWQG and/or SSWQO in June in Mammoth Lake and Whale Tail Lake (South Basin).

ECCC recommends that the proponent increases water quality monitoring (e.g., frequency) in the receiver and downstream during months of high-flow discharge and in the month following the end of high-flow discharge (i.e., during June and July).

Agnico Eagle's Response to Request / Recommendation:

To improve source control on-site and per the Adaptive Management Plan, Agnico Eagle will monitor site water quality to identify major loading sources and water segregation opportunities within the various collection ponds and systems of the Expansion Project. The segregation of water on-site will result in smaller volumes of contact water needing treatment prior to discharge. This optimization would increase treatment plant efficiency and reduce the overall mass loading to the receiving environment during month of high flow discharge.

Agnico Eagle believes the recommendation for higher frequency monitoring in June and July in the receiving environment is not required. The treated effluent to be pumped to the receiving environment will be subject to regulated monitoring under the Water Quality and Flow Monitoring Plan for the mine (e.g., daily, weekly, and monthly monitoring requirements based on parameter groupings). This monitoring will include end of pipe (i.e., source) and within the receiving environment. Further, the monitoring within the receiving environment under the CREMP is at a higher frequency than many other northern mines currently monitor under their AEMPs. Agnico Eagle is confident the proposed Water Quality and Flow Monitoring Plan and CREMP monitoring frequency is appropriate to manage the risk of potentially exceeding CWQG and/or SSWQO in June in Mammoth Lake and Whale Tail Lake (South Basin).

Interested Party:	ECCC	Rec No.:	ECCC-FC14
Re:	Licence Term		

Information Request / Recommendation Made By Interested Party:

ECCC recommends that the proponent provide a rationale for this time frame, and discuss other milestones in the life of project which may be more appropriate timing for the licence renewal.

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle is seeking a water licence term until 2042, which includes the operations and closure phases. Agnico Eagle is of the opinion that the Water Licence should be extended until the end of the closure phase as there are already a number of conditions in the Water Licence which apply to the closure phase. For example, condition Part E, Item 9 requires Agnico Eagle to compare predicted water quantity and quality to the measured water quantity and quality during closure on an annual basis.

Interested Party:	ECCC	Rec No.:	ECCC-FC15
Re:	Comments on Draft Water Licence		

Information Request / Recommendation Made By Interested Party:

Section Part A.1a.6	Proponent Revisions Withdrawal and use of water from Whale Tail Lake (South Basin) for camp operation and re-flooding of open pit following pit development during Closure and for withdrawal and use of water from water bodies proximal to the Haul Road for dust suppression;	ECCC Comments/Recommendations ECCC notes this section has two clauses. ECCC recommends that the section be separated into two bullets as follows: 6. <i>Withdrawal and use of water from Whale Tail Lake (South Basin) for camp operation and re-flooding of open pit following pit development during Closure; and for</i> 7. <i>Withdrawal and use of water from water bodies proximal to the Haul Road for dust suppression;</i>	Part C.12 The Board may modify to the Monitoring Program for all phases of mining as set out in Schedule I without amendment or a public hearing. Requests for changes to the Monitoring Program should be forwarded to the Board in writing and should include justification for the change. Such requests may take into consideration the Water Monitoring Reduction Framework attached as Schedule C.	ECCC notes that this clause is broader than closure security, and should be moved to Part B (General Conditions). The Water Monitoring Reduction Framework referenced was first proposed in September 2017, and does not appear to have been updated to address reviewer comments previously provided. ECCC recommends that this clause be added to Part B, and that the proposed Schedule C Water Monitoring Reduction Framework should be provided as an unlocked PDF version, rather than a photocopy, to facilitate further review.															
Part A.1.a.13	Operation of site water management facilities, including but not limited to: • Operation of a Sewage Treatment Plant, Wastewater (STP); • Operation of Operational Treatment Plant (O-WTP); • Operation of a Saline water Treatment Plant and controlled discharge (S-WTP);	ECCC notes errata in the last two bullets (i.e. Water). ECCC recommends that the section be updated to address the errata as follows: • Operation of Operational <u>Water</u> Treatment Plant (O-WTP); • Operation of a Saline <u>Water</u> Treatment Plant (S-WTP);	Part D.1 and 3 1. The Licensee shall submit to the Board for review, at least sixty thirty (30) days prior to Construction, final design and Construction drawings accompanied, with a detailed report, for the following: 3. The Licensee shall submit to the Board for review, at least thirty twenty (20) days prior to Construction, final design and Construction drawings accompanied, with a detailed report, for the Whale Tail Dike WRSF water collection system, IVR WRSF water collection system, IVR diversion, IVR attenuation pond infrastructure, IVR pit water management infrastructure, Dewatering A47, Dewatering A49, Dewatering A53, Dewatering A-P21, Dewatering A50, Dewatering A51, Dewatering A52, Whale Tail South Basin Diffuser, IVR Dike 1 & spillway, Pad H Extension. The detailed report shall include items referred to in Part D Item 2.	With these two clauses, ECCC notes that the proponent is proposing to shorten time frames for submission of construction plans and designs to the NWB for review. The proposed time frames may not allow sufficient review time. ECCC recommends that the submission periods not be shortened for any items which may require review.															
Part B.11	The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written Board approval and direction. The Board may request that the Licensee alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan. Unless the Board otherwise advises, Plans and amendments thereto submitted under this Licence shall be deemed to be approved by the Board within forty-five (45) days of submission by the Licensee. For greater clarity, an	ECCC notes that approval by default is not a desirable clause; there may be practical constraints that would extend response times for review and approval of plans. ECCC recommends the clause: "Unless the Board otherwise advises, Plans and amendments thereto submitted under this Licence shall be deemed to be approved by the Board within forty-five (45) days of submission by the Licensee." not be included in the amended licence.																	
	approved Plan remains in force until such time as it is replaced by a new approved Plan.		Part D.7 Effluent from dewatering activities shall be monitored at Monitoring Program Stations	ECCC notes this clause includes dewatering discharge limits, and changes are proposed such that only total suspended solids (TSS) is regulated. ECCC does not object to removing turbidity as a regulated parameter, based on work done at Meadowbank; however, ECCC recommends it still be retained as a monitoring parameter with site-specific correlation to TSS determined, so turbidity can be used as a real-time surrogate. ECCC also recommends pH be retained as a regulated parameter, and aluminum be retained as a monitored rather than regulated parameter (because aluminum is closely associated with suspended solids, and would be substantially controlled by the TSS criteria, depending on pH).															
Part B.12	Unless otherwise directed by the Board in writing, if a Plan is not acceptable to the Board, the Licensee shall provide a revised version to the Board for review within thirty (30) days of notification by the Board. The Board shall issue a final approval decision upon receipt of the revised version of the Plan.	ECCC notes this addition is not a practical condition. Further review time and revisions may be needed. If timing should be defined, ECCC recommends a reasonable period be specified.	STDD-1 to ST-DD-TBD and not exceed the following Effluent quality limits: <table><tr><th>Parameter</th><th>Maximum Monthly Mean</th><th>Short Term Maximum</th></tr><tr><td>Total Suspended Solids (TSS)</td><td>15.0 mg/L</td><td>22.630 mg/L</td></tr><tr><td>Turbidity</td><td>15 NTU</td><td>30 NTU</td></tr><tr><td>pH</td><td>6.0 to 9.0</td><td>6.0 to 9.0</td></tr><tr><td>Total Aluminium</td><td>1.6 mg/L</td><td>3.0 mg/L</td></tr></table>	Parameter	Maximum Monthly Mean	Short Term Maximum	Total Suspended Solids (TSS)	15.0 mg/L	22.630 mg/L	Turbidity	15 NTU	30 NTU	pH	6.0 to 9.0	6.0 to 9.0	Total Aluminium	1.6 mg/L	3.0 mg/L	
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Part B.14 and 15	14. c Whale Tail Pit Interim Closure and Reclamation Plan, Version 4473 (June 2016-December 2019); 15. c Whale Tail Pit Interim Closure and Reclamation Plan, Version 3 (December 2019);	Section B 14 and 15 outline the timing for submission of plans, depending on whether they are already approved (B.14) or to be submitted for approval (B.15). ECCC notes the ICRP is listed under both Part B14 and 15, however it should only be in one of the lists. ECCC recommends that the ICRP is listed only under B.15, given the commitment by the proponent to update the ICRP with respect to pit water quality closure objectives.	Part D.10 The Licensee shall monitor the Whale Tail and IVR Attenuation Pond Ponds and Whale Tail Lake South water quality in accordance with the Licence criteria. Effluent from Whale Tail Attenuation Pond may be discharged to Mammoth Lake via the Mammoth Lake diffuser, if Effluent discharge criteria are met.	ECCC notes this clause refers to effluent and not dewatering discharges, so it should be moved to Section F. The limits set out in Section D refer only to dewatering. ECCC recommends that this clause be moved to Section F.															
Part B.17	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 or a replacement Plan or Plans when and as the need arises.	ECCC notes this clause proposes to decouple updates to management plans from the annual reporting cycle and notes this may be a practical approach. However, it would still be useful to retain the revisions list. ECCC recommends that the proponent retain the revisions list.	Part D.17 The Licensee shall prevent any chemicals, petroleum products, fuel or wastes associated with the Undertaking from entering any Water body except in accordance with this Licence.	The intent of the addition may be to preclude any contradiction with the authorized deposit of treated effluent to water; however, ECCC notes that the deposit of chemicals, petroleum products, fuels, or other contaminants into surface waters could not be authorized by the licence. ECCC recommends that this clause be reworded to remove wastes from the listed categories, but otherwise retain the original wording.															
Part B.19	The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement Act.	ECCC notes the proposed edits change the intent of the clause. In the event of a delayed renewal or unforeseen circumstance where the Licence is not in normal force, there would not be clarity in the extent of the obligations in simply stating "the Act."	Part E.10 The Licensee shall not breach dikes until the water quality in the re-flooded area meets CCME Water Quality Guidelines for the Protection of Aquatic Life, baseline concentrations Final Environmental Impact Statement and Addendum	ECCC notes that the reference to the Final Environmental Impact Statement (FEIS) and Addendum is not specific, and does not provide a clear standard as the objectives in closure sections of the FEIS were narrative. If this is to be used															
		ECCC recommends this clause be retained in its original form.																	

	<p>predictions, or appropriate site-specific water quality objectives. Subject to the Board approval. If water quality parameters are above CCME Guidelines, or Final Environmental Impact Statement and Addendum, unless otherwise approved by the Board a site-specific risk assessment must be conducted to identify specific water quality objectives Site Specific Water Quality Objectives for the site that are protective of the aquatic environment. Where they are required, Site Specific Water Quality Objectives shall be incorporated in the approved <i>Final Reclamation and Closure Plan</i>.</p>	<p>as a yardstick, then ECCC recommends including a reference to the data intended to be used for comparison.</p> <p>ECCC also recommends the reference to baseline concentrations be retained, as there may be parameters that merit evaluation which do not have guidelines or SSWQOs.</p>
Part F.4	<p>The Discharge of Effluent from the Whale Tail Attenuation Pond at Monitoring Program Station ST-WT-2 shall be directed to Mammoth Lake, at Monitoring Program Station ST-WT-26 for South Whale Tail Basin, and at Monitoring Station TBD for Lake D1 and Lake D5 through the Mammoth Lake Diffuser and approved diffusers and unless otherwise approved by the Board as part of a Plan shall not exceed the following Effluent quality limits:</p> <p>*includes table of effluent quality criteria with the total dissolved solids (TDS) row crossed out*</p>	<p>ECCC notes this clause includes the effluent quality criteria for discharges from the Attenuation Ponds. The proponent proposes to remove TDS as a regulated criteria. If this is to be considered, then ECCC recommends rationale be presented for the removal of TDS which demonstrates it is not a parameter of concern. Alternatively, consideration could be given to regulating constituent ions of concern individually.</p>
Part F.5	<p>The Discharge of Effluent from a Final Discharge Point at Monitoring Program Stations STWT- 2, at Monitoring Program Station ST-WT-26 for South Whale Tail Basin, and at Monitoring Station TBD for Lake D1 and Lake D5 shall be demonstrated to be Acutely non-Lethal under the following test and as stipulated in Schedule I of the Licence:</p> <p>a. Acute Lethality of Effluents to Rainbow Trout (as per Environment Canada's</p>	<p>ECCC notes this clause includes the requirement to be "Acutely Non-Lethal". ECCC recommends the wording be revised to "non-acutely lethal" for clarity. ECCC also recommends the test methods referenced should be retained, as they are stand-alone, rather than referencing other legislation that references these methods.</p> <p>ECCC notes that using the reference to <i>the Metal and Diamond Mining Effluent</i></p>
	<p>Environmental Protection Series: Biological Test Method EPS/4/DM/43, Second Edition December 2000 (with May 2007 amendments)-in accordance with the MDMER.</p>	<p><i>Regulations</i> (MDMER) methods would effectively bring in the Daphnia requirement (which is not currently included in the body of the licence) as of June 2021, as well as the Rainbow Trout test.</p>
Schedule B, Item 13 (Monitoring)	<p>TheA summary of the results of monitoring related to the Aquatic Effects Monitoring Program (AEMP) including:</p>	<p>ECCC notes it is not clear when the full report would be submitted for the AEMP components. It is currently available in detail for review under the Annual Report, and this should be retained.</p> <p>ECCC recommends that the AEMP be retained for review in the Annual Report, or submission of the full AEMP Report for approval be specified elsewhere.</p>

Agnico Eagle's Response to Request / Recommendation:

To address recommendations received from intervenors, Agnico Eagle has provided a mark-up version, clean copy, and a response table to address recommendations.

FISHERIES AND OCEANS CANADA (DFO)

Interested Party:	DFO	Rec No.:	DFO-FC3.1
Re:	Fish Passage		

Information Request / Recommendation Made By Interested Party:

DFO requests the Proponent:

3.1.1

Continue to work with DFO-FFHPP to ensure that all watercourse crossings over fish bearing watercourses are able to adequately enable fish passage.

Agnico Eagle's Response to Request / Recommendation:

As discussed during the review process, the Whale Tail Haul Road was confirmed to be designed for fish passage. For the increased width of the road, Agnico Eagle agrees to the recommendation and will commit to modifying existing Whale Tail Haul Road crossings over fish-bearing watercourses that will continue to maintain fish passage as per the Approved Project.

Agnico Eagle will work with DFO to ensure all requirements of the *Fisheries Act* are met and look forward to finalizing the expanded crossings to meet Agnico Eagle's construction and operation schedule.

Interested Party:	DFO	Rec No.:	DFO-FC3.2
Re:	Water use		

Information Request / Recommendation Made By Interested Party:

DFO requests the Proponent:

3.2.1

Commit to meeting with DFO prior to water withdrawals to discuss expectations regarding under ice volume calculations, monitoring of withdrawals, and communication prior to and reporting as part of Fisheries Act Authorisations.

3.2.2

For Whale Tail Lake South Basin information provided Dec 5 in Table 1:

- a) Provide the rationale for the recalculation of South Whale Tail Lake Basin total lake volume and available under-ice volume;*
- b) provided calculations details; and*
- c) clarify why 156.75masl was selected.*

3.2.3.

Commit to meeting with DFO to discuss requirements related to fish outs, including collection of data to support research (e.g. conducted under the existing Fisheries Act Authorisation for the approved project, as well as future initiatives)

Agnico Eagle's Response to Request / Recommendation:

Response 3.2.1

Agnico Eagle will continue to adhere to the currently applicable DFO policies, namely the *Freshwater Intake End-of-Pipe Fish Screen Guideline* (Fisheries and Oceans Canada 1995) and Fisheries and Oceans Canada *Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut* (Fisheries Oceans Canada 2010).

The current DFO protocol for *Winter Water Withdrawal from Ice-covered Waterbodies in Northwest Territories and Nunavut* was used in the calculations, which were based on comprehensive bathymetric methods to determine lake volumes per water level. Agnico Eagle has complied with this protocol. For clarity, DFO does not require a *Fisheries Act* Authorization for winter water withdrawal.

It is Agnico Eagle's expectation that the Water Licence Amendment will approve water withdrawal from waterbodies listed in the table provided to the NWB and DFO on December 5, 2019. Water withdrawal volumes will be reported in the annual report as per typical water licence conditions.

Response 3.2.2

a) The amount of water required is very minimal, Agnico Eagle is expecting to consume 25,037 m³. The revised estimate of available under-ice water volume was based on advanced bathymetry analyzed using GIS tools. This revised number represents an accurate estimation of the 10% under-ice volume.

b) The rationale for determining the available under-ice volume for water withdrawals is based on advanced bathymetry analyses of Whale Tail South Basin. The calculated lake volume at 156.75 m is 16,188,796 m³, and the calculated under ice volume for that elevation (assuming 2 m ice thickness) is 7,886,643 m³. Therefore, the 10% under-ice volume is 788,664 m³.

c) An elevation of 156.75 m represents high water conditions such as during the spring freshet with overflow, and elevation of 156 m represents typical conditions. Regardless of whether Whale Tail South Basin is under high or typical conditions, Agnico Eagle will require less than 1% of the under-ice volume.

Response 3.2.3

Agnico Eagle is very familiar with fish out requirements and has conducted successful fish outs, such as Whale Tail North, Vault Lake, Phaser Lake, and Second Portage Lake.

Agnico Eagle agrees to continue to engage with DFO with respect to the fish outs associated with the Expansion Project to confirm the fish outs will continue to follow current published DFO guidance and the *Fisheries Act*. Agnico Eagle understands research was part of the complementary measures included in the Authorization for the Approved Project.

Interested Party:	DFO	Rec No.:	DFO-FC3.3
Re:	Downstream Environment		

Information Request / Recommendation Made By Interested Party:

DFO requests the Proponent:

3.3.1

Clarify that information provided in December 4, 2019 Technical Memo Addendum in Response to Technical Comment DFO 3.4 Addendum. will be also included in the Final Offsetting Plan.

3.3.2

Clarify why median values have been selected (vs. means with error estimates).

3.3.3

Clarify why monitoring of waterbodies A12, A15 and A76 is not required to verify predictions. From an adaptive management perspective, clarify why monitoring for lakes further downstream of A76 to Nodes 1 and 2 is not required.

3.3.4

Provide examples of what approaches to monitoring are to be included in the Final Offsetting Plan with regards to verifying predictions in downstream percent changes in water levels, surface area and volumes.

3.3.5

Clarify where information on the natural variation in surface area/ volume from lakes listed in 3.4.7 other than A16, A15 A12 and A67, can be located.

Agnico Eagle's Response to Request / Recommendation:

Response 3.3.1

The technical memo 'Whale Tail Expansion Project: Response to Technical Comment DFO 3.4 Addendum', dated December 4, 2019, will be included with the offsetting plan.

Response 3.3.2

With respect to DFO's technical comments on the method applied in generating hydrological statistics, it is agreed that a median value is not necessarily equal to a mean value. However, Agnico Eagle's view is that a median provides a more representative estimate compared to a mean with error estimate. A significant advantage of the median in describing data compared to the mean is that it is less skewed by a small number of extremely large or small values, and therefore, represents a better description of a "typical" value. The median statistic is also reported in the December 4, 2019 Whale Tail Expansion Project: Response to Technical Comment DFO 3.4 Addendum technical memo because it is the 1:2 year

flood event (equivalent to the median - a 50% chance of being exceeded in any given year) generated from a frequency analysis.

In the previously submitted memo, dated October 12, 2019, Golder provided hydrological conditions for a range of recurrence intervals to characterize uncertainty around 'risk' (which is similar to what variance would represent for a mean). The recurrence interval is based on the probability that the given event will be equaled or exceeded in any given year. The recurrence interval statistic of interest in the assessment of downstream changes provided in the December 4, 2019 technical memo was the 10-year drought, which has a $1/10 = 0.1$ or 10% chance of being lower in any one year. These statistics were generated using a spreadsheet-based tool based on the Consolidated Frequency Analysis (CFA) software developed by Environment Canada (1993).

The method is widely adopted as the standard for the assessment of risk of drought or flooding, and is a standard approach accepted for other projects in Nunavut and by ECCC and DFO on other occasions that require an assessment of flood or drought risks (e.g., see Meliadine Project Final Environmental Impact Statement, Volume 7 [Agnico Eagle 2014]; Back River Project Final Environmental Impact Statement Volume 6 [Sabina 2015]).

Response 3.3.3

Based on available information and conclusions provided in the technical memo submitted on October 12, 2019, titled 'Whale Tail Pit Expansion Project: Response to Technical Comment DFO 3.4', as well as supplemental memo submitted on December 11, 2019, monitoring of water surface levels in Lakes A12, A15, and A76 is not required because the lakes will lie outside the spatial extent of residual effects. Monitoring of water surface levels in Lake A16 (Mammoth Lake – which is upstream of Lakes A12, A15, and A76) is expected to provide a reasonable surrogate for detecting changes in surface areas and volumes during closure and will be conducted to verify predictions provided in the submitted technical memos. DFO recommendation to monitor lakes further downstream of A76 to Nodes 1 and 2 is not required as they are located further downstream of Lakes A12, A15, and A76.

Response 3.3.4

There is no Harmful Alteration, Disruption, and Destruction (HADD) predicted from the downstream effects for the Expansion Project. The offsetting plan does not require monitoring to verify predictions on downstream percent changes that do not constitute a HADD under the *Fisheries Act*; however, per commitment made in technical response DFO-TC2.3, Agnico Eagle has included consideration of downstream water level monitoring in the offsetting plan. The final offsetting plan will be finalized following the Water Licence Amendment.

Monitoring techniques to be used will be focused on lake level variation in Mammoth Lake and Lakes A12, A15, and A76.

Response 3.3.5

The requested information is included in the technical memo submitted on October 12, 2019, titled 'Whale Tail Pit Expansion Project: Response to Technical Comment DFO 3.4'. Details on the natural variation in the hydrology of the study lakes are described in detail in the submitted technical memo.

KIVALLIQ INUIT ASSOCIATION (KivIA)

Interested Party:	KivIA	Rec No.:	KivIA-WL-TC#2 KivIA-WL-IR#32
Re:	Removal of pit walls from water quality model predictions		

Information Request / Recommendation Made By Interested Party:

The KivIA established through discussions with the proponent prior to and during the technical hearings that the issue would be resolved if Agnico Eagle provided an adaptive management approach to water management as per KIA-WL-TC#6 for review prior to receipt of the water license. Agnico Eagle has since drafted an Adaptive Management Plan and provided the KivIA two opportunities for review –in December 2019 and January 2020.

We now consider this issue resolved pending review of the final Adaptive Management Plan to determine whether KivIA technical comments have been adequately incorporated.

Agnico Eagle’s Response to Request / Recommendation:

Agnico Eagle also considers this issue resolved and has provided the final Adaptive Management Plan as Appendix B to this response package. Agnico Eagle appreciates the input provided by KivIA in developing the Adaptive Management Plan.

Interested Party:	KivIA	Rec No.:	KivIA-WL-TC#3 KivIA-WL-IR#31
Re:	Cryo-concentration in water quality model assumptions		

Information Request / Recommendation Made By Interested Party:

Agnico Eagle has submitted a memorandum titled “Effects of cryo-concentration on the downstream receiving lakes water quality” dated December 18, 2019, which provides the requested information. We note that the updated cryo-concentration modelling for Mammoth Lake indicates the potential for short term (<1 year) exceedances of the arsenic site-specific water quality objective of 0.025 mg/L, and a prolonged shift (< 4 years) away from oligotrophic conditions in both Mammoth and Whale Tail lakes. However, this new concern is addressed through the Adaptive Management Plan Agnico Eagle is in the process of finalizing with input from the KivIA and other intervenors.

Agnico Eagle’s Response to Request / Recommendation:

Agnico Eagle also considers this issue resolved and has provided the final Adaptive Management Plan as Appendix B to this response package. Agnico Eagle appreciates the input provided by KivIA in developing the Adaptive Management Plan.

Interested Party:	KivIA	Rec No.:	KivIA-WL-TC#4 KivIA-WL-IR#4
Re:	Uncertainty in Waste Rock Seepage Estimates		

Information Request / Recommendation Made By Interested Party:

Agnico Eagle provided an updated evaluation of the “Effects of Wet Year Scenarios on Water Management” in a memo dated December 17, 2019. The updated evaluation confirms a potential for excess water in both 2020 under 1:10 year wet scenarios, and in 2025 under 1:100 wet year scenarios. The Adaptive Management Plan provides adequate options to deal with the potential risk in 2025. However, both Agnico Eagle’s modelling and through discussion on the Adaptive Management Plan on January 8, 2020 in Winnipeg indicate an unmitigated risk for > 1:10 wet years for freshet 2020. Excess water during freshet in future years (i.e. after 2020) can be mitigated through the potential use of the groundwater storage ponds (GSPs); these structures will not be available for freshet 2020.

We therefore request Agnico Eagle provide a memorandum supplemental to the Adaptive Management Plan addressing how contact water can be managed for freshet 2020 should a 1:10 wet year or greater occur.

This issue is unresolved.

Agnico Eagle’s Response to Request / Recommendation:

Agnico Eagle has developed an operational framework that ensures safe management of the water volumes for the spring 2020 freshet. This was developed based on estimated volumes from flood events with 1:10 years and 1:100 years recurrence periods, which has been submitted to the Nunavut Water Board as part of the December 20, 2019 submission package (Golder 2019). Table 1 highlights the volumes of water to manage under these different scenarios.

Table 1 : Exceedance Volumes for Different Scenarios in 2020

	Volume exceedance for 1:10 years wet scenario (m³)	Volume exceedance for 1:100 years wet scenario (m³)
1950-2018 climate data set	145,000	232,000
2000-2018 climate data set	161,000	499,000

To manage water at freshet 2020 the two main storage infrastructures are Quarry 1 and GSP-1. Operational flexibility will dictate the order in which water will be managed (Table 2).

Table 2 : Storage Capacity of Water Infrastructure

	Capacity (m³)	1950-2018 Climate, 1:10 year	1950-2018 Climate, 1:100 year	2000-2018 Climate, 1:10 year	2000-2018 Climate, 1:100 year
Quarry 1	343,000	X	X	X	X
GSP 1	263,000				Y
Total	606,000	X	X	X	X+Y

Freshet 2020 water management strategy is aligned with the Adaptive Management Plan. It should also be noted that if water quality meets water licence effluent discharge criteria, direct discharge to the receiver could be completed to increase water storage capacity.

References:

Golder (Golder Associates Ltd.). 2019. Effects of Wet Year Scenarios on Water Management. 1912753-380-RM-Rev0. December 2019

Interested Party:	KivIA	Rec No.:	KivIA-WL-TC#6 KivIA-WL-IR#34
Re:	Climatic inputs for water quality model		

Information Request / Recommendation Made By Interested Party:

Agnico Eagle committed to providing an Adaptive Management Plan to address water management concerns during the technical hearings in Yellowknife.

Agnico Eagle has since drafted an Adaptive Management Plan and provided the KivIA two opportunities for review – in December 2019 and January 2020.

We now consider this issue resolved pending review of the final Adaptive Management Plan to determine whether KivIA technical comments have been adequately incorporated.

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle also considers this issue resolved and has provided the final Adaptive Management Plan as Appendix B to this response package. Agnico Eagle appreciates the input provided by KivIA in developing the Adaptive Management Plan.

Interested Party:	KivIA	Rec No.:	KivIA-WL-TC#7 KivIA-WL-IR#3
Re:	Climate Change and Project Timeline		

Information Request / Recommendation Made By Interested Party:

Agnico Eagle provided an updated evaluation of the Effects of wet year scenarios on water management in a memo dated December 17, 2019. The updated evaluation confirms a potential for excess water in both 2020 under 1:10 year wet scenarios, and in 2025 under 1:100 wet year scenarios. The Adaptive Management Plan provides adequate options to deal with the potential risk in 2025. However, both Agnico Eagle's modelling and through discussion on the Adaptive Management Plan on January 8, 2020 in Winnipeg indicate an unmitigated risk for > 1:10 wet years for freshet 2020. Excess water during freshet in future years (i.e. after 2020) can be mitigated through the potential use of the groundwater storage ponds (GSPs); these structures will not be available for freshet 2020.

We therefore request Agnico Eagle provide a memorandum supplemental to the Adaptive Management Plan addressing how excess contact water can be managed during freshet 2020 should a 1:10 wet year or greater occur.

This issue is unresolved.

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle refers the reader to the KivIA-WL-TC#4 response.

Interested Party:	KivIA	Rec No.:	KivIA-WL-TC#9 KivIA-WL-IR#14
Re:	Arsenic and ARD mitigation on Whale Tail Pit Wall		

Information Request / Recommendation Made By Interested Party:

Agnico Eagle committed to providing an Adaptive Management Plan to address water management concerns during the technical hearings in Yellowknife.

Agnico Eagle has since drafted an Adaptive Management Plan and provided the KivIA two opportunities for review – in December 2019 and January 2020.

We now consider this issue resolved pending review of the final Adaptive Management Plan to determine whether KivIA technical comments have been adequately incorporated.

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle also considers this issue resolved and has provided the final Adaptive Management Plan as Appendix B to this response package. Agnico Eagle appreciates the input provided by KivIA in developing the Adaptive Management Plan.

Interested Party:	KivIA	Rec No.:	KivIA-WL-TC#10 KivIA-WL-IR#47
Re:	Implications of rock fracturing on groundwater volumes		

Information Request / Recommendation Made By Interested Party:

Agnico Eagle committed to provide thermistor data from Meadowbank to support the conclusion that the freeze-back of the pit walls will result in a negligible impact from rock fracturing on the overall water balance during the technical hearings in October 2019.

This information was satisfactorily provided in a memorandum titled “Permafrost Development – Thermal Data Report Whale Tail Project Expansion” dated December 2019. We now consider Agnico Eagle’s assertion that the contribution of groundwater infiltration in the pits will be a negligible contribution to the overall water balance to be substantiated.

This issue is resolved.

Agnico Eagle’s Response to Request / Recommendation:

Agnico Eagle appreciates the KivIA’s comments and also considers this issue resolved.

January 2020

Interested Party:	KivIA	Rec No.:	KivIA-WL-TC#18 KivIA-WL-IR#18
Re:	Water Quality Contingencies		

Information Request / Recommendation Made By Interested Party:

Agnico Eagle outlined mitigation measures associated with elevated arsenic loadings from the pit walls in the draft Adaptive Management Plan. The proposed mitigation measures include treatment of arsenic rich contact water and an accelerated flooding schedule in the pits to prevent ongoing oxidation by ensuring they were isolated from the air.

Details on the water treatment plant’s capacity to treat arsenic were outlined to our satisfaction in the Construction Summary Report for the Construction Water Treatment Plant (CWTP) and the Arsenic Water Treatment Plant (AsWTP) dated October 4, 2019.

Agnico Eagle has also provided a quantitative assessment of water quantity in Nemo Lake as well as Lakes D1 and D5 to support the assertion that an increased rate of flooding was an available mitigation measure to prevent ongoing oxidation from the pit walls without resulting in an excessive draw on the source water bodies; Agnico Eagle must ensure that water withdrawal does not result in a deleterious impact aquatic life or aquatic habitat. This information was provided in two separate memos: “Whale Tail Pit – Expansion Project Water Balance for Lake C38 (Nemo Lake)” and “Technical Comment KivIA-WL-TC#9: Assessment of Lake D5 and Lake D1 to Expedite the Refilling Duration of Whale Tail Lake (North Basin) at Closure”.

These documents indicate that expedited reflooding using Lake D1 is a viable option to isolate the pit walls.

Triggers for increasing arsenic treatment efficiency and to implement an accelerated reflooding schedule for the pits are outlined in the draft Adaptive Management Plan. Together these documents adequately address the KivIA’s concern for water quality within the pits and downstream in the closure and post closure environments.

We now consider this issue resolved pending review of the final Adaptive Management Plan to determine whether KivIA technical comments have been adequately incorporated.

Agnico Eagle’s Response to Request / Recommendation:

Agnico Eagle also considers this issue resolved and has provided the final Adaptive Management Plan as Appendix B to this response package. Agnico Eagle appreciates the input provided by KivIA in developing the Adaptive Management Plan.

Interested Party:	KivIA	Rec No.:	KivIA-WL-TC#21 KivIA-WL-IR#50
Re:	Waste Rock Storage Facility Design		

Information Request / Recommendation Made By Interested Party:

The thermal modeling that recommends the use of a thermal cap of 4.7 metres appears to be reasonable. However, the KivIA requests that Agnico Eagle establish a sufficient number of thermistor strings in the Whale Tail WRSF and the bedrock beneath and in close proximity to the WRSF in order to ensure that the modeling is updated with local project data instead of thermistor readings from the Portage WRSF at the Meadowbank Gold Mine. This local data will best determine how effective the ARD/ML material has been isolated within the WRSF. In addition, it will allow for a better understanding of the depth and distribution of the active layer as it is related to permafrost distribution should be determined with the additional thermistor strings that will be established in the Whale Tail WRSF. This will also better determine the effectiveness of the

- 1) freeze back in the WRSF,*
- 2) the water retention ability and capacity of WRSF dike, and*
- 3) the impact of water flow from the WRSF on the water quality in Mammoth Lake.*

This issue is now resolved.

Agnico Eagle's Response to Request / Recommendation:

Agnico Eagle appreciates the comments from the KivIA. Agnico Eagle also considers this issue resolved.

Interested Party:	KivIA	Rec No.:	Water Licence Comments
Re:	Draft Water Licence Comments		

Information Request / Recommendation Made By Interested Party:

Comments provided to Agnico Eagle on the draft water licence.

Agnico Eagle's Response to Request / Recommendation:

To address recommendations received from intervenors, Agnico Eagle has provided a mark-up version, clean copy, and a response table to address recommendations.

20 December 2019

Spencer Dewar
Director, Resource Management
Crown-Indigenous Relations and Northern Affairs Canada
Building 918 Box 2200
Iqaluit, NU X0A 0H0

Re: Agnico Eagle's Proposed Closure and Post-closure Monitoring for NWB Water Licence 2AM-WTP1826 - Whale Tail Pit Expansion Project

Dear Mr. Dewar:

On December 2, 2019, Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), the Kivalliq Inuit Association (KivIA), and Agnico Eagle Mines Limited (Agnico Eagle) met to discuss financial security for the Type A Water Licence Amendment Application (2AM-WTP1826) for the Whale Tail Pit Expansion Project.

At this meeting, CIRNAC requested that Agnico Eagle complete 25 years of post-closure monitoring and referred Agnico Eagle to the Abandoned Military Site Remediation Protocol (INAC 2009) (AMSRP) as justification for the suggested duration. CIRNAC also indicated that their view is that the post-closure phase should start when reflooding of Whale Tail and IVR pits is completed and water quality in the flooded pit lake meets receiving environment guidelines (CEQG-AL [chronic] or the relevant site-specific water quality objectives).

Agnico Eagle has considered this request, but for the reasons set out in this letter does not agree with CIRNAC's proposed 25 year monitoring framework. This letter presents the proposed closure and post-closure monitoring programs for the Expansion Project, which are based on monitoring programs that were approved by CIRNAC and KivIA for the Approved Project and Agnico Eagle is confident that this approach is appropriate to ensure mitigation of closure and post-closure risk related to the Expansion Project.

1.0 OVERVIEW OF THE ABANDONED MILITARY SITE REMEDIATION PROTOCOL AND OTHER RELEVANT FEDERAL RECLAMATION GUIDELINES SPECIFIC TO MINE SITES

The AMSRP was developed to provide guiding principles for the assessment and remediation of abandoned military sites, namely stations along the Distant Early Warning (DEW) Line, and sites associated with the Pole Vault line in the eastern Arctic located on Crown Land. The environmental issues related to these sites include:

- physical hazards related to unconsolidated debris and aged structures; and
- environmental impacts associated with soil contamination.

Section 7 of the AMSRP sets out a three phase "remediation protocol" for abandoned military sites:

Phase I: Monitoring of conditions to confirm that thermal equilibrium and physical stability criterion are achieved.

- a. This monitoring phase occurs for the first five years of remediation and is intended to confirm that ground-temperature thermal regimes reach a state of equilibrium. Freeze-back of landfills is the ideal condition. Groundwater monitoring is also recommended. At the end of the five-year term, an evaluation of the monitoring data collected is carried out to confirm that thermal equilibrium has been achieved, and that no stability issues had been identified.*

Phase II: Verification of equilibrium conditions established during Phase I.

- a. This phase represents an extended monitoring term, if warranted, based on Phase I monitoring results. It is characterized by a lower frequency of monitoring and may last up to 25 years. However, if no significant issues are identified, monitoring may be discontinued at the conclusion of Phase I.*
- b. This phase may also require continued thermal monitoring if significant climate changes are recorded in the region. The definition of significant is not provided.*

Phase III: Monitoring for long term issues such as linear integrity, permafrost stability, and significant storm events.

- b. This phase of the monitoring occurs at the end of Phase II, 25 years after site remediation is complete. At this point, a re-evaluation of the monitoring program may be carried out, and the monitoring program may be adjusted prior to the initiation of Phase III.*
- c. It is noted that it is difficult to predict beyond 25 years how world events and improvements in technology may impact monitoring requirements.*

The AMSRP is specifically designed to address legacy issues at abandoned military sites on federal land and are not meant to be applicable to mining sites with defined and approved closure plans. Because defined mine closure plans are designed to address and mitigate identified risks in the long-term, they include sufficient monitoring programs and modelling to support this. It is in Agnico Eagle's best interest to ensure the risks in post-closure are acceptable for long-term conditions, including ensuring the flooded pit lake in post-closure meets the applicable receiving environment guidelines to support aquatic life.

There are many fundamental differences between the Expansion Project as compared to the historical infrastructure and legacy contamination issues the ASMRP was designed to address:

- Unlike the Approved Project and Whale Tail Expansion Project, the infrastructure covered by the ASMRP was not subject to an environmental assessment prior to construction and operation.

- The infrastructure covered by the ASMRP was not built with closure in mind. In contrast, the Approved Project and Expansion Project is modern infrastructure which has incorporated reclamation obligations as part of the design.
- The ASMRP does not include a comprehensive site reclamation process integrated in the construction, operation, closure, and post-closure phases, such as the Approved Project and Expansion Project, where monitoring is implemented at each of those phases to understand and mitigate post-closure risks related to the project.
- Comprehensive modelling was required in advance of construction of the Approved Project and in respect of the Expansion Project.
- The nature of the materials handled at the DEW Line sites (including PAHs and PCBs) means that a longer term monitoring period may be appropriate. PAHs and PCBs are not an issue for the Approved Project or the Expansion Project.
- The DEW Line sites were subject to limited to no regulatory oversight until relatively recently. The Approved Project and Expansion Project are both subject to a suite of stringent federal, territorial, and KivIA approvals. All of these work together to prevent the occurrence of long-term legacy issues such as those present at the DEW Line sites.
- The Approved Project and Expansion Project will be subject to a comprehensive ongoing monitoring program, which will require monthly, quarterly and annual reports to key authorities such as NIRB, NWB, CIRNAC, and KivIA. This means that any issues that could develop will be subject to early mitigation and adaptive management strategies which will prevent the long-term complex contamination issues that developed at the DEW Line sites.

Overall, the regulatory requirements and detailed planning that is part of the development and execution of mine closure plans that are required under the NIRB Certificate and Type A Water Licence are fundamentally different than those applicable to the DEW Line sites, which is why the AMSRP is of limited to no relevance.

There are a number of mining-specific reclamation policies developed by the federal government and applicable in the North, including the Mine Site Reclamation Policy for Nunavut and the Mine Site Reclamation Policy for the Northwest Territories (INAC 2002a, b). Agnico Eagle has also consulted the Mackenzie Valley Land and Water Board (MVLWB) Guidelines for Closure and Reclamation Cost Estimates for Mines (2017) and MVLWB Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories (MVLMB/AANDC 2013). It is clear from a review of the applicable mining-specific federal policies that a 25 year monitoring period is not standard, as suggested by CIRNAC in our meeting on December 2, 2019. These policies provide that it is necessary for proponents to develop a plan for post-closure monitoring of the site including a monitoring schedule and reporting frequencies, but appropriately these policies do not specify a duration for post-closure monitoring. It would not make sense to apply a specific period for post-closure monitoring to the Whale Tail Mine based on the AMSRP, when the mining specific policies do not specify a duration.

As set out in the Mine Site Policy for Nunavut,

The duration of the required monitoring phase will be reviewed and confirmed at the time of closure and will depend on the risks associated with the potential impacts on the environment... If warranted by site conditions, the monitoring period may be extended to ensure remedial measures are met.

Some mines are anticipated to require long-term care and maintenance after closure.

Examples include sites where:

- acid mine drainage requires neutralization by water treatment;
- tailings containment structures require periodic monitoring and maintenance; and
- remediation technologies are not proven.

None of the conditions described in the Mine Site Policy for Nunavut (INAC 2002a) which support a long-term monitoring scenario will be present at the Approved Project or the Expansion Project in the post-closure phase.

Under the MVLWB Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories (2013), the suggested duration of the post-closure period is a three year minimum, not a twenty five year minimum. That policy also states:

The proponent should prepare a performance assessment report after the final reclamation completion report has been submitted and after a time period needed to assess the performance of the reclamation. A performance assessment should be completed when it is anticipated that environmental conditions demonstrate that certain closure objectives will be achieved, such as closure objectives requiring short term monitoring (e.g., five years) and those related to general site stability and construction-related issues. At this time, the environmental conditions are again assessed against the closure criteria and any ongoing residual and/or environmental risks. The monitoring and maintenance plan will require updating if subsequent performance assessment reports are required by the Board. This will likely be the case for longer term closure objectives (e.g., 20 years or more) for individual project components. Note that some mine components may remain on site in perpetuity, such as tailings caps, waste rock piles, and landfills.

Moreover, following Nunavut Water Board recommendations, the Whale Tail Interim Closure and Reclamation Plan for the Approved and Expansion Projects have been updated in accordance with the “Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories”, issued by the Mackenzie Valley Land and Water Board (MVLWB) and Aboriginal Affairs and Northern Development Canada (AANDC) in 2013 (MVLWB/AANDC 2013) and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002.

Again, the features of the Expansion Project are not of a nature that will require long-term closure objectives for individual mine components. Further details on this point are summarized in the next section of this memo.

2.0 PROPOSED MONITORING DURING CLOSURE AND POST-CLOSURE

2.1 *Flooded Pit Water Quality*

At the initiation of the closure period (i.e., 2026), Agnico Eagle will begin a comprehensive monitoring program (Table 1). The expected monitoring frequency will vary by pit:

- The IVR Pit will be filled for the first two years of closure, and the final three years of the Whale Tail Pit back-flooding. Monitoring will be carried out four times per year (i.e., late winter, post-freshet, summer, and fall) during the two years of flooding and five years after flooding is completed.
- The Whale Tail Pit will be filled from Year 2028 to 2042. Monitoring will be carried out four times per year (i.e., late winter, post-freshet, summer, and fall) during the first five years of flooding and five years after flooding is completed.

Regular monitoring throughout the closure period will focus on physico-chemical parameters, such as pH, specific conductivity, temperature, and dissolved oxygen, throughout the water column, as well as general water quality parameters, including nutrients and metals, at near-surface and deep-water intervals.

The timing of flooding is beneficial to implementing a comprehensive monitoring plan during closure, particularly as a relatively large proportion of the pits will fill quickly. For each pit, this allows the benefit of reducing uncertainty in the final flooded water quality conditions. The Whale Tail Pit is expected to take approximately 17 years to flood to surface level, however, it will reach 75% in approximately 14 years, with only 25 m of depth remaining for the final three years. The IVR Pit will be filled to 90% of its volume (approximately 4 m below the target flood level) within the first two years of closure.

As per Water Licence 2AM-WTP1826 Part E Item 9, water quantity and water quality within the pit lakes will be compared with predictions on an annual basis during Closure and Post-Closure. The analysis will be provided to Interveners as part of the Annual Report.

Because of the 17 year closure period, combined with the early filling of IVR Pit, Agnico Eagle considers that the proposed monitoring plans are sufficient to characterize pit water quality conditions, validate water quality predictions, reduce uncertainty in projected post-closure conditions, and, if necessary, adaptively manage pit water quality if the monitored water quality consistently trends above predictions.

Table 1. Proposed monitoring program

Year	Operational Phase	Flooding activity	IVR Pit Flooding Status	WT Pit Flooding Status	Monitoring frequency
2026	Operations/Closure	UG/IVR Pit flooding			Late winter, post freshet, summer, and fall
2027	Closure	IVR/WT Pit flooding	90%		Late winter, post freshet, summer, and fall
2028	Closure	WT Pit flooding	90%		Late winter, post freshet, summer, and fall
2029	Closure	WT Pit flooding	90%		Late winter, post freshet, summer, and fall
2030	Closure	WT Pit flooding	90%		Late winter, post freshet, summer, and fall
2031	Closure	WT Pit flooding	90%		Late winter, post freshet, summer, and fall
2032	Closure	WT Pit flooding	90%		Late winter, post freshet, summer, and fall
2033	Closure	WT Pit flooding	90%		Once a year (summer)
2034	Closure	WT Pit flooding	90%		Once a year (summer)
2035	Closure	WT Pit flooding	90%		Once a year (summer)
2036	Closure	WT Pit flooding	90%		Once a year (summer)
2037	Closure	WT Pit flooding	90%		Once a year (summer)
2038	Closure	WT Pit flooding	90%		Once a year (summer)
2039	Closure	WT Pit flooding	90%		Late winter, post freshet, summer, and fall
2040	Closure	IVR/WT Pit flooding	90%	75%	Late winter, post freshet, summer, and fall
2041	Closure	IVR/WT Pit flooding	>90%	>75%	Late winter, post freshet, summer, and fall
2042	Closure	IVR/WT Pit flooding	>90%	>75%	Late winter, post freshet, summer, and fall
2043	Post-closure	Lake reconnection	100%	100%	Late winter, post freshet, summer, and fall
2044	Post-closure	Post-Closure	100%	100%	Late winter, post freshet, summer, and fall
2045	Post-closure	Post-Closure	100%	100%	Once a year (summer)

2.2 WRSF Thermal Stability

O'kane Consultants have developed a WRSF monitoring plan (OKC 2019) that will allow for the evaluation of freeze-back time at the surface and within the WRSF. The plan includes the installation of vertical and horizontal thermistors, differential pressure monitoring, and the monitoring of meteorological conditions, as well as near surface volumetric water content, temperature, soil matric suction, and thermal conductivity.

The monitoring program will be initiated as part of the operations phase and is designed to quantify the active layer depth and validate the freeze-back time, evaluate net percolation rates at the WRSF surface (which affect freeze-back), and evaluate the convective cooling mechanism that promotes freeze-back at depth. Furthermore, data collected through this monitoring program will allow for the implementation of adaptive management measures, if required, and development of calibrated thermal models. Calibrated thermal models will allow for the validation of long-term predictions of cover system performance and freeze-back objectives, greatly reducing the uncertainty in long-term effects to water quality during the operation and closure period.

2.3 *Water Monitoring Reduction*

On September 27, 2018, a framework to reduce the monitoring requirements and security for post-closure was agreed upon the parties during the public hearing of the Approved Project. Agnico Eagle included this framework in the draft water licence for the Expansion Project which includes removal of a monitoring parameter, removal of a monitoring station, reduction in frequency of monitoring station(s) and also a reduction in the associated security. These changes will be based on the analysis of the data collected to date and compared with predictions and guidelines.

3.0 **CONCLUSION**

The AMSRP provides little relevant guidance in determining the appropriate duration of post-closure monitoring. As set out in the applicable mining specific reclamation policies developed by and with input from the federal government, an arbitrary approach to setting the duration of post-closure monitoring is not appropriate and instead, a project specific approach should be developed.

In the case of the Whale Tail Expansion, it is important to take into account the duration of closure activities which will gradually flood the pit and reconnect it to the natural environment. A 25 year period would not be appropriate for this activity and would create significant challenges in the management of pit water (i.e., preventing pit lake water from overflow into the environment). This approach would be contrary to the overall goals of Agnico Eagle, as well as CIRNAC and KivIA in achieving a responsible closure of the Whale Tail Pit Expansion Project. Further, the nature of the monitoring that will be undertaken during the 17 year flooding period will provide significant data to provide comfort to all parties that the closure criteria agreed to in the Final Closure Plan will be met. There is no reasonable basis for the view that a further 25 year monitoring program could be required at the end of the 17 year flooding period.

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

Regards,



Jamie Quesnel

Jamie.Quesnel@agnicoeagle.com

819.856.0821

Regional Manager - Permitting & Regulatory Affairs

REFERENCES

- INAC (Indian and Northern Affairs Canada). 2002a. Mine Site Reclamation Policy for Nunavut. July 2002.
- INAC. 2002b. Mine Site Reclamation Policy for Northwest Territories. July 2002.
- INAC. 2009. Abandoned Military Site Remediation Protocol. Volume 1 Main report. March 2009.
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- MVLWB. 2017. Guidelines for Closure and Reclamation Cost Estimates for Mines. November 2017.
- OKC (Okane Consultants). 2019. Whale Tail Mine WRSF Instrumentation Design – Conceptual Drawings Rev B. Prepared for Agnico Eagle Mines Ltd. October 2, 2019



WHALE TAIL PIT EXPANSION PROJECT

Adaptive Management Plan

Prepared by:
Agnico Eagle Mines Limited – Meadowbank Division

Version 1.1
January 2020

DISTRIBUTION LIST

AEM – Engineering Superintendent

AEM – Geotechnical Coordinator

AEM – Environment Superintendent

AEM – Environment General Supervisor

AEM – Environmental Coordinator

AEM – Permitting and Regulatory Affairs Superintendent

DOCUMENT CONTROL

Version	Date (YMD)	Section	Revision
1	2019-12-19	All	New Plan to address commitments made during the review process of the Whale Tail Pit Expansion Project Water Licence Amendment
1.1	2020-01-30	All	Updated Plan to address comments from CIRNAC, KivlA and ECCC on January 8 meeting in Winnipeg and Final Written Submissions as part of the Whale Tail Pit Expansion Project Water Licence Amendment

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1 INTRODUCTION

Agnico Eagle Mines Limited – Meadowbank Division (Agnico Eagle) is proposing an expansion to the Whale Tail Pit and Haul Road Project (Approved Project), a Meadowbank satellite deposit located on the Amaruq property. As an expansion to the Approved Project (NIRB PC No. 008 and NWB 2AM-WTP1826) Agnico Eagle is proposing to expand and extend the Whale Tail Pit operations to include a larger Whale Tail open pit, development of the IVR open pit, and underground operations (referred to as the Expansion Project) while continuing to operate and process ore at the Meadowbank Mine.

The Amaruq property is a 408 km² site located on Inuit Owned Land approximately 150 km north of the hamlet of Baker Lake and approximately 50 km north of Meadowbank Mine in the Kivalliq Region of Nunavut.

Construction upgrades to support the Expansion Project will begin as soon as approval and permits for the amendment applications are received (anticipated for early 2020). The operational phase (Approved and Expansion Projects) will span from Year 1 (2020) to Year 7 (2026). Mining activities are expected to end in Year 7 (2026). Closure will occur from Year 8 (2027) to Year 24 (2042) after the completion of mining and will include removal of the non-essential site infrastructure and flooding of the mined-out open pits and underground mining, as well as reestablishment of the natural Whale Tail Lake water level.

This document presents an Adaptive Management Plan prepared for the following facilities and activities associated with the Project:

- Waste rock storage facility (WRSF);
- Receiver water quality;
- Surface water quantity; and
- Underground mine water quantity.

This Plan has been completed for the Expansion Project in support of the Nunavut Water Board (NWB) review process and Agnico Eagle is requesting that the NWB approve this Plan with the issuance of the amended 2AM-WTP1826.

The primary objective of the Adaptive Management Plan is to document specific mitigation measures and associated management actions to be taken when specified thresholds are exceeded. Mitigation measures may include special studies, operational changes, revised or new water and waste management systems, new or expanded conveyance systems, structures and/or facilities, or implementing mitigation activities to prevent, stabilize or reverse a change in environmental conditions or to otherwise protect the receiving environment.

All mitigation measures described in this Plan have undergone a self assessment by Agnico Eagle in accordance with the "NIRB Guidance Re Process for Seeking Approval for Modifications to Previously-Approved Projects" (April 27, 2018) (the NIRB Guidance), which references Section 90 of the Nunavut Waters and Nunavut Surface Rights Tribunal Act (NuPPAA) and the measure are not considered a "significant modification" under the Nunavut Agreement or NuPPAA. The mitigation measures described in this Plan would not be required as a result of changes to the mine life or other expansion of the mine. With respect to land use planning requirements, all mitigation measures would occur within the footprint

described in the project proposal that was the subject of the Nunavut Planning Commission's positive conformity determination on the Expansion Project of October 16, 2018.

In consideration of the section 90 factors under NuPPAA, mitigation measures described in this Plan, when assessed comparatively to the Final Environmental Impact Statement (FEIS):

- would be situated within the footprint of the Expansion Project, which has not been identified as a particularly sensitive area or historical, cultural or archeologically significant area;
- would not result in changes to impacts on human and animal populations;
- would result in a low to negligible change to the Expansion Project predicted environmental impacts, including the nature, magnitude and complexity of the impacts;
- would result in a low to negligible change to the probability of impacts occurring;
- would result in a low to negligible change to the frequency and duration of the impacts;
- would result in no change to the reversibility or irreversibility of the impacts; and
- would result in no change to the cumulative impacts.

The Adaptive Management Plan will be reviewed if deemed required to account for the dynamics of mine construction, operations and policy changes, and to adjust the adaptive management strategy as needed.

In the event of a conflict or inconsistency between this Adaptive Management Plan and any other Plan approved under the Type A Water Licence, the Adaptive Management Plan shall prevail to the extent of the conflict or inconsistency.

For greater clarity, all actions and management strategies described in the approved Adaptive Management Plan are included in the Scope of the Type A Water Licence (see Part A, Item 1) and can proceed without modification or amendment to the Type A Water Licence.

2 ADAPTIVE MANAGEMENT PLAN

This section presents the adaptive management strategy prepared for the following facilities and activities associated with the mine:

- waste rock storage facility (WRSF);
- receiver water quality;
- surface water quantity; and
- underground mine water quantity.

2.1 WASTE ROCK MANAGEMENT

2.1.1 WRSF Permafrost Aggradation

Performance of the WRSF is in part defined by its ability to achieve geochemical stability. Maintaining permafrost conditions within potentially acid generating (PAG) and potentially metal leaching (ML) waste rock will inhibit leaching of acidic drainage or metal contaminated waters.

Permafrost aggradation into the WRSF from the surrounding bedrock (Figure 1) will be monitored to verify frozen conditions at depth are developing and being maintained over time. For more details on permafrost aggradation concept and how it applies to the Whale Tail Project WRSF's, the reader is referred to O'kane (OKC 2019a).

Permafrost aggradation is defined within this Adaptive Management Plan by the point of zero amplitude (i.e., the depth at which seasonal temperature fluctuations no longer influence ground temperature) moving upwards into the WRSF until a post-construction thermal equilibrium is reached. Should the point of zero amplitude not move upwards, Table 1 summarizes specific mitigation measures and associated management actions to be taken.

When using Table 1 to assess the adaptive management response required, some preliminary assumptions should be considered:

- The zero-amplitude points heights are determined during the Annual Report.
- The thresholds are referring to an average of thermistors or two spatially-consecutive thermistors for localized effects.

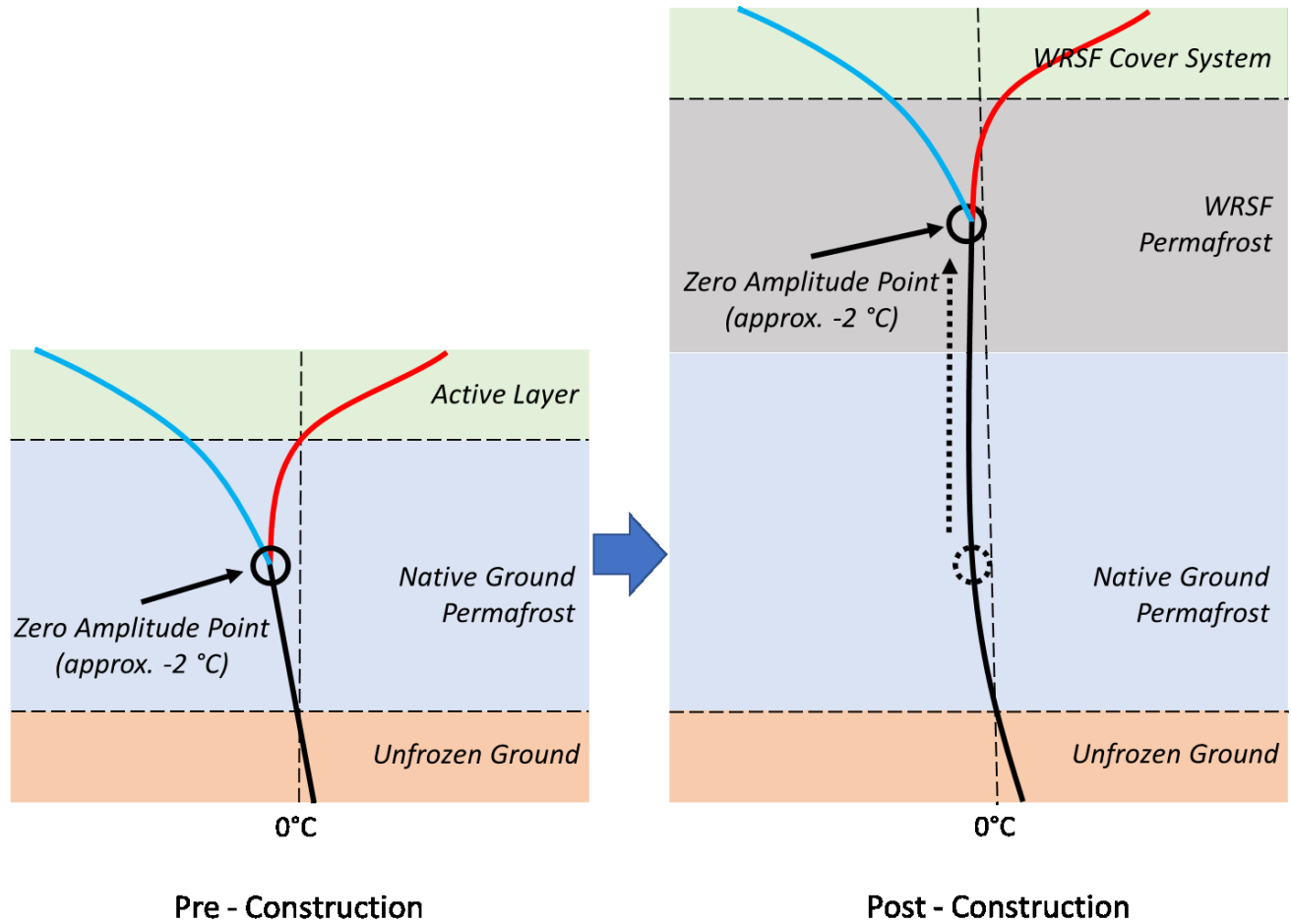


Figure 1: Sketch of typical annual thermal profile in a permafrost soil where the zero amplitude points moves upwards into overlying WRSF.

Table 1: WRSF Permafrost Aggradation Adaptive Management Strategy.

Adaptive Management Level	Threshold	Management Strategy
Level 0 (Normal Operating Condition)	-	<ul style="list-style-type: none"> Monitor temperature at depth within WRSF. Monitor temperature in base of WRSF. Report rate of permafrost aggradation from monitoring data in the Annual Report.
Level 1 (Situation of Concern)	Average zero amplitude point does not move upwards	<ul style="list-style-type: none"> Continue Level 0 management strategy. Complete review of climate data to place WRSF permafrost aggradation rate in context of long-term climate conditions. Complete data review of site, regional ground thermal data and WRSF thermal data in context of regional permafrost conditions. Report results for data review in the Annual Report.
Level 2 (Situation of Concern)	Average zero amplitude point does not move upwards for two consecutive years	<ul style="list-style-type: none"> Continue Level 1 management strategy. Modification of instrumentation program based on interpretation of existing data and understanding of mechanism (could include installation of thermistors and downhole monitoring instruments). Complete review of physical and geochemical properties of WRSF materials including: <ul style="list-style-type: none"> Geochemical testing of drill cuttings and/or grab samples obtained from additional monitoring program (noted above). Report results of additional testing / monitoring in the Annual Report.
Level 3 (Situation of Concern)	<p>Average zero amplitude point does not move upwards for three consecutive years AND</p> <p>Geotechnical and geochemical properties of waste rock from Level 2 review are outside the bounds of those used in modelling</p>	<ul style="list-style-type: none"> Continue Level 1 management strategy, including the review of additional data collected in Level 2 management strategy. Update modelling of permafrost aggradation predictions based on calibrated material properties and in situ conditions as well as updated climate model predictions available. Update WRSF water balance and water quality model based on results of updated thermal model to understand impact on performance of the structure. Report updated performance targets for permafrost aggradation based on updated modelling in the Annual Report.
Level 4 (High Risk Situation)	Updated performance predicted by modelling does not fit within overall project closure objective as detailed in the ICRP (Agnico Eagle 2019a)	<ul style="list-style-type: none"> Implement construction measures to mitigate risk to the receiving environment. This will be situation specific based on result of previous level but could include: <ul style="list-style-type: none"> Construction of passive ground freezing systems; Construction of active ground freezing systems; Relocation / reconfiguration of WRSF; Construction of new or expanded interception structures for water (ponds, sump, ditch, other conveyance systems) to redirect WRSF contact water in the flooded pits.

2.1.2 WRSF Surface Water Balance and Active Layer Development

Performance of the WRSF is also defined by its ability to manage interaction between surface water (runoff) or near-surface water (interflow) with waste rock. Achieving freeze-back near surface will ensure conditions are not favourable for mobilization of oxidation products to the environment to occur. Freeze-back near-surface, but outside the active layer zone, will be monitored to ensure that freeze-back near-surface is occurring. Focused monitoring outside of the active layer zone will allow for long-term trends to be observed dampening the influence of annual climate variability.

Thermal data and cover material physical properties will be measured according to the WRSF instrumentation plan (Okane, 2019b). The Thermal Modelling of the Whale Tail and IVR WRSFs report (Okane 2019a). include the predicted range of estimated freeze-back, the five cross-sections in the WRSFs used for two-dimensional freeze-back modeling. The model's range in freeze-back profiles is a function of climatic conditions around the WRSF (e.g. sun exposure, direction of dominant winds) and material properties. Frequency of the monitoring is detailed in the Thermal Monitoring Plan (Agnico Eagle, 2018b).

Should freeze-back not occur within the projected time frame, Table 2 summarizes specific mitigation measures and associated management actions to be taken.

The assessment of adaptive management level will be evaluated once per year, as part of the annual report. However, monitoring data is continually assessed through internal monitoring and data review from the operations teams.

Table 2: WRSF surface water balance and active layer development adaptive management strategy

Adaptive Management Level	Threshold	Management Strategy
Level 0 (Normal Operating condition)	-	<ul style="list-style-type: none"> Monitoring of near surface thermal / energy balance. Monitoring of near surface water balance. Monitoring of annual freeze-back below active layer. Report thermal condition within WRSF below active layer in the Annual Report.
Level 1 (Area of concern)	Freeze-back below active layer (7 m depth) is not following trend of annual freeze-back predicted by modelling	<ul style="list-style-type: none"> Continue Level 0 management strategy. Complete review of climate data to place WRSF thermal data in context of annual climate conditions. Complete data review of site, regional ground thermal data and WRSF thermal data in context of regional permafrost conditions. Report results of data review in annual report.
Level 2 (Area of concern)	Freeze-back below active layer (7 m depth) is not following trend of annual freeze-back predicted by modelling for two consecutive years	<ul style="list-style-type: none"> Continue Level 1 management strategy. Complete review of physical and geochemical properties of cover system materials including: <ul style="list-style-type: none"> Sampling program to confirm in situ properties and conditions; and Comparison of in situ cover system conditions and properties to conditions observed during base case monitoring program and cover system construction QA/QC. Complete review of cover system construction including: <ul style="list-style-type: none"> Updated survey of WRSF. Report results of cover system review in the Annual Report.
Level 3 (Area of concern)	Trajectory of freeze-back below active layer (7 m depth) is not following model trend for three consecutive years OR Physical and geochemical properties of cover system from Level 2 review are outside the bounds of those used in modelling	<ul style="list-style-type: none"> Continue Level 2 management strategy. If geochemical properties of cover system are outside the bounds of those used in modelling, complete review of cover system segregation procedures. If construction review from the Level 2 management strategy does not identify the cause of non-target freeze-back, or if existing monitoring data does not support additional modelling, complete enhanced monitoring program to capture greater spatial distribution. Complete updated WRSF thermal modelling based on calibrated material properties and in situ conditions, as well as with available updated climate model predictions. Update WRSF water balance and water quality model based on results of updated thermal model. Review cover system freeze-back target based on updated model results and determine requirement to increase cover thickness to meet performance criteria.

Adaptive Management Level	Threshold	Management Strategy
		<ul style="list-style-type: none"> • Report updated cover system material segregation procedures (if required), additional monitoring data (if required), and updated freeze-back targets based on updated modelling (if required) in the Annual Report. • Consider implementation of construction measures outlined at Level 4 below and assess cover material requirements.
Level 4 (High-risk situation)	<p>Trajectory of freeze-back below active layer (7 m depth) is not following model trend for four consecutive years</p> <p>AND</p> <p>Updated performance predicted by modelling show that performance objective of the structure will not be met</p>	<ul style="list-style-type: none"> • Continue Level 1 management strategy including additional data collected in Level 3 management strategy. • Implement construction measures to mitigate risk to the receiving environment. This will be situation specific based on result of previous levels but could include: <ul style="list-style-type: none"> ○ Increasing the thickness of the cover locally with contingency NPAG material as per recommendations of Level 3 modelling; ○ Addition of finer-textured cover system material locally to the existing cover system based on recommendations of Level 3 modelling; ○ Addition of non-granular material amendments to the cover system (eg, geosynthetic) based on recommendation of Level 3 modelling; or ○ Construction of new or expanded interception structures for water (ponds, sump, ditch) to protect the environment. • Report cover system construction measures completed and updated targets in the Annual Report.

2.2 WATER MANAGEMENT

2.2.1 Receiver Water Quality

Agnico Eagle will compare water quality monitoring data to different thresholds during the operation as presented in the Whale Tail Project Water Quality and Flow Monitoring Plan V4 (Agnico Eagle 2018a). The adaptive management thresholds presented below are based on the Water Licence 2AM-WTP1826 Part E Item 9 (NWB 2018) and on the Whale Tail Project Water Quality Forecast issued for the reconsideration of the Project Certificate 008 (Golder 2018). The Receiver Water Quality Adaptive Management Plan will limit comparison of the thresholds presented in Table 3 to the monitoring data of the parameters of concern identified for the Project, which are arsenic and phosphorus. Other parameters of concern can be added as part of the Annual Report process based on the results of the updated water quality forecast.

The thresholds are based on the projected water quality and the Site Specific Water Quality Objectives of the Project that will be potentially updated during the project life cycle based on additional monitoring data. Also, these thresholds are specific to each receiver based on the monitoring data (e.g., Mammoth Lake could be considered at Level 2 when Whale Tail South Basin would be ranked at Level 0). Figure 2 shows a schematic representation of adaptive management levels.

The time of implementation for different corrective measures depends on the lead time on the material and shipping time. Procurement and implementation timelines will be planned for as part of the adaptive management process as per the associated levels.

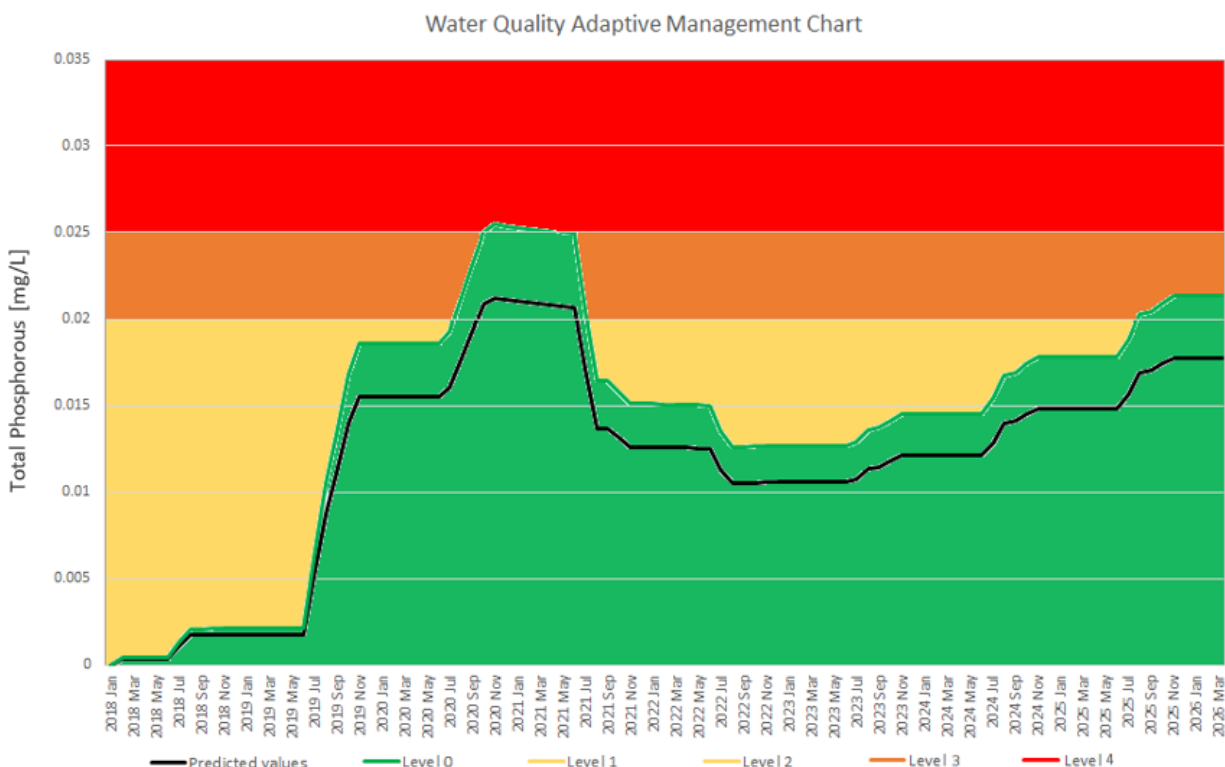


Figure 2: Receiver Water Quality Adaptive Management Chart

When using Table 3 to assess the adaptive management responses, some preliminary assumptions should be considered:

- The table is used to assess the following parameters of concern: arsenic and phosphorus.
- Sampling frequency is done 5 times per year (March and four other samples during open water season) under normal operation conditions as per Core Receiving Environment Monitoring Plan (Azimut, 2018).
- Data from Core Receiving Environment Monitoring Plan (CREMP) (Azimuth, 2018) monitoring stations will be used, including data at the end of the mixing zones.
- The table is to be used with total concentration values.
- Given a contradiction between two criteria, the higher level takes precedence.
- Two consecutive measurements in the same level are necessary to move upwards or downwards in adaptive management response level.
- For results alternating between levels, the result in the highest level will determine the adaptive management response. For example, results in level 1, level 2, then level 1 would dictate that level 2 be implemented until another level 1 is recorded.
- Water quality during the closure and post-closure phases is not considered in the Adaptive Management Plan: they will be considered as part of the Interim Closure and Reclamation Plan (ICRP) (Agnico Eagle, 2019a) adaptive management measures.
- Evaluation of level will be based on FEIS water quality predictions (Appendix 6H).
- In the thresholds, “subsequent exceedances” can refer to two sampling events (e.g. June, July) or two subsequent seasonal events (e.g. March 2020, March 2021).
- For Phosphorus, the percentages are calculated off the maximum predicted concentration in the FEIS water quality predictions (Appendix 6H).

Table 3: Receiver Water Quality Adaptive Management Strategy.

Adaptive Management Level	Threshold	Management Strategy
Level 0 (Normal operating condition)	-	<ul style="list-style-type: none"> Continue monitoring as per Water Quality and Flow Monitoring Plan. Update water balance and water quality forecast as part of the Annual Report.
Level 1 (Area of concern)	<p>Difference between predicted base case values and two subsequent exceedances above level 0 in water quality measured values in the receiver are 20% or greater AND</p> <p>Two subsequent exceedances above Level 0 in water quality measured values in the receiver are less than 80% of the CCME Water Quality Guidelines for the Protection of Aquatic Life criteria or site-specific water quality objectives</p>	<ul style="list-style-type: none"> Continue Level 0 management strategy. Complete analysis of site wide water quantity and quality data to identify and assess cause(s) of the difference(s) and reported to the NWB. Report results of data review in annual reporting to the NWB including implications on the Water management plan and the evaluation of potential mitigation strategies such as: <ul style="list-style-type: none"> Enhance water treatment plant efficiency and reduce maximum effluent discharge concentration by 10%; and Review water management practices to stay within assimilative capacity of the receivers; Discharge in the two receivers simultaneously (Mammoth and Whale Tail South Basin) to reduce overall loading per receiver.
Level 2 (Area of concern)	<p>Difference between predicted base case values and two subsequent exceedances above Level 1 in water quality measured values in the receiver are 20% or greater AND</p> <p>Two subsequent exceedances in Level 1 water quality measured values in the receiver are between 80% and 100% of the CCME Water Quality Guidelines for the Protection of Aquatic Life criteria or site-specific water quality objectives</p>	<ul style="list-style-type: none"> Continue Level 1 management strategy Report results of data review to the NWB in the Annual Report, including implications on the Water management plan and the evaluation of potential mitigation strategies such as: <ul style="list-style-type: none"> Enhance water treatment plant efficiency and reduce maximum effluent discharge concentration by 20%; Reassess monitoring frequency needs; Look at opportunity to use new treatment technologies; Implement in-line water treatment process in the areas of concerns to reduce contaminant at the source; Move discharge location to an approved receiver (Mammoth or Whale Tail South Basin). Complete assessment of potential discharge in lakes D1 or D5 in case level 3 is reached, with approval from the NWB as per NIRB Project Certificate Conditions.
Level 3 (High Risk situation)	<p>Difference between predicted base case values and two subsequent exceedances in Level 2 water quality measured values in the receiver are 20% or greater, AND</p>	<ul style="list-style-type: none"> Continue Level 2 management strategy. Report results of data review in the Annual Report to the NWB including implications on the Water management plan and the evaluation of potential mitigation strategies such as: <ul style="list-style-type: none"> Review overall water management strategy to stay within assimilative capacity of the receivers; Implement new water treatment unit; and

Adaptive Management Level	Threshold	Management Strategy
	Two subsequent exceedances in Level 2 water quality measured values in the receiver are between 100% and 120% of the CCME Water Quality Guidelines for the Protection of Aquatic Life criteria or site-specific water quality objectives	<ul style="list-style-type: none"> ○ Move discharge location in an approved receiver in Lakes D1 or D5, with approval from the NWB as per NIRB Project Certificate Condition. • Continue monitoring in the original receiver to evaluate if they recover and define threshold to restart using them.
Level 4 (Emergency situation)	<p>Difference between predicted base case values and two subsequent exceedances in Level 3 water quality measured values in the receiver are 20% or greater, AND</p> <p>Two subsequent exceedances in Level 3 water quality measured values in the receiver are above 120% of the CCME Water Quality Guidelines for the Protection of Aquatic Life criteria or site-specific water quality objectives</p>	<ul style="list-style-type: none"> • Continue Level 3 management strategy. • Report results of detailed data review in the Annual Report to the NWB, including implications on the Water management plan and the evaluation of potential mitigation strategies such as: <ul style="list-style-type: none"> ○ Move discharge location in an approved receiver or in Lakes D1 or D5; and ○ Suspended effluent discharge until receiver recovery. • Continue monitoring in the original receiver to evaluate if they recover and define thresholds to restart using them. • Evaluate potential new discharge location to resume operation.

2.2.2 Surface Water Quantity

The thresholds developed for the surface water quality are based on the capacity of the different water management infrastructures to retain water on site. The objective is to trigger management strategy actions based on the capacity of these structures. The main management response is based on increasing the discharge rate, especially when water is meeting effluent discharge criteria. As presented by the 1:10 and 1:100 wet year scenario sensitivity analysis of the water balance (Agnico Eagle 2019b), the main driver of this risk is the high recurrence precipitation. Under such event, Agnico Eagle is assuming that the resulting water quality could potentially meet discharge criteria. In such conditions, increasing the discharge rate would de-risk the operation of the water management infrastructure. In the event effluent water quality criteria is not met, storage of the water within the project footprint would be required based on the limited treatment plant capacity. Figure 3 presents the main infrastructure within the current mine plan to store contact water on site (WRSF Pond, Whale Tail Attenuation Pond, IVR Attenuation Pond, and GSP-1 and the discharge locations in Mammoth Lake and Whale Tail Lake.

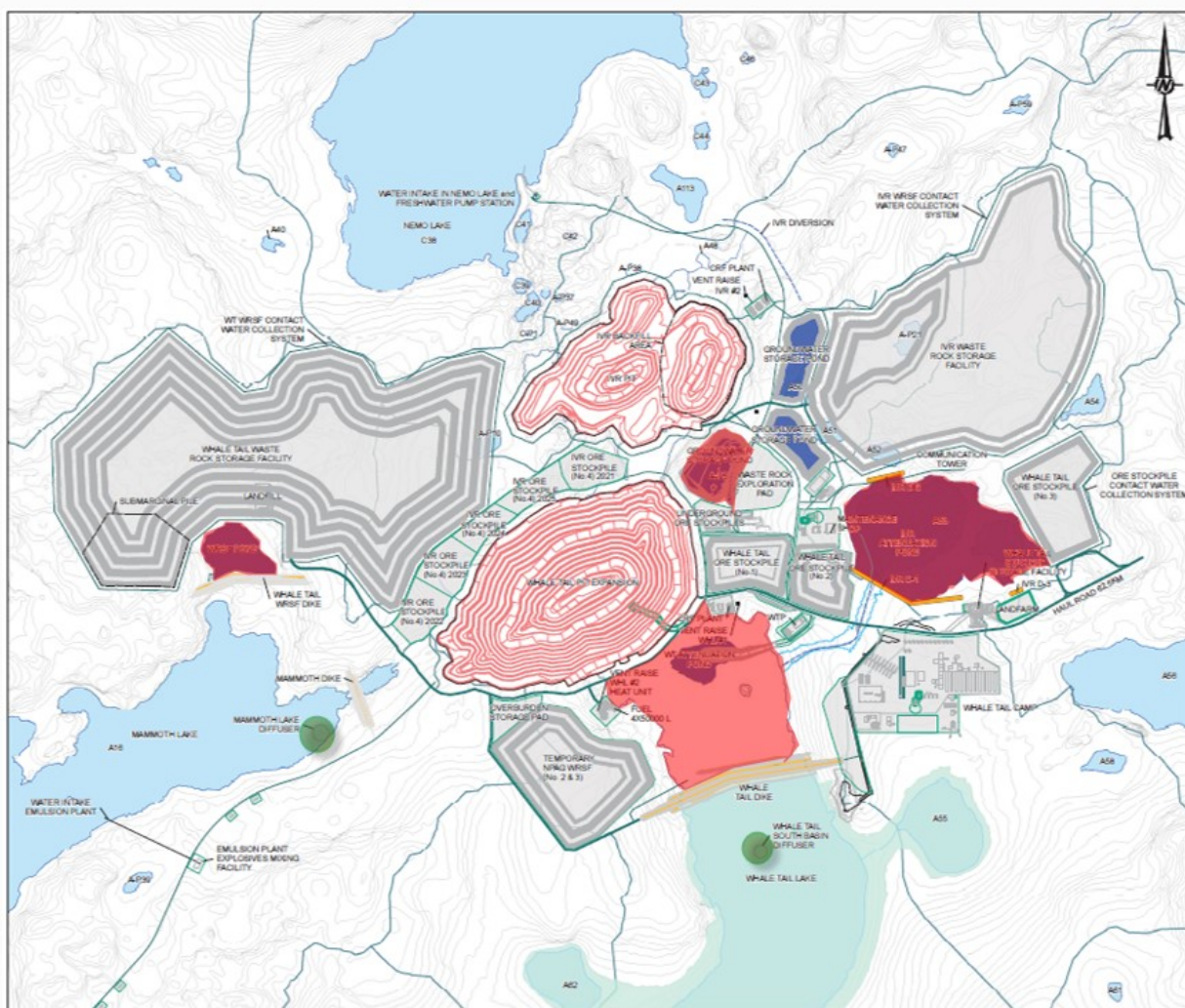


Figure 3: Surface Water Management Infrastructure and discharge locations

Table 4: Surface water quantity adaptive management strategy.

Adaptive Management Level	Threshold	Management Strategy
Level 0 (Normal operating condition)	-	<ul style="list-style-type: none"> Continue monitoring as per Water Quality and Flow Monitoring Plan. Continue water management as per Water Management Plan. Update water balance and water quality forecast as part of the Annual Report.
Level 1 (Area of concern)	Reach maximum operational capacity of the Attenuation Pond(s) and WRSF Pond	<ul style="list-style-type: none"> Continue Level 0 management strategy. Assess water quality within the attenuation ponds and other water storage infrastructure: <ul style="list-style-type: none"> If water quality is below Water Licence criteria, complete water discharge in a preapproved discharge location and bypass O-WTP <ul style="list-style-type: none"> Discharge on splash pad toward Nemo Lake; Discharge on splash pad toward Mammoth Lake; Discharge on splash pad toward Whale Tail Lake; Discharge in Mammoth Lake diffusers; or Discharge in Whale Tail Lake South Basin diffusers. If water quality is above Water Licence criteria, evaluate additional storage location such as GSPs and open pit sump. Complete analysis of the precipitation monitoring event to define rain event scenario and monitor pit wall surface to identify any new groundwater infiltration and assess cause(s) of the difference(s) and reported to the NWB as part of the Annual Report. Once water level of the Attenuation Ponds is back to normal operating condition complete detailed data review of site wide water quality and quantity data and submit report to NWB as part of the annual report.
Level 2 (Area of concern)	Reach max capacity of the Attenuation Pond(s) and GSP1 and 2	<ul style="list-style-type: none"> Continue Level 1 management strategy. Complete construction of GSP-3. Evaluate the feasibility of constructing additional storage on site. Implement construction measures to improve contact and non-contact water management. This will be situation specific based on result of previous levels but could include: <ul style="list-style-type: none"> Construction of new or expanded ponds, ditch, berm, sump and/or water conveyance system to avoid mixing contact water above discharge criteria with non-contact water or contact water under discharge criteria. Increase water treatment plant capacity and increase the number of diffusers in the receiver accordingly and update modelling of the impact on the receivers (water quality and quantity).

Adaptive Management Level	Threshold	Management Strategy
Level 3 (High Risk Situation)	Water volume stored in one of the open pits requires suspension of operations in that pit	<ul style="list-style-type: none"> • Continue Level 2 management strategy. • Complete construction of an additional water storage facility. • Suspend operation in one of the pits until water level allows resuming all mining activities in that pit.

2.2.3 Underground Water Quantity Adaptive Management Strategy

The thresholds developed for the Underground (UG) Mine Water Quantity Adaptive Management Plan are based on the capacity of the different water management infrastructures to retain water on site. The objective is to trigger management strategy actions based on the capacity of these structures. As the inflows from the UG mine are significantly smaller than from the Surface Mine Infrastructure, the main management response is based on increasing the storage capacity until closure of the site. At that time, the UG mine will need to be reflooded and mitigation measures is based off of the residual contact water to complete UG mine reflooding. Figure 4 presents the Groundwater Storage Ponds and the discharge locations in Mammoth Lake and Whale Tail Lake.

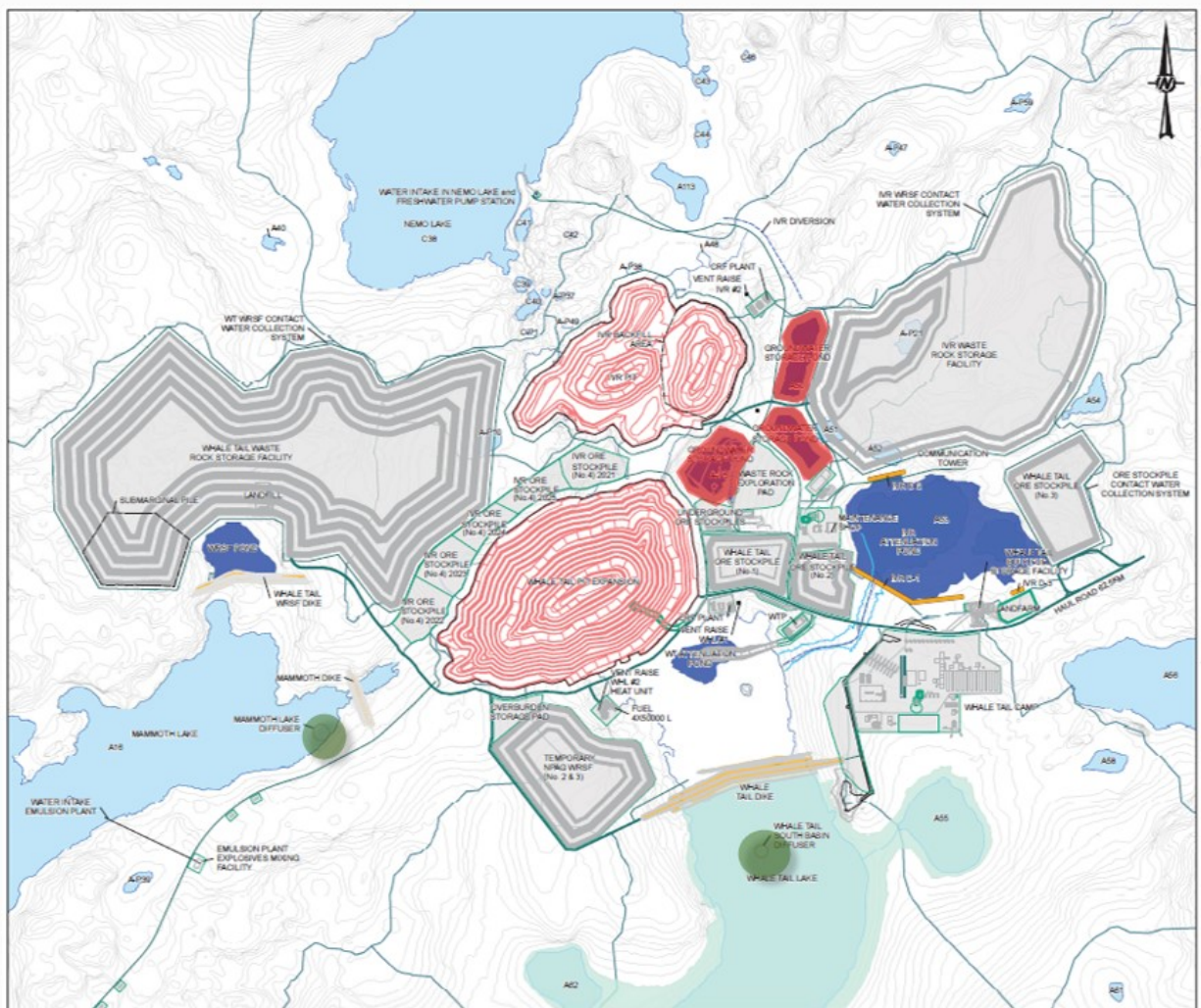


Figure 4: Underground Mine Water Management Infrastructure and discharge locations

Table 5: Underground mine water quantity adaptive management strategy

Adaptive Management Level	Threshold	Management Strategy
Level 0 (Normal operating condition)	-	<ul style="list-style-type: none"> Continue monitoring as per Water Quality and Flow Monitoring Plan. Continue water management as per Water Management Plan. Update water balance and water quality forecast as part of the Annual Report.
Level 1 (Area of concern)	Reach max operational capacity of the GSP1 or GSP 2 reached	<ul style="list-style-type: none"> Continue Level 0 management strategy. Complete review of site wide water quantity and quality data integrating thermistor and piezometer data specific to the UG mine development to identify and assess cause(s) of the difference(s). Complete construction of GSP-3. Report results of detailed data review in Annual Report to the NWB.
Level 2 (Area of concern)	Reach max operational capacity in two of the three Groundwater Storage Ponds	<ul style="list-style-type: none"> Continue Level 1 management strategy. Report results of detailed data review in annual reporting to the NWB including implications on the base case water management strategy and the evaluation of potential mitigation strategies such as: <ul style="list-style-type: none"> Improve underground mine pumping infrastructure; Improve grouting efficiency Improve water treatment efficiency by increasing capacity by adding new treatment unit, installing mechanical evaporators, implementing in-line water treatment process and adding pre-treatment unit in the underground mine; Construction of an additional groundwater storage pond and/or additional UG water stopes; Evaluate feasibility of storing extra underground contact water within IVR pit until end of operation; or Evaluate deep well injection for high TDS water and/or meromictic pit lake disposal approach.
Level 3 (High Risk Situation)	Reach max operational capacity in the three of the four Groundwater Storage Ponds	<ul style="list-style-type: none"> Continue Level 2 management strategy. Report results of detailed data review in annual reporting to the NWB including implications on the base case water management strategy and implement of potential mitigation strategies such as: <ul style="list-style-type: none"> Store extra underground contact water within IVR Pit until end of operation; or Perform deep well injection for high TDS water and/or meromictic pit lake disposal approach following approval from the NWB.

3 REFERENCES

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WHALE TAIL PIT EXPANSION PROJECT

Adaptive Management Plan

Prepared by:
Agnico Eagle Mines Limited – Meadowbank Division

Version 1.14
January~~December~~ 2020~~19~~

DISTRIBUTION LIST

AEM – Engineering Superintendent

AEM – Geotechnical Coordinator

AEM – Environment Superintendent

AEM – Environment General Supervisor

AEM – Environmental Coordinator

AEM – Permitting and Regulatory Affairs Superintendent

DOCUMENT CONTROL

Version	Date (YMD)	Section	Revision
1	2019-12-19	All	New Plan to address commitments made during the review process of the Whale Tail Pit Expansion Project Water Licence Amendment
<u>1.1</u>	<u>2020-01-30</u>	<u>All</u>	<u>Updated Plan to address comments from CIRNAC, KivIA and ECCC on January 8 meeting in Winnipeg and Final Written Submissions as part of the Whale Tail Pit Expansion Project Water Licence Amendment</u>

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1 INTRODUCTION

Agnico Eagle Mines Limited – Meadowbank Division (Agnico Eagle) is proposing an expansion to the Whale Tail Pit and Haul Road Project (Approved Project), a Meadowbank satellite deposit located on the Amaruq property. As an expansion to the Approved Project (NIRB PC No. 008 and NWB 2AM-WTP1826) Agnico Eagle is proposing to expand and extend the Whale Tail Pit operations to include a larger Whale Tail open pit, development of the IVR open pit, and underground operations (referred to as the Expansion Project) while continuing to operate and process ore at the Meadowbank Mine.

The Amaruq property is a 408 km² site located on Inuit Owned Land approximately 150 km north of the hamlet of Baker Lake and approximately 50 km north of Meadowbank Mine in the Kivalliq Region of Nunavut.

Construction upgrades to support the Expansion Project will begin as soon as approval and permits for the amendment applications are received (anticipated for early 2020). The operational phase (Approved and Expansion Projects) will span from Year 1 (20~~20~~~~19~~) to Year 7 (20~~25~~~~56~~). Mining activities are expected to end in Year 7 (20~~25~~~~2026~~) ~~and ore processing is expected to end during Year 8 (2026)~~. Closure will occur from Year 8 (20~~26~~~~2027~~) to Year ~~25-24 (20432042)~~ after the completion of mining and will include removal of the non-essential site infrastructure and flooding of the mined-out open pits and underground mining, as well as reestablishment of the natural Whale Tail Lake water level.

This document presents an Adaptive Management Plan prepared for the following facilities and activities associated with the Project:

- Waste rock storage facility (WRSF);
- Receiver water quality;
- Surface water quantity; and
- Underground mine water quantity.

This Plan has been completed for the Expansion Project in support of the Nunavut Water Board (NWB) review process and Agnico Eagle is requesting that the NWB approve this Plan with the issuance of the amended 2AM-WTP1826.

The primary objective of the Adaptive Management Plan is to document specific mitigation measures and associated management actions to be taken when specified thresholds are exceeded. Mitigation measures may include special studies, operational changes, revised or new water and waste management systems, new or expanded conveyance systems, structures and/or facilities, or implementing mitigation activities to prevent, stabilize or reverse a change in environmental conditions or to otherwise protect the receiving environment.

All mitigation measures described in this Plan have undergone a self assessment by Agnico Eagle in accordance with the "NIRB Guidance Re Process for Seeking Approval for Modifications to Previously-Approved Projects" (April 27, 2018) (the NIRB Guidance), which references Section 90 of the Nunavut Waters and Nunavut Surface Rights Tribunal Act (NuPPAA) and the measure are not considered a "significant modification" under the Nunavut Agreement or NuPPAA. The mitigation measures described in this Plan would not be required as a result of changes to the mine life or other expansion of the mine. With respect to land use planning requirements, all mitigation measures would occur within the footprint

described in the project proposal that was the subject of the Nunavut Planning Commission's positive conformity determination on the Expansion Project of October 16, 2018.

In consideration of the section 90 factors under NuPPAA, mitigation measures described in this Plan, when assessed comparatively to the Final Environmental Impact Statement (FEIS):

- would be situated within the footprint of the Expansion Project, which has not been identified as a particularly sensitive area or historical, cultural or archeologically significant area;
- would not result in changes to impacts on human and animal populations;
- would result in a low to negligible change to the Expansion Project predicted environmental impacts, including the nature, magnitude and complexity of the impacts;
- would result in a low to negligible change to the probability of impacts occurring;
- would result in a low to negligible change to the frequency and duration of the impacts;
- would result in no change to the reversibility or irreversibility of the impacts; and
- would result in no change to the cumulative impacts.

The Adaptive Management Plan will be reviewed if deemed required to account for the dynamics of mine construction, –operations and policy changes, and to adjust the adaptive management strategy as needed.

In the event of a conflict or inconsistency between this Adaptive Management Plan and any other Plan approved under the Type A Water Licence, the Adaptive Management Plan shall prevail to the extent of the conflict or inconsistency.

For greater clarity, all actions and management strategies described in the approved Adaptive Management Plan are included in the Scope of the Type A Water Licence (see Part A, Item 1) and can proceed without modification or amendment to the Type A Water Licence.

2 ADAPTIVE MANAGEMENT PLAN

This section presents the adaptive management strategy prepared for the following facilities and activities associated with the mine:

- waste rock storage facility (WRSF);
- receiver water quality;
- surface water quantity; and
- underground mine water quantity.

2.1 WASTE ROCK MANAGEMENT

2.1.1 WRSF Permafrost Aggradation

Performance of the WRSF is in part defined by its ability to achieve geochemical stability. Maintaining permafrost conditions within potentially acid generating (PAG) and potentially metal leaching (ML) waste rock will inhibit leaching of acidic drainage or metal contaminated waters.

Permafrost aggradation into the WRSF from the surrounding bedrock (Figure 1) will be monitored to verify frozen conditions at depth are developing and being maintained over time. For more details on permafrost aggradation concept and how it applies to the Whale Tail Project WRSF's, the reader is referred to O'kane (OKC 2019a).

Permafrost aggradation is defined within this Adaptive Management Plan by the point of zero amplitude (i.e., the depth at which seasonal temperature fluctuations no longer influence ground temperature) moving upwards into the WRSF until a post-construction thermal equilibrium is reached. Should the point of zero amplitude not move upwards, Table 1 summarizes specific mitigation measures and associated management actions to be taken.

When using Table 1 to assess the adaptive management response required, some preliminary assumptions should be considered:

- The zero-amplitude points heights are determined during the Annual Report.
- The thresholds are referring to an average of thermistors or two spatially-consecutive thermistors for localized effects.

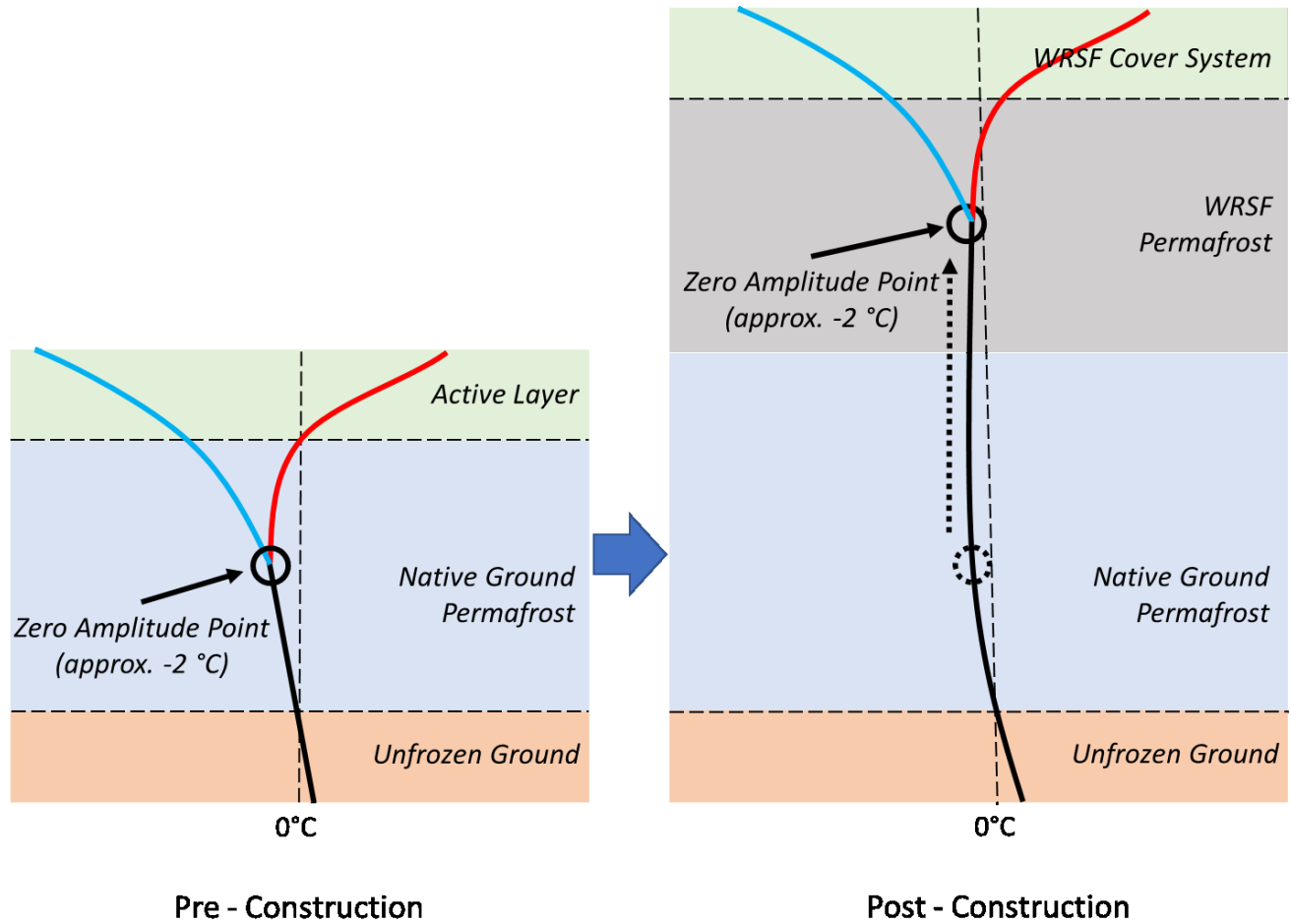


Figure 1: Sketch of typical annual thermal profile in a permafrost soil where the zero amplitude points moves upwards into overlying WRSF.

Table 1: WRSF Permafrost Aggradation Adaptive Management Strategy.

Adaptive Management Level	Threshold	Management Strategy
Level 0 (Normal Operating Condition)	-	<ul style="list-style-type: none"> Monitor temperature at depth within WRSF. Monitor temperature in base of WRSF. Report rate of permafrost aggradation from monitoring data in the Annual Report.
Level 1 (Situation of Concern)	Average zero amplitude point does not move upwards	<ul style="list-style-type: none"> Continue Level 0 management strategy. Complete review of climate data to place WRSF permafrost aggradation rate in context of long-term climate conditions. Complete data review of site, regional ground thermal data and WRSF thermal data in context of regional permafrost conditions. Report results for data review in the Annual Report.
Level 2 (Situation of Concern)	Average zero amplitude point does not move upwards for two <u>consecutive</u> years	<ul style="list-style-type: none"> Continue Level 1 management strategy. Modification of instrumentation program based on interpretation of existing data and understanding of mechanism (could include installation of thermistors and downhole monitoring instruments). Complete review of physical and geochemical properties of WRSF materials including: <ul style="list-style-type: none"> Geochemical testing of drill cuttings and/or grab samples obtained from additional monitoring program (noted above). Report results of additional testing / monitoring in the Annual Report.
Level 3 (Situation of Concern)	Average zero amplitude point does not move upwards for three <u>consecutive</u> years AND Geotechnical and geochemical properties of waste rock from Level 2 review are outside the bounds of those used in modelling	<ul style="list-style-type: none"> Continue Level 1 management strategy, including the review of additional data collected in Level 2 management strategy. Update modelling of permafrost aggradation predictions based on calibrated material properties and in situ conditions as well as updated climate model predictions available. Update WRSF water balance and water quality model based on results of updated thermal model to understand impact on performance of the structure. Report updated performance targets for permafrost aggradation based on updated modelling in the Annual Report.
Level 4 (High Risk Situation)	Updated performance predicted by modelling does not fit within overall project closure objective as detailed in the ICRP (Agnico Eagle 2019a)	<ul style="list-style-type: none"> Implement construction measures to mitigate risk to the receiving environment. This will be situation specific based on result of previous level but could include: <ul style="list-style-type: none"> Construction of passive ground freezing systems; Construction of active ground freezing systems; Relocation / reconfiguration of WRSF; Construction of new or expanded interception structures for water (ponds, sump, ditch, other conveyance systems) to redirect WRSF contact water in the flooded pits.

2.1.2 WRSF Surface Water Balance and Active Layer Development

Performance of the WRSF is also defined by its ability to manage interaction between surface water (runoff) or near-surface water (interflow) with waste rock. Achieving freeze-back near surface will ensure conditions are not favourable for mobilization of oxidation products to the environment to occur. Freeze-back near-surface, but outside the active layer zone, will be monitored to ensure that freeze-back near-surface is occurring. Focused monitoring outside of the active layer zone will allow for long-term trends to be observed dampening the influence of annual climate variability.

Thermal data and cover material physical properties will be measured according to the WRSF instrumentation plan (Okane, 2019b). –The Thermal Modelling of the Whale Tail and IVR WRSFs– report (Okane 2019a). include the predicted range of estimated freeze-back, the five cross-sections in the WRSFs used for two-dimensional freeze-back modeling. The model's range in freeze-back profiles is a function of climatic conditions around the WRSF (e.g. sun exposure, direction of dominant winds) and material properties. Frequency of the monitoring is detailed in the Thermal Monitoring Plan (Agnico Eagle, 2018b).

Should freeze-back not occur within the projected time frame, Table 2 summarizes specific mitigation measures and associated management actions to be taken.

The assessment of adaptive management level will be evaluated once per year, as part of the annual report. However, monitoring data is continually assessed through internal monitoring and data review from the operations teams.

Table 2: WRSF surface water balance and active layer development adaptive management strategy

Adaptive Management Level	Threshold	Management Strategy
Level 0 (Normal Operating condition)	-	<ul style="list-style-type: none"> Monitoring of near surface thermal / energy balance. Monitoring of near surface water balance. Monitoring of annual freeze-back below active layer. Report thermal condition within WRSF below active layer in the Annual Report.
Level 1 (Area of concern)	Freeze-back below active layer (7 m depth) is not following trend of annual freeze-back predicted by modelling	<ul style="list-style-type: none"> Continue Level 0 management strategy. Complete review of climate data to place WRSF thermal data in context of annual climate conditions. Complete data review of site, regional ground thermal data and WRSF thermal data in context of regional permafrost conditions. Report results of data review in annual report.
Level 2 (Area of concern)	Freeze-back below active layer (7 m depth) is not following trend of annual freeze-back predicted by modelling for two <u>consecutive</u> years	<ul style="list-style-type: none"> Continue Level 1 management strategy. Complete review of physical and geochemical properties of cover system materials including: <ul style="list-style-type: none"> Sampling program to confirm in situ properties and conditions; and Comparison of in situ cover system conditions and properties to conditions observed during base case monitoring program and cover system construction QA/QC. Complete review of cover system construction including: <ul style="list-style-type: none"> Updated survey of WRSF. Report results of cover system review in the Annual Report.
Level 3 (Area of concern)	Trajectory of freeze-back below active layer (7 m depth) is not following model trend for three <u>consecutive</u> years OR Physical and geochemical properties of cover system from Level 2 review are outside the bounds of those used in modelling	<ul style="list-style-type: none"> Continue Level 2 management strategy. If geochemical properties of cover system <u>are outside the bounds of those used in modelling-differ significantly from-those used in modelling</u>, complete review of cover system segregation procedures. If construction review from the Level 2 management strategy does not identify the cause of non-target freeze-back, or if existing monitoring data does not support additional modelling, complete enhanced monitoring program to capture greater spatial distribution. Complete updated WRSF thermal modelling based on calibrated material properties and in situ conditions, as well as with available updated climate model predictions. Update WRSF water balance and water quality model based on results of updated thermal model. Review cover system freeze-back target based on updated model results and determine requirement to increase cover thickness to meet performance criteria.

Adaptive Management Level	Threshold	Management Strategy
		<ul style="list-style-type: none"> • Report updated cover system material segregation procedures (if required), additional monitoring data (if required), and updated freeze-back targets based on updated modelling (if required) in the Annual Report. • Consider implementation of construction measures outlined at Level 4 below and assess cover material requirements.
Level 4 (High-risk situation)	<p>Trajectory of freeze-back below active layer (7 m depth) is not following model trend for four <u>consecutive</u> years</p> <p>AND</p> <p>Updated performance predicted by modelling show that performance objective of the structure will not be met</p>	<ul style="list-style-type: none"> • Continue Level 1 management strategy including additional data collected in Level 3 management strategy. • Implement construction measures to mitigate risk to the receiving environment. This will be situation specific based on result of previous levels but could include: <ul style="list-style-type: none"> ◦ Increasing the thickness of the cover locally with contingency NPAG material as per recommendations of Level 3 modelling; ◦ Addition of finer-textured cover system material locally to the existing cover system based on recommendations of Level 3 modelling; ◦ Addition of non-granular material amendments to the cover system (eg, geosynthetic) based on recommendation of Level 3 modelling; or ◦ Construction of new or expanded interception structures for water (ponds, sump, ditch) to protect the environment. • Report cover system construction measures completed and updated targets in the Annual Report.

2.2 WATER MANAGEMENT

2.2.1 Receiver Water Quality

Agnico Eagle will compare water quality monitoring data to different thresholds during the operation as presented in the Whale Tail Project Water Quality and Flow Monitoring Plan V4 (Agnico Eagle 2018a). The adaptive management thresholds presented below are based on the Water Licence 2AM-WTP1826 Part E Item 9 (NWB 2018) and on the Whale Tail Project Water Quality Forecast issued for the reconsideration of the Project Certificate 008 (Golder 2018). The Receiver Water Quality Adaptive Management Plan will limit comparison of the thresholds presented in Table 3 to the monitoring data of the parameters of concern identified for the Project, which are arsenic and phosphorus. Other parameters of concern can be added as part of the Annual Report process based on the results of the updated water quality forecast.

The thresholds are based on the projected water quality and the Site Specific Water Quality Objectives of the Project that will be potentially updated during the project life cycle based on additional monitoring data. Also, these thresholds are specific to each receiver based on the monitoring data (e.g., Mammoth Lake could be considered at Level 2 when Whale Tail South Basin would be ranked at Level 0). Figure 2 shows a schematic representation of adaptive management levels.

The time of implementation for different corrective measures depends on the lead time on the material and shipping time. Procurement and implementation timelines will be planned for as part of the adaptive management process as per the associated levels.

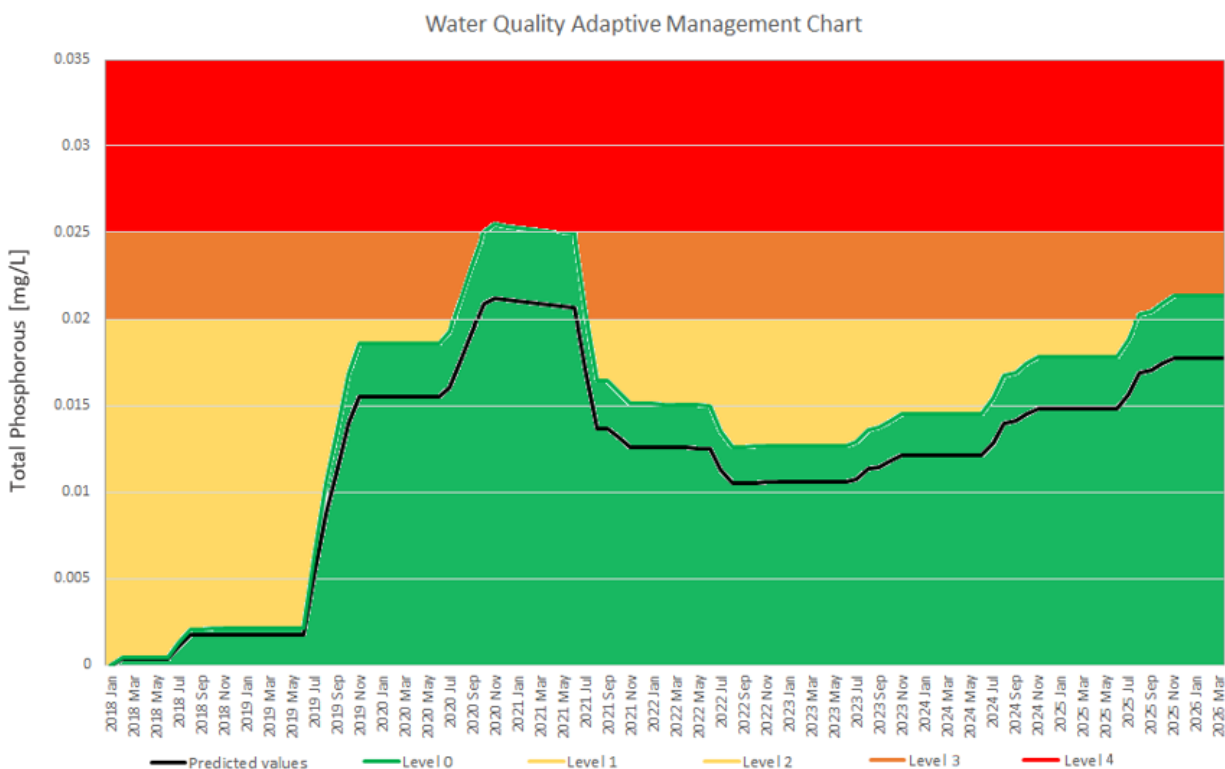


Figure 2: Receiver Water Quality Adaptive Management Chart

When using Table 3 to assess the adaptive management responses, some preliminary assumptions should be considered:

- The table is used to assess the following parameters of concern: arsenic and phosphorus.
- Sampling frequency is done 5 times per year (March and four other samples during open water season) under normal operation conditions as per Core Receiving Environment Monitoring Plan (Azimut, 2018).
- Data from Core Receiving Environment Monitoring Plan (CREMP) (Azimuth, 2018) monitoring stations will be used, including data at the end of the mixing zones.
- The table is to be used with total concentration values.
- Given a contradiction between two criteria, the higher level takes precedence.
- Two consecutive measurements in the same level are necessary to move upwards or downwards in adaptive management response level.
- For results alternating between levels, the result in the highest level will determine the adaptive management response. For example, results in level 1, level 2, then level 1 would dictate that level 2 be implemented until another level 1 is recorded.
- Water quality during the closure and post-closure phases is not considered in the Adaptive Management Plan: they will be considered as part of the Interim Closure and Reclamation Plan (ICRP) (Agnico Eagle, 2019a) adaptive management measures.
- Evaluation of level will be based on FEIS water quality predictions (Appendix 6H).
- In the thresholds, “subsequent exceedances” can refer to two sampling events (e.g. June, July) or two subsequent seasonal events (e.g. March 2020, March 2021).
- For Phosphorus, the percentages are calculated off the maximum predicted concentration in the FEIS water quality predictions (Appendix 6H).

Table 3: Receiver Water Quality Adaptive Management Strategy.

Adaptive Management Level	Threshold	Management Strategy
Level 0 (Normal operating condition)	-	<ul style="list-style-type: none"> Continue monitoring as per Water Quality and Flow Monitoring Plan. Update water balance and water quality forecast as part of the Annual Report.
Level 1 (Area of concern)	<p>Difference between predicted base case values and two subsequent exceedances above level 0 in water quality measured values in the receiver are 20% or greater AND</p> <p>Two subsequent exceedances above Level 0 in water quality measured values in the receiver are less than 80% of the CCME Water Quality Guidelines for the Protection of Aquatic Life criteria or site-specific water quality objectives</p>	<ul style="list-style-type: none"> Continue Level 0 management strategy. Complete analysis of site wide water quantity and quality data to identify and assess cause(s) of the difference(s) and reported to the NWB. Report results of data review in annual reporting to the NWB including implications on the Water management plan and the evaluation of potential mitigation strategies such as: <ul style="list-style-type: none"> Enhance water treatment plant efficiency and reduce maximum effluent discharge concentration by 10%; and Review water management practices to stay within assimilative capacity of the receivers; Discharge in the two receivers simultaneously (Mammoth and Whale Tail South Basin) to reduce overall loading per receiver.
Level 2 (Area of concern)	<p>Difference between predicted base case values and two subsequent exceedances above Level 1 in water quality measured values in the receiver are 20% or greater AND</p> <p>Two subsequent exceedances in Level 1 water quality measured values in the receiver are between 80% and 100% of the CCME Water Quality Guidelines for the Protection of Aquatic Life criteria or site-specific water quality objectives</p>	<ul style="list-style-type: none"> Continue Level 1 management strategy Report results of data review- to the NWB in the Annual Report, including implications on the Water management plan and the evaluation of potential mitigation strategies such as: <ul style="list-style-type: none"> Enhance water treatment plant efficiency and reduce maximum effluent discharge concentration by 20%; Reassess monitoring frequency needs; Look at opportunity to use new treatment technologies; Implement in-line water treatment process in the areas of concerns to reduce contaminant at the source; Move discharge location to an approved receiver (Mammoth or Whale Tail South Basin). Complete assessment of potential discharge in lakes D1 or D5 in case level 3 is reached, with approval from the NWB as per NIRB Project Certificate Conditions.
Level 3 (High Risk situation)	<p>Difference between predicted base case values and two subsequent exceedances in Level 2 water quality measured values in the receiver are 20% or greater, AND</p>	<ul style="list-style-type: none"> Continue Level 2 management strategy. Report results of data review in the Annual Report to the NWB including implications on the Water management plan and the evaluation of potential mitigation strategies such as: <ul style="list-style-type: none"> Review overall water management strategy to stay within assimilative capacity of the receivers; Implement new water treatment unit; and

Adaptive Management Level	Threshold	Management Strategy
	Two subsequent exceedances in Level 2 water quality measured values in the receiver are between 100% and 120% of the CCME Water Quality Guidelines for the Protection of Aquatic Life criteria or site-specific water quality objectives	<ul style="list-style-type: none"> ○ Move discharge location in an approved receiver in Lakes D1 or D5, with approval from the NWB as per NIRB Project Certificate Condition. • Continue monitoring in the original receiver to evaluate if they recover and define threshold to restart using them.
Level 4 (Emergency situation)	<p>Difference between predicted base case values and two subsequent exceedances in Level 3 water quality measured values in the receiver are 20% or greater, AND</p> <p>Two subsequent exceedances in Level 3 water quality measured values in the receiver are above 120% of the CCME Water Quality Guidelines for the Protection of Aquatic Life criteria or site-specific water quality objectives</p>	<ul style="list-style-type: none"> • Continue Level 3 management strategy. • Report results of detailed data review in the Annual Report to the NWB, including implications on the Water management plan and the evaluation of potential mitigation strategies such as: <ul style="list-style-type: none"> ○ Move discharge location in an approved receiver or in Lakes D1 or D5; and ○ Suspended effluent discharge until receiver recovery. • Continue monitoring in the original receiver to evaluate if they recover and define thresholds to restart using them. • Evaluate potential new discharge location to resume operation.

2.2.2 Surface Water Quantity

The thresholds developed for the surface water quality are based on the capacity of the different water management infrastructures to retain water on site. The objective is to trigger management strategy actions based on the capacity of these structures. The main management response is based on increasing the discharge rate, especially when water is meeting effluent discharge criteria. As presented by the 1:10 and 1:100 wet year scenario sensitivity analysis of the water balance (Agnico Eagle 2019b), the main driver of this risk is the high recurrence precipitation. Under such event, Agnico Eagle is assuming that the resulting water quality could potentially meet discharge criteria. In such conditions, increasing the discharge rate would de-risk the operation of the water management infrastructure. In the event effluent water quality criteria is not met, storage of the water within the project footprint would be required based on the limited treatment plant capacity. Figure 3 presents the main infrastructure within the current mine plan to store contact water on site (WRSF Pond, Whale Tail Attenuation Pond, IVR Attenuation Pond, and GSP-1 and the discharge locations in Mammoth Lake and Whale Tail Lake.

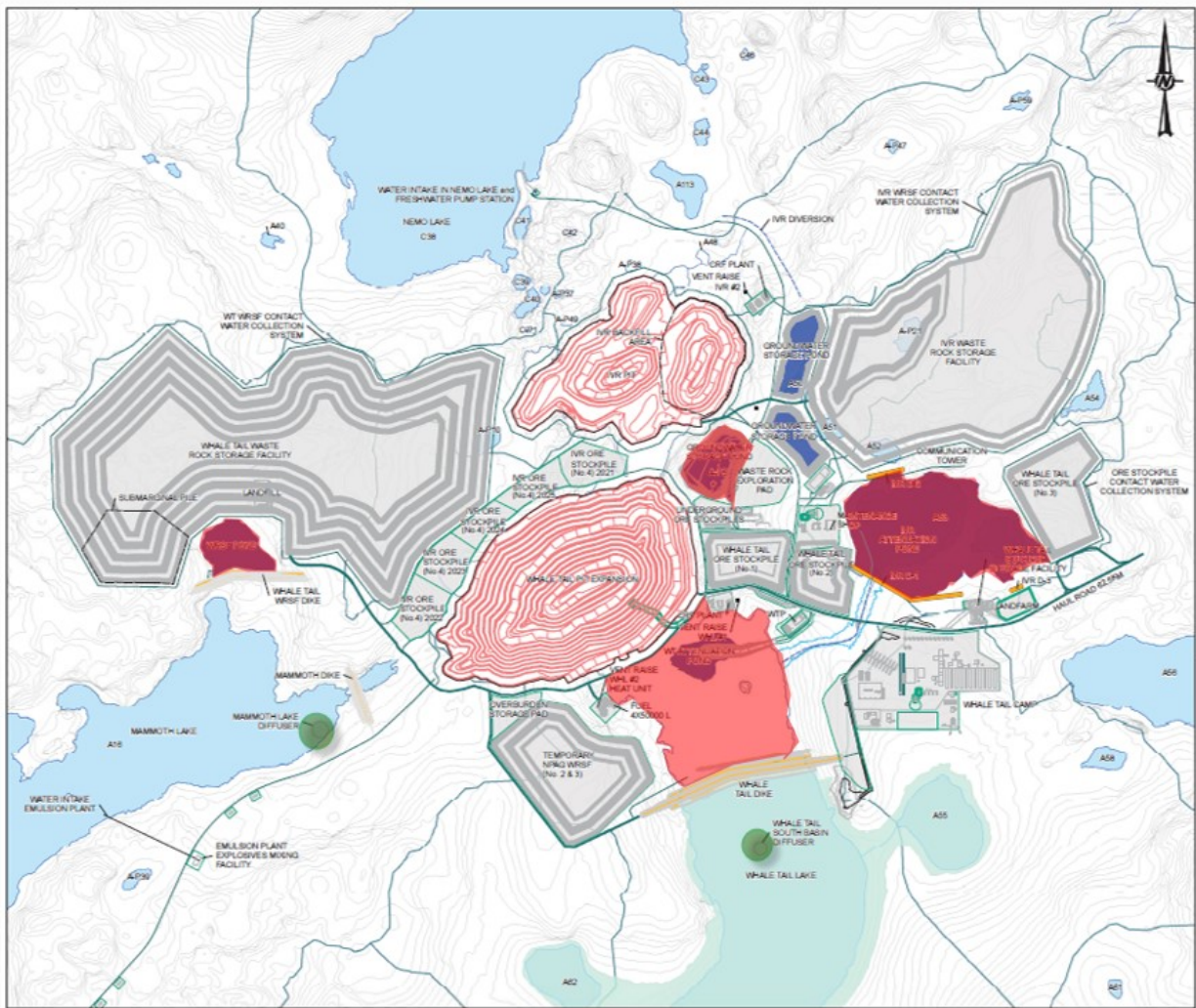


Figure 3: Surface Water Management Infrastructure and discharge locations

Table 4: Surface water quantity adaptive management strategy.

Adaptive Management Level	Threshold	Management Strategy
Level 0 (Normal operating condition)	-	<ul style="list-style-type: none"> Continue monitoring as per Water Quality and Flow Monitoring Plan. Continue water management as per Water Management Plan. Update water balance and water quality forecast as part of the Annual Report.
Level 1 (Area of concern)	Reach maximum operational capacity of the Attenuation Pond(s) and WRSF Pond	<ul style="list-style-type: none"> Continue Level 0 management strategy. Assess water quality within the attenuation ponds and other water storage infrastructure: <ul style="list-style-type: none"> If water quality is below Water Licence criteria, complete water discharge in a preapproved discharge location and bypass O-WTP <ul style="list-style-type: none"> Discharge on splash pad toward Nemo Lake; Discharge on splash pad toward Mammoth Lake; Discharge on splash pad toward Whale Tail Lake; Discharge in Mammoth Lake diffusers; or Discharge in Whale Tail Lake South Basin diffusers. If water quality is above Water Licence criteria, evaluate additional storage location such as GSPs and open pit sump. Complete analysis of the precipitation monitoring event to define rain event scenario and monitor pit wall surface to identify any new groundwater infiltration and assess cause(s) of the difference(s) and reported to the NWB as part of the Annual Report. Once water level of the Attenuation Ponds is back to normal operating condition complete detailed data review of site wide water quality and quantity data and submit report to NWB as part of the annual report.
Level 2 (Area of concern)	Reach max capacity of the Attenuation Pond(s) and GSP1 and 2	<ul style="list-style-type: none"> Continue Level 1 management strategy. Complete construction of GSP-3. Evaluate the feasibility of constructing additional storage on site. Implement construction measures to improve contact and non-contact water management. This will be situation specific based on result of previous levels but could include: <ul style="list-style-type: none"> Construction of new or expanded ponds, ditch, berm, sump and/or water conveyance system to avoid mixing contact water above discharge criteria with non-contact water or contact water under discharge criteria. Increase water treatment plant capacity and increase the number of diffusers in the receiver accordingly and update modelling of the impact on the receivers (water quality and quantity).

Adaptive Management Level	Threshold	Management Strategy
Level 3 (High Risk Situation)	Water volume stored in one of the open pits requires suspension of operations in that pit	<ul style="list-style-type: none"> • Continue Level 2 management strategy. • Complete construction of an additional water storage facility. • Suspend operation in one of the pits until water level allows resuming all mining activities in that pit.

2.2.3 Underground Water Quantity Adaptive Management Strategy

The thresholds developed for the Underground (UG) Mine Water Quantity Adaptive Management Plan are based on the capacity of the different water management infrastructures to retain water on site. The objective is to trigger management strategy actions based on the capacity of these structures. As the inflows from the UG mine are significantly smaller than from the Surface Mine Infrastructure, the main management response is based on increasing the storage capacity until closure of the site. At that time, the UG mine will need to be reflooded and mitigation measures is based off of the residual contact water to complete UG mine reflooding. Figure 4 presents the Groundwater Storage Ponds and the discharge locations in Mammoth Lake and Whale Tail Lake.

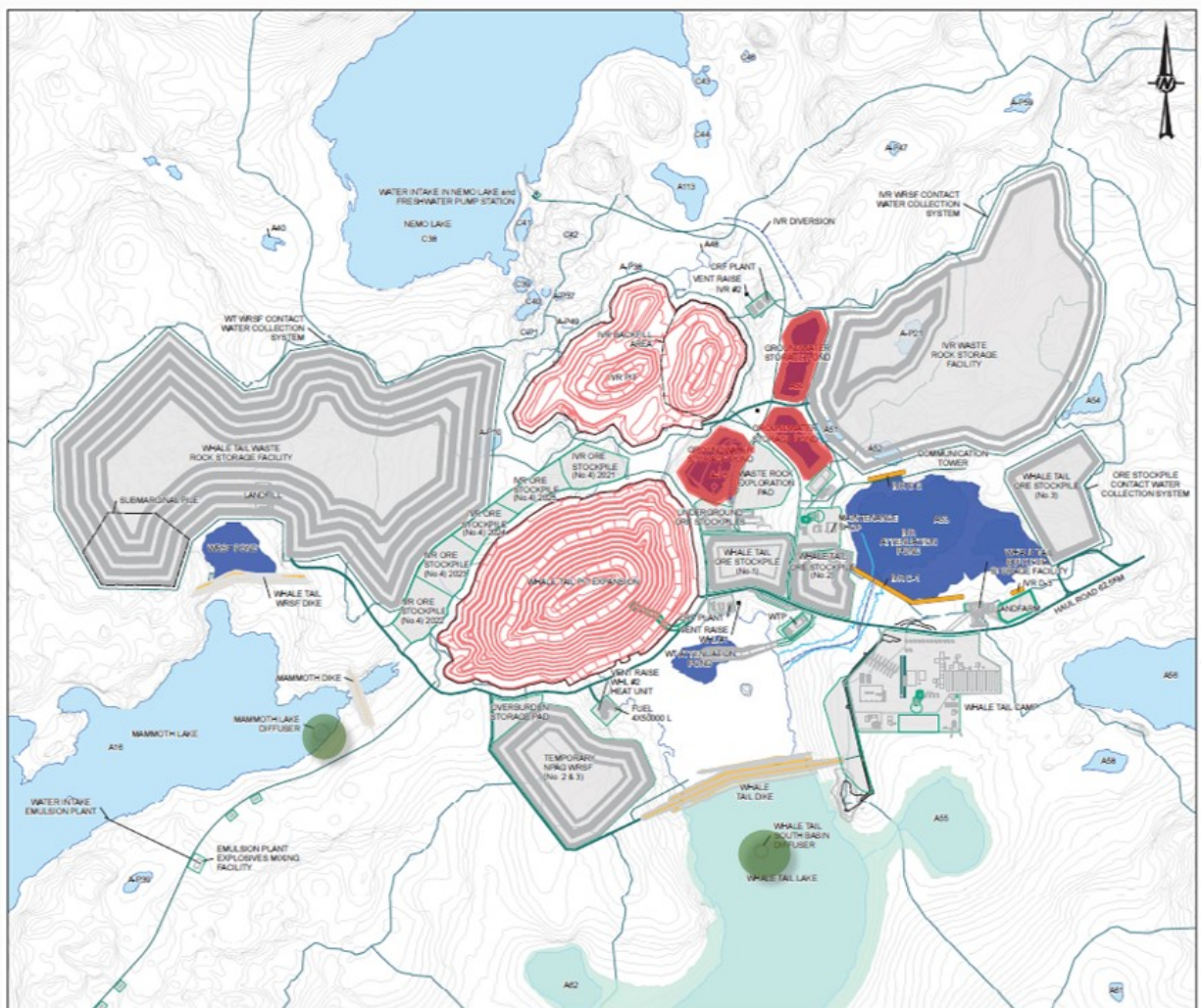


Figure 4: Underground Mine Water Management Infrastructure and discharge locations

Table 5: Underground mine water quantity adaptive management strategy

Adaptive Management Level	Threshold	Management Strategy
Level 0 (Normal operating condition)	-	<ul style="list-style-type: none"> Continue monitoring as per Water Quality and Flow Monitoring Plan. Continue water management as per Water Management Plan. Update water balance and water quality forecast as part of the Annual Report.
Level 1 (Area of concern)	Reach max operational capacity of the GSP1 or GSP 2 reached	<ul style="list-style-type: none"> Continue Level 0 management strategy. Complete review of site wide water quantity and quality data integrating thermistor and piezometer data specific to the UG mine development to identify and assess cause(s) of the difference(s). Complete construction of GSP-3. Report results of detailed data review in Annual Report to the NWB.
Level 2 (Area of concern)	Reach max operational capacity in two of the three Groundwater Storage Ponds	<ul style="list-style-type: none"> Continue Level 1 management strategy. Report results of detailed data review in annual reporting to the NWB including implications on the base case water management strategy and the evaluation of potential mitigation strategies such as: <ul style="list-style-type: none"> Improve underground mine pumping infrastructure; Improve grouting efficiency o Improve water treatment efficiency by increasing capacity by adding new treatment unit, installing mechanical evaporators, implementing in-line water treatment process and adding pre-treatment unit in the underground mine; Construction of an additional groundwater storage pond and/or additional UG water stopes; Evaluate feasibility of storing extra underground contact water within IVR pit until end of operation; or Evaluate deep well injection for high TDS water and/or meromictic pit lake disposal approach.
Level 3 (High Risk Situation)	Reach max operational capacity in the three of the four Groundwater Storage Ponds	<ul style="list-style-type: none"> Continue Level 2 management strategy. Report results of detailed data review in annual reporting to the NWB including implications on the base case water management strategy and implement of potential mitigation strategies such as: <ul style="list-style-type: none"> Store extra underground contact water within IVR Pit until end of operation; or Perform deep well injection for high TDS water and/or meromictic pit lake disposal approach following approval from the NWB.

3 REFERENCES

- Agnico Eagle. 2018a. Whale Tail Pit Water Quality and Flow Monitoring Plan.V4. August 2018.
- Agnico Eagle. 2018b. Final Environmental Impact Statement Addendum – Whale Tail Pit – Expansion Project. December 2018.
- Agnico Eagle. 2018c. Whale Tail Pit Project – Thermal Monitoring Plan. Version 1. May 2018
- Agnico Eagle. 2019a. Whale Tail Pit Expansion Project – Interim Closure and Reclamation Plan. December 2019. Version_3 NWB.
- Agnico Eagle. 2019b. 2AM-WTP1826 Technical Comment Responses Whale Tail Pit Expansion Project. Submitted to Nunavut Water Board. 7 October 2019.
- Azimuth Consulting Group. 2018. Core Receiving Environment Monitoring Program (CREMP): 2015 Plan Update – Whale Tail Pit Addendum
- Golder (Golder Associates Ltd.). 2018. Mine Site and Downstream Receiving Water Quality Predictions. Ref No. 1789310-237-RPT-Rev0. November 2018.NIRB (Nunavut Impact Review Board). 2018. NIRB Project Certificate No. 008. March 2018
- NWB (Nunavut Water Board). 2018. Water Licence No. 2AM-WTP1826 Part E Item 9.
- Okane (Okane Consultants). 2019a. Whale Tail Project – Thermal Modelling of the Whale Tail and IVR WRSFs Rev 0. Prepared for Agnico Eagle Mines Ltd. May 24, 2019.
- Okane. 2019b. Whale Tail Mine WRSF Instrumentation Design – Conceptual Drawings Rev B. Prepared for Agnico Eagle Mines Ltd. October 2, 2019



NUNAVUT WATER BOARD

WATER LICENCE NO: 2AM-WTP2043

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Licence No. 2AM-WTP2043

Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

AGNICO EAGLE MINES LIMITED

(Licensee)

145, KING STREET EAST, SUITE 400, TORONTO, ONTARIO M5C 2Y7

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or deposit waste for a period subject to restrictions and conditions contained within this Licence:

Licence Number/Type:	2AM-WTP2043 / Type "A"
Water Management Area:	THELON, QUOICH & BACK WATERSHEDS (5, 9 & 31)
Location:	WHALE TAIL PIT MINE AND HAUL ROAD KIVALLIQ REGION, NUNAVUT
Purpose:	WATER USE AND DEPOSIT OF WASTE
Description:	MINING UNDERTAKING
Quantity of Water not to be Exceeded:	up to 700,859 CUBIC METRES ANNUALLY DURING CONSTRUCTION AND OPERATION AND up to 14,855,606 CUBIC METRES ANNUALLY DURING CLOSURE CLOSURE AS PER PART E
Date of Issuance:	MAY 1, 2020
Expiry of Licence:	December 31, 2043

This Licence issued (**Motion Number TBD**) and recorded at Gjoa Haven, Nunavut includes and is subject to the annexed conditions.

**Lootie Toomasie
Nunavut Water Board
Chair**

**APPROVED
BY:**

**Dan Vandal
Minister of Northern Affairs**

**DATE LICENCE
APPROVED:**



PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. SCOPE

- a This Licence authorizes the Licensee to the use of Waters and deposit of Wastes in support of a Mining Undertaking, at the Project as outlined in the Type “A” Water Licence Application (Application) submitted to the Nunavut Water Board (NWB or Board) on July 8, 2016 and the Amendment Application submitted May 16, 2019 and as reviewed throughout the regulatory process.

The Licensee may conduct mining and associated activities at the Project in the Kivalliq Region of Nunavut at the following project extents:

Project Extents	Latitude	Longitude
Whale Tail Haul Road	65° 04' 53.3'' N	96° 01' 00.8'' W
	65° 23' 49.7'' N	96° 40' 35.8'' W
Project Area	65° 25' 22.2564'' N	96° 46' 07.5868'' W
	65° 25' 09.3792'' N	96° 35' 32.0875'' W
	65° 21' 10.5036'' N	96° 36' 56.2353'' W
	65° 21' 26.3220'' N	96° 46' 33.9176'' W
Whale Tail Pit Camp	65° 24' 36'' N	96° 41' 41'' W

In general, the scope of the activities, works and Undertakings authorized in accordance with the terms and conditions of the Licence are as follows:

1. Certain activities previously included in the scope of the former 2BB-MEA 1828 as follows:
 - Underground development and exploration drilling (including the portal, ramp and ventilation raises);
 - operation of stormwater management pond (A-P5) (to be converted into GSP-1).
2. Mining including extraction of overburden, waste rock and ore via Open Pits and Underground mine facilities;
3. Withdrawal and use of water for the Project from Nemo Lake, Mammoth Lake, A53, Whale Tail South, Lake D1, ponds and lakes proximal to drilling sites and Whale Tail Haul Road and other lakes listed in the Application;
4. Withdrawal and use of water for the Project for Construction, Operations, camp, mining, associated activities, dust suppression and domestic purposes;
5. Withdrawal and use of water
6. for the Project for Closure, camp, associated activities, dust suppression, domestic purposes and re-flooding; Dewatering of Whale Tail Lake North Basin, Lake A53 and other water bodies as described in the Application;
7. Quarrying of materials;



Nunavut Water Board | Water Licence No: 2AM-WTP2043

8. Operation of a camp at the Project site;
9. Construction and operation of the Whale Tail Haul Road and site roads, including associated water crossings and bridges;
10. Construction and operation of the Waste Rock Storage Facilities and Ore Stockpiles;
11. Operation of satellite mine site facilities including bulk fuel storage, shops, offices warehouse and camp;
12. Controlled discharges of Effluent during Construction, Operations and Closure;



13. Set-up and operation of diesel fired equipment including the Waste Incinerator or approved equipment;
14. Set-up and operation of composting facilities;
15. Construction and operation of emulsion facilities, which may include emulsion storage facilities or Emulsion Plants;
16. Operation of the Attenuation Ponds;
17. Management and disposal of Wastes associated with the Whale Tail satellite deposit including: Waste Rock Storage Facility(s), landfill, landfarm, incinerator, composter, ore stockpiles, Groundwater Storage Ponds, Water Treatment Plants, Attenuation Ponds and other waste management and disposal infrastructure as described in the Application;
18. Handling and storage of petroleum products and hazardous materials including explosives and other reagents;
19. Construction and operation of Contact and Non-Contact Water management systems;
20. Construction and Operation of Whale Tail site water management facilities including: Sewage Treatment Plant, Operational Water Treatment Plant, Saline Water Treatment Plant, Whale Tail Dike, Mammoth Dike, Waste Rock Storage Facility Dike, Northwest Dike, Mammoth Channel Culvert, Attenuation Ponds, and Whale Tail Diversion Channel; Waste Rock Storage Facility water collection systems, IVR Diversion, Groundwater Storage Ponds, dikes;
21. Re-flooding of Open Pits and Underground following development;
22. Planning for, and carrying out Adaptive Management actions (including all potential activities and facilities described in the Adaptive Management Plan, as approved);
23. Planning for, and carrying out progressive Reclamation, Closure and Abandonment of on-site facilities and infrastructure.

[Note: Scope has been further revised to reduce repetition, ensure it is inclusive of all Project activities, and to provide further clarity.]

- b. This Licence is issued subject to conditions contained herein with respect to the use of Waters and the deposit of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or the existing Regulations are amended by the Governor in Council under the Act, this Licence shall be deemed to be subject to such requirements.

[Note: Should this wording to be clarified to explain what is meant by "new Regulations"? It is Agnico Eagle's understanding that this clause is intended to apply to amendments to the Nunavut Waters and Nunavut Surface Rights Tribunal Act, Nunavut Waters Regulations and any new or further regulations pursuant to the Nunavut Waters and Nunavut Rights Tribunal Act. The Board may also give consideration to reference to the Nunavut Agreement in this section, as the Board's authority derives from the Nunavut Agreement.]



- c. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with all applicable legislation.

2. DEFINITIONS

- a. The Licensee shall refer to Schedule A for definitions of terms used in this Licence.

3. ENFORCEMENT



- a. Failure to comply with this Licence may be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*.
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*.
- c. For the purpose of enforcing this Licence and with respect to the use of Waters and deposit of Waste by the Licensee, Inspectors appointed under the *Act* hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable laws.

PART B: GENERAL CONDITIONS

1. The amount of Water use fees shall be determined and payment of those fees shall be made in accordance with section 12 of the *Regulations*.
2. The Licensee shall file an Annual Report with the Board no later than March 31st in the year following the calendar year being reported. The Annual Report shall be developed in accordance with [Schedule B](#).
3. The Licensee shall retain and have a copy of this Licence available at the site of operations at all times.
4. Any communication with respect to this Licence shall be made in writing to the attention of:

Manager of Licensing, Nunavut Water Board
P. O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca

5. Any notice made to an Inspector shall be made in writing to the attention of:

Water Resources Officer
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445

6. The Licensee shall submit one (1) electronic copy of all reports, studies, and plans to the Board unless otherwise requested by the Board. Unless otherwise directed by the Board, reports or studies submitted to the Board by the Licensee shall include an executive summary



in English, Inuktitut, and French.

7. This Licence is assignable as provided in Section 44 of the *Act*.
8. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.
9. Other than changes associated with Adaptive Management, the Licensee shall notify the Board of any changes in operating plans or conditions associated with this Project at least sixty (60) days prior to any such change.

[Note: This section refers to "operating plans or conditions" but Agnico Eagle's understanding is that this is intended to refer to Project phases. For example, the Board requires 60 days notice prior to moving from Operations to Closure phase. This wording is not intended to supersede other notice timelines specified in the Licence that may be less than 60 days. Agnico Eagle requests the Board give consideration to revisions to enhance clarity.]

10. The Licensee shall post signs in the appropriate areas to inform the public of the location of the Water Supply Facilities and the Waste Disposal Facilities. All signs must be in English, Inuktitut and French and shall be located and maintained to the satisfaction of an Inspector.
11. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written Board approval and direction. The Board may request that the Licensee alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.

[Note: Agnico Eagle has revised and moved the proposed "deemed approval" clause to Item 15 below. Response to ECCC comments are included in the note below Item 15.]

12. Unless otherwise directed by the Board in writing, if a Plan is not acceptable to the Board, the Licensee shall provide a revised version to the Board for review addressing the Board's specified deficiencies within thirty (30) days of notification by the Board which clearly outlines the revisions to the Plan. The Board shall issue a final approval decision within fifteen (15) days of receipt of the revised version of the Plan.

[Note: Currently, Plans may be subject to multiple intervenor comment periods which leads to very extended timelines and delays in final Board approval of Plans. Respectfully, there is no certainty as to timelines for review and approval of revised Plans which means that the most up to date Plans are delayed in implementation at site. This is not consistent with best management practices and creates significant practical challenges for the License and inspectors.]

To address this issue and to provide procedural clarity to all parties, Agnico Eagle suggests that further review by Intervenors should not be required following submission of the revised plan (where required by the Board), as in those situations Intervenors will have previously



had an opportunity to provide comments to the Board and identify any potential deficiencies. Once the Board has reviewed Intervenor comments and decided what items the Licencee will be directed to address, it is for the Board alone to determine whether the Board's request has been fulfilled. The suggested timing would provide the Board with a defined period to review the changes in the revised Plan and confirm the Board-directed changes have been made, and would support planning and best management practices at site.]

13. The Licensee shall implement the following Plans also required under the Type “A” Water Licence 2AM-MEA2033 as approved (or accepted) by the Board. Any future updates to these Plans approved (or accepted) under the Type “A” Water Licence 2AM-MEA2033 or this Licence shall be applicable to both 2AM-MEA2033 and 2AM-WTP2043 Licences. Any changes to the plans deemed significant by the Board must be approved by the Board.
- a. Aquatic Effects Monitoring Program (AEMP), Version 3 (November 2015)*¹;
 - b. Ammonia Management Plan - Whale Tail Pit Addendum, Version 2 (April 2019)*;
 - c. Core Receiving Environment Monitoring Program (CREMP), Version WT (May 2018)^;
 - d. Mercury Monitoring Plan (March 2019) [*Note this Plan appears as Appendix A to the CREMP*];
 - e. Dewatering Dikes: Operation, Maintenance and Surveillance Manual, Version 2 (March 2019)*;
 - f. Groundwater Monitoring Plan, Version 10 (July 2019);
 - g. Hazardous Materials Management Plan: Meadowbank Mine Site, Whale Tail Pit Site, Baker Lake Facilities, Version WT 4 (March 2019)*;
 - h. Quality Assurance/Quality Control (QA/QC) Plan, Version 5 (April 2019)*;
 - i. Operational ARD/ML Testing and Sampling Plan, Version 5 (April 2019)^;

¹ The Plans identified as “Version WT” are addendums^ to existing Meadowbank Mine Project’s plans; otherwise the most up-to-date Meadowbank plan is applicable*



- j. Spill Contingency Plan, Version 7 (April 2019)^.
14. The Licensee shall, for all Plans submitted under this Licence, implement the Plans 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 by the Board and must be approved by the Board.
- a. Whale Tail Sewage Treatment Plant Operation and Maintenance Plan, Version 3 (May 2019)*;
 - b. Meadowbank and Whale Tail Bulk Fuel Storage Facilities: Environmental Performance Monitoring Plan, Version 4, (March 2019);
 - c. Whale Tail Pit Interim Closure and Reclamation Plan, Version 3 (December 2019)^;
 - d. Whale Tail Pit Landfill and Waste Management Plan, Version 2 (April 2019);
 - e. Whale Tail Pit Landfarm Design and Management Plan, Version 1 (April 2019);
 - f. Whale Tail Pit Incinerator and Composter Waste Management Plan, Version 1 (April 2019);
 - g. Whale Tail Pit Haul Road Management Plan, Version 2 (March 2019);
 - h. Whale Tail Pit Waste Rock Management Plan, Version 5 (May 2019);
 - i. Whale Tail Pit Water Management Plan, Version 4 (May 2019);
 - j. Whale Tail Pit Water Quality and Flow Monitoring Plan, Version 6 (March 2019);
 - k. Whale Tail Pit Water Quality Monitoring and Management Plan for Dike Construction and Dewatering, Version 2 (May 2019);
 - l. Adaptive Management Plan (January 2020);
 - m. CREMP (April 2019);
 - n. Thermal Monitoring Plan, Version 2 (May 2019); and
 - o. Emergency Response Plan, Version 1 (May 2019);
15. Within sixty (60) days of approval of this Licence by the Minister, the Licensee shall submit to the Board, for approval in writing, the following updated management plans. The updates are to take into account commitments made with respect to submissions received during the technical review of the Application, where applicable.

Unless the Board otherwise advises, Plans and amendments submitted under this Licence shall be deemed to be approved by the Board within fifteen (15) days of submission by the Licensee. For greater clarity, an approved Plan remains in force until such time as it is replaced by a new approved Plan.

- a. Whale Tail Pit Waste Rock Management Plan, Version 5 (May 2019);
 - b. Whale Tail Pit Water Management Plan, Version 4 (May 2019);
 - c. Whale Tail Pit Interim Closure and Reclamation Plan, Version 3 (December 2019);
 - d. Spill Contingency Plan, Version 7 (April 2019);
 - e. Hazardous Materials Management Plan: Meadowbank Mine Site, Whale Tail Pit Site, Baker Lake Facilities, Version 4 (May 2019);
 - f. Emergency Response Plan, Version 1 (May 2019)^.
16. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a



Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.

17. 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 or a replacement Plan or Plans when and as the need arises, complete with a revision list detailing where significant content changes are made.

[Note: Per ECCC comments, Agnico Eagle agrees that a revision list would be useful.]

Per KivIA comments, Agnico Eagle disagrees that the licence should restrict modification of plans to only once annually. Plans should be revised as needed to reflect site conditions and operational requirements.]

18. The Licensee may consolidate and streamline one or more approved Plans to support efficient site management and operations and communication with Inspectors and regulators.

[Note: For clarity, Agnico Eagle is not proposing to reduce any obligations under the Plans. Instead this approach would permit flexibility to combine related requirements and Plans under single plans. Fewer Plans would be easier for the proponent, KIA and CIRNAC Inspectors and the Board to administer and would not reduce protection of Nunavut waters in any way. Agnico Eagle has discussed this approach with KivIA and CIRNAC and based on those discussions it appears there is general consensus this approach would be helpful.]

19. The expiry of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirements.

[Note: Per KivIA and ECCC comments on Item 19, Agnico Eagle suggests including this wording back in the Licence. For clarity, Agnico Eagle does not intend to permit the Licence to expire.]

20. The cancellation of this Licence relieves the Licensee from all obligations imposed by the Licence.

[Note: Per KivIA and ECCC comments on Part B, Item 19, Agnico Eagle suggests that this clarification would be helpful. As an example, at the end of the post-closure phase, Agnico Eagle's understanding is that the Licence would eventually be cancelled and would cease to be an obligation for the Licensee. Agnico Eagle's understanding that it is not the Board's intention to create perpetual obligations under the License for Licensees, and so is of the view this revised clause would enhance clarity on that point.]



21. The Schedules attached to this Licence provide details regarding the requirements associated with specific items in the main body of the Licence and are included in the Schedule to provide greater clarity and as an aid to interpretation for the Licensee. If the Board subsequently determines that an item in any of the Schedules requires revision in order to better reflect the intent and objectives of the Licence, the Board may at its discretion, and upon consulting and providing written notice to the Licensee and interested parties, revise the Schedule accordingly. Unless the Board directs otherwise, such revision may not necessarily be considered as an “Amendment” to the Licence.
22. Unless otherwise stated, references in the Licence to any specific legislation, policy, guideline or other regulatory requirement are deemed to refer to the regulatory requirement as may be amended or as may be expressly replaced by successor legislation, policy, guidelines or other regulatory requirements after the Licence is approved by the Minister.

PART C: CONDITIONS APPLYING TO SECURITY

1. The Licensee shall, within thirty (30) days following the approval of this Licence by the Minister, furnish and maintain security with the Minister in the amount for a total of \$25,331,754. As set out in the *Whale Tail Security Management Agreement*, the amount secured under this Part constitutes 50% of the total global security amount of \$50,663,508 that is required to reclaim the Undertaking and reflects that the other 50% of the global security amount will be held outside the Licence by the Kivalliq Inuit Organization, in accordance with the terms and conditions of the *Whale Tail Security Management Agreement*.
2. The security held under Part C, Item 1 shall be in a form that is satisfactory to the Minister and consistent with the *Act* and *Regulations*.
3. The Licensee shall, within ten (10) days after furnishing security with the Minister, provide evidence to the NWB and the Kivalliq Inuit Association, that the security has been received by the Minister, indicating the amount, form, nature and conditions of the security.
4. The Licensee shall, within ten (10) days after furnishing security with the Kivalliq Inuit Association, provide evidence to the NWB and to the Minister, that the security has been received by the Kivalliq Inuit Association, indicating the amount, form, nature and conditions of the security.
5. The Licensee shall provide the Board with at least ninety (90) days written notice prior to any termination by the Licensee of the *Whale Tail Security Management Agreement*, or any material change to the *Whale Tail Security Management Agreement* that may affect the amount of security held under Part C, Item 1.

[Note: Agnico Eagle notes that while it could give prior written notice to the Board of its own intention to terminate the Whale Tail Security Management Agreement, it is not possible for Agnico Eagle to give prior notice of CIRNAC or KivIA's intentions with respect to the Whale Tail Security Management Agreement. The License should not be written in a way that could expose the Licensee to enforcement actions based on the actions of third parties]



that the Licensee does not control.]

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).

7. The Licensee shall, within twelve (12) months following the commencement of Operations and when the Licensee files a Final Reclamation and Closure Plan as required under the Licence, submit to the Board for review an updated reclamation cost estimate, using the RECLAIM Reclamation Cost Estimating Model (Version 7.0 or the most current version in use at the time the updated reclamation cost estimate is submitted to the Board).
8. Upon the Board receiving notice under Part C, Items 5 or 6, or upon receiving an updated reclamation cost estimate as required under Part C, Item 7, the Board may, on its own initiative, or upon application by the Licensee, the Minister and/or the Kivalliq Inuit Association, conduct a periodic review of the outstanding reclamation liability associated with the Undertaking and may, as the Board considers appropriate, amend the amount of security held under Part C, Item 1. If the Nunavut Water Board determines it to be necessary or upon the request of the Proponent, the Minister and/or the KIA, the Nunavut Water Board may issue further direction with respect to the process for the Board's conduct of periodic reviews of security and associated amendments to the amount of security to be furnished and maintained under the Licence.
9. The Licensee may, at any time, submit to the Board for consideration and approval, a request to change the amount of security outlined in Part C, Item 1. The submission shall include supporting evidence to justify the request, and the Minister and the Kivalliq Inuit Association will be consulted by the Board during the Board's consideration of this request. Such requests may take into account the Water Monitoring Reduction Framework attached as Schedule C.

[Note: Under the Nunavut Waters Regulations and the Act the Board is to make the final decision on the determination of security, but Agnico Eagle agrees that CIRNAC and the KivIA should be consulted prior to making such determinations.]

With respect to Schedule C, see Agnico Eagle's note at Part C, Item 12 below.

It is also noted that the request to change the security should not be limited to once annually - security should be adjusted as need arises to reflect current site conditions,]

10. If the Board determines it to be necessary, or upon the request of Licensee, the Minister and/or the Kivalliq Inuit Association, the Board may issue further directions under this Part with respect to the process for amending the amount of security to be furnished and maintained under the Licence.
11. The security referred to in Part C, Item 1 shall be maintained until such time as the Minister is satisfied that the Licensee has complied with all provisions of the approved Final Closure and Reclamation Plan and as it is fully or in part refunded by the Minister pursuant to Section 76(5) of the Act, subject to the following. Consideration will be given to progressive release of security by the Minister as activities included in the approved Interim Closure and



Reclamation Plan are completed. This clause shall survive the expiry of the Licence or renewals thereof and until the Minister is satisfied that the Licensee has complied with all provisions of the approved Final Closure and Reclamation Plan.

[Note: Per their letter of October 11, 2017 on the Water Monitoring Reduction Framework, KivIA confirmed: "Reduction in security associated with the Project following a reduction in monitoring intensity (parameters, frequency, stations) is an acceptable approach if supported by monitoring data. Reductions in monitoring intensity following AEM's proposed rationale and our recommendations would reflect an increasingly stable and acceptable (as per the Project Certificate) post-closure aquatic environment as well as a decrease in outstanding environmental liabilities associated with the Project. We therefore agree that a staged reduction in security held by the federal government and KivIA (as agreed to in the Security Management Agreement and to the satisfaction of the NWB) commensurate with the measured decrease in project liabilities is appropriate."]

Similarly, per their letter of October 17, 2017 on the Water Quality Monitoring Reduction Framework, CIRNAC confirmed: "INAC agrees that a reduction in the amount of security being held associated with the Project can and should be decreased if appropriate reports, studies and monitoring data indicate that the site is becoming chemically and physically stable thereby also indicating that a reduction in water quality monitoring can be undertaken".]

12. The Board may approve modifications to the Monitoring Program for all phases of mining as set out in Schedule I without amendment or a public hearing. Requests for changes to the Monitoring Program should be forwarded to the Board in writing and shall include justification for the change. Such requests may take into consideration the Water Monitoring Reduction Framework attached as Schedule C.

[Note: Agnico Eagle will update Schedule C memo and submit it to the Board 60 days after the issuance of the amended Licence. The update will take into consideration comments received from CIRNAC (October 17, 2017), ECCC (October 17, 2017, and KivIA (October 11, 2017). Per Part B, Item 21 of the Licence, the Board could revise Schedule C to reflect the updated Schedule C memo without need for "Amendment" to the License. Per ECCC's suggestion that this clause should be moved to a different Part of the Licence, Agnico Eagle is supportive of moving this clause to a different Part in the Licence as the Board deems appropriate.]

PART D: CONDITIONS APPLYING TO CONSTRUCTION AND OPERATION

1. The Licensee shall submit to the Board for review, at least thirty (30) days prior to Construction, final design and Construction drawings accompanied, with a detailed report, for the following:
 - a. Water Intake and causeway,
 - b. Berms, jetties;
 - c. Wastewater Treatment Plant,
 - d. Sewage Treatment Plant,
 - e. Saline Treatment Plant
 - f. Discharge Diffuser,
 - g. Overburden stockpiles,



- h. Landfill; and
 - i. Bulk Fuel Storage Facility.
- 2. The Licensee shall submit to the Board for review, at least sixty (60) days prior to Construction, final design and Construction drawings accompanied, with a detailed report, for the following:
 - a. Dikes; and
 - b. Waste Rock Storage Facility.

[Note: Agnico Eagle notes that the Meliadine Type A Water Licence refers to a thirty (30) day review period, and so there is precedent for this approach. Accordingly, a 30 day period as described should be sufficient and would support construction proceeding on time within the limited windows available in the Arctic environment. That being said, given the ECCC comments while the majority of facilities should require a 30 day review, Agnico Eagle suggests that a 60 day review period could apply to Dikes and Waste Rock Storage Facility only]

- 3. The detailed report(s) referred to in Part D, Items 1 and 2 shall include:



- a. Design rationale, requirements, criteria, parameters, standards analysis, methods, assumptions and limitations;
 - b. Site specific data and analysis to support the design and management decisions;
 - c. Geochemical analysis of Waste Rock and fill, demonstrating the Acid Rock Drainage and Metal Leaching characteristics of these materials;
 - d. Construction methods and procedures outlining how infrastructure will be put in place, including Quality Assurance and Quality Control measures and equipment to be used;
 - e. Technical specifications for sedimentation, erosion control and bank stabilization measures, including proposed materials, location and extent, place methods and quantities required;
 - f. Timetable for submission, including date of Construction and proposed date of commissioning of infrastructure; and
 - g. Where applicable, be signed and sealed by the appropriately qualified Engineer.
4. The Licensee shall submit to the Board for review, at least twenty (20) days prior to Construction, final design and Construction drawings accompanied, with a detailed report, for the:
- a. Whale Tail WRSF water collection system;
 - b. IVR WRSF water collection system;
 - c. IVR diversion;
 - d. Attenuation pond infrastructure;
 - e. IVR pit water management infrastructure;
 - f. Dewatering A47;
 - g. Dewatering A49;
 - h. Dewatering A53,
 - i. Dewatering A-P21;
 - j. Dewatering A50;
 - k. Dewatering A51;
 - l. Dewatering A52;
 - m. Whale Tail South Basin Diffuser;
 - n. IVR Dike and spillway;
 - o. Pad H Extension.

The detailed report shall include items referred to in Part D Item 3.

[Note: Agnico Eagle presented detailed rationale for the 20 day review period during the Technical Meeting and provided to the Board with the listed items on December 20, 2019.]

5. The Whale Tail Waste Rock Storage Facility expansion and the IVR Waste Rock Storage Facility construction plans are deemed approved upon issuance of this Licence.

[Note: This timing provides notice that Agnico Eagle intends to commence construction immediately upon issuance of the Licence, and as agreed during the Technical Meeting Agnico Eagle provided these supporting materials to the intervenors and the Board in December 2019. See response to CIRNAC FC3(b) for further rationale.]

6. The Licensee shall use Waste rock and fill material for Construction only from approved



sources that have been demonstrated, by appropriate geochemical analyses, to not produce Acid Rock Drainage and to be Non-Metal Leaching, and free of contaminants.

7. During dike construction, the Licensee shall implement the Water Quality Monitoring and Management Plan for Dike Construction and Dewatering and associated action plans outlined if:
 - a. Total Suspended Solids (TSS) levels in a single sample exceed the Short Term Maximum TSS concentration defined in Part D Item 8;
 - b. The 7-day moving average TSS concentration exceeds the Maximum Monthly Mean TSS concentration defined in Part D Item 8.
8. The Licensee shall compare TSS levels as required in Part D Item 5 to the following Maximum Monthly Mean and Short Term Maximum concentrations:

Parameter	Maximum Monthly Mean (mg/L)	Short Term Maximum (mg/L)
TSS in areas where there is spawning habitat and at times when eggs or larvae are expected to be present	6	25
TSS in all other areas and at times when eggs/larvae are not present	15	50
TSS in impounded areas at all times in all areas.	15	50



9. Unless otherwise approved by the Board, Effluent from dewatering activities shall be monitored at Monitoring Program Stations ST- DD-1 to ST-DD-TBD and not exceed the following Effluent quality limits:

Parameter	Maximum Monthly Mean	Short Term Maximum
Total Suspended Solids (TSS)	15.0 mg/L	30 mg/L

[Note: Agnico Eagle agrees with ECCC that TSS should be retained as the regulated parameter for dewatering activities directed to the receiving environment and retaining turbidity and total aluminum as monitored parameters. Turbidity and aluminum are closely linked to TSS so there is redundancy in regulating all of these parameters. For pH, Agnico Eagle recommends it is retained as a monitored parameter because dewatering to the receiving environment represents the transfer of water that would be considered a 'like for like' water transfer; that is, pH in the dewatering water is expected to be similar to that in the Receiving Environment (any variability in pH between the two areas will be within the natural range of variability of pH reported in the receiving environment.)]

10. Effluent from dewatering of A-38, A-46, A-47, A-49, A-50, A-51, A-52, A-53, A-P21, A-P10, A-P67, A-P68 will be discharged to Whale Tail Lake South Basin, if discharge water quality criteria are met.
11. All Effluent from Sewage Treatment Plant shall be directed to the Whale Tail Attenuation Pond.
12. The Licensee shall monitor the Attenuation Ponds water quality in accordance with the Licence criteria. Effluent from the Attenuation Ponds may be discharged to Mammoth Lake and/or Whale Tail South Basin via diffuser(s), if Effluent discharge criteria are met.
13. The Licensee shall implement sediment and erosion control measures prior to and during Construction, and Operations where necessary, to prevent entry of sediment into Water.
14. The Licensee shall inspect daily, all Construction activities for signs of erosion that may affect surface water flowing to Nemo Lake, Mammoth Lake and Whale Tail Lake.
15. Unless otherwise approved by the Board, all surface runoff during the Construction of any facilities, where flow may directly or indirectly enter a Water body, shall be sampled Weekly and not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids (TSS)	50.0	100.0

16. The Licensee shall, during the Construction of all engineered structures, provide the required supervision and field checks by an appropriately qualified and experienced Engineer in such a manner that the Project specifications can be enforced and, where required, the quality



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control measures can be followed. The Licensee shall maintain all Construction records of all Engineered Structures to be made available at the request of the Board and/or an Inspector.

17. The Licensee shall submit to the Board for review, within ninety (90) days of completion of each facility designed to contain, withhold, divert or retain Waters or Wastes during the construction phase, a Construction Summary Report prepared by a qualified Engineer(s) in accordance with [Schedule D, Item 1](#).



18. The Licensee shall submit to the Board for review, within ninety (90) days of completion of the Whale Tail Haul Road, a Construction Summary Report prepared by a qualified Engineer(s) in accordance with [Schedule D, Item 1](#).
19. The Licensee shall prevent any chemicals, petroleum products, fuel or wastes associated with the Undertaking from entering any Water body except in accordance with this Licence.

[Note: As the overall purpose of the Licence is to set the conditions by which the Licensee may use water and manage waste in a manner that is protective of Nunavut waters, Agnico Eagle is of the view that the suggested wording provides clarity.]

20. The Licensee shall minimize disturbance to terrain, permafrost and drainage during movement of contractor's equipment and personnel around the site during construction activities.
21. The Licensee shall not store material on the surface of frozen streams or lakes except what is for immediate use.
22. The Licensee shall locate equipment storage areas on gravel, sand or other durable land, a distance of at least thirty one (31) metres above the ordinary High Water Mark of any water body in order to minimize impacts on surface drainage and water quality.
23. The Licensee shall undertake appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's operations.
24. The Licensee shall limit any in-stream activity to low Water periods. In-stream activity is prohibited during fish migration.
25. The Licensee shall, for the purposes of bridge construction, ensure that all activities remain outside of the natural channel width by the placement of abutments, footings or armouring above the ordinary High Water Mark so that there is no restriction to the natural channel processes.
26. The Licensee shall operate the Bulk Fuel Storage Facility in accordance with the following applicable legislation and industry standards:
 - a. Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, 2003 (Updated in 2013) or most recent; CCME; and
 - b. National Fire Code, 2010 or most recent.

[Note: To avoid potential for confusion, the specific applicable legislation and industry standards should be listed.]

27. The Licensee shall apply the principles of adaptive management in construction and operations. For greater clarity, Adaptive Management strategy actions identified in an



approved Adaptive Management Plan may be implemented by the Licensee upon notice to the Board and do not require Modification or Amendment to this Licence prior to implementation.

New Adaptive Management Actions may be implemented by the Licensee upon 21 days written notice to the Board and do not require Modification or Amendment to this Licence prior to implementation.

Notice to the Board must include:

- A description of the rationale for the action(s);
- An evaluation of whether the action may change overall reclamation liability, and if applicable an estimate of any required reduction or increase to security;
- Confirmation that the primary purpose for the action(s) is to prevent, stabilize, or reverse an adverse change in environmental conditions or to otherwise protect the Receiving Environment;
- A description and location of any facilities and or works to be constructed;
- A description of any new monitoring required, including sampling locations, parameters measured and frequency of sampling;
- A proposed schedule for construction;
- Drawings of Engineered Structures stamped by a Professional Engineer (where applicable); and
- If required, any proposed sediment and erosion control measures.

PART E: CONDITIONS APPLYING TO WATER USE AND MANAGEMENT

1. Unless otherwise approved by the Board in writing, the Licensee shall obtain fresh Water from:
 - a. Nemo Lake;
 - b. Mammoth Lake;
 - c. A53;
 - d. Ponds/small lakes proximal to Whale Tail Haul Road; and
 - e. Other lakes listed as per Application,

for Construction and Operations, domestic camp use, dust suppression, drilling, dewatering, and associated use and the use of water for all purposes shall not exceed a total of 700,859 m³ per year from the Licence approval date.

For illustrative purposes only, the Licensee anticipates utilizing the following volumes, from the following locations, for the following uses:

Purpose	Volume (Annual)	Source
Consumption (domestic camp use, construction, operations, dust	209,544 m ³	Nemo Lake at Monitoring Station ST-WT-5 using the Nemo Lake Water Intake



suppression)		
Consumption (emulsion plant)	2,500 m ³	Mammoth Lake
Dewatering	153,735 m ³	A53 and other lakes listed as per Application
Drilling	109,135 m ³	In total from all sources (this includes 25,037 m ³ from Nemo Lake)
Dust suppression around haul road	109,135 m ³	Ponds/small lakes proximal to Haul Road
	Subtotal: 584,049 m ³	
Contingency (20%)	116,810 m ³	Above described sources
	Total: 700,859 m ³	

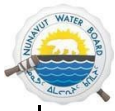
2. Unless otherwise approved by the Board in writing, the Licensee shall obtain fresh Water from:

- a. Whale Tail South;
- b. Lake D1; and/or
- c. Nemo Lake,

for Closure and Post-Closure, and associated use or as and the use of water for all purposes shall not exceed a total of 2,475,934 m³ per year from the Licence approval date.

For illustrative purposes only, the Licencee anticipates utilizing the following volumes, from the following locations, for the following uses:

Purpose	Volume (Annual)	Source
Re-flooding	10,655,000 m ³	Whale Tail South
Re-flooding	1,710,000 m ³	Lake D1
Consumption	14,672 m ³	Nemo Lake
Subtotal	12,379,672 m ³	
Contingency (20%)	2,475,934 m ³	All



Total	14,855,606 m ³	
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3. The Licensee shall dewater lakes A-49, A-P67, A-47, A-46, A-P68, A-P21, A-50, A-51, A-52, A-P38, A-P10 as required for Construction and Operations, or as otherwise approved by the Board in writing.

As per Part E Item 2 above, the Licensee shall obtain fresh Water from Whale Tail Lake South Basin at Monitoring Station ST-WT-8 for re-flooding of Open Pits and associated use, or as otherwise approved by the Board in writing.

[Note: the wording should be removed as it repeats information already summarized in Item 2 above.]

5. The Licensee shall equip all Water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.
6. The Licensee shall submit an updated *Water Management Plan* on an annual basis to the Board for review following the commencement of Operations. The Plan must include an updated Water Balance. The Water Management Plan shall include an action plan to be implemented if predicted re-flooded pit water quality indicates that treatment is necessary.
7. The Licensee shall submit a Water Quality Model for pit re-flooding and for WRSF contact water mixing into Mammoth Lake post-Closure as part of the Water Management Plan which shall be re-calibrated as necessary and updated annually following commencement of Operations. The results and implications of the predictive model shall be reported to the Board.
8. The Licensee shall, on an annual basis during Closure, compare the predicted water quantity and quality within the pit and lake, to the measured water quantity and quality. Should the difference between the Final Environmental Impact Statement (FEIS) water quantity and quality predictions described in Appendix 6-H of the FEIS, as supplemented by ECCC-T17 Figure (a), (b), (c), and (d) in Technical Comment Responses dated May 29, 2019 and measured values be 20% or greater,



then the cause(s) of the difference(s) shall be identified and the implications of the difference shall be assessed and reported to the Board.

[Note: Per ECCC comment, Agnico Eagle has provided a more specific reference.]

9. The Licensee may include appropriate Site Specific Water Quality Objectives site-specific water quality objectives within the Receiving Environment applicable during construction and operations in the approved Water Quality and Flow Monitoring Plan, which Plan may be further modified by the Licensee and approved by the Board from time to time.
10. The Licensee shall not breach dikes until the water quality in the re-flooded area meets *CCME Water Quality Guidelines for the Protection of Aquatic Life*, FEIS predictions described in Appendix 6-H of the FEIS, as supplemented by ECCC-T17 Figure (a), (b), (c), and (d) in Technical Comment Responses dated May 29, 2019, or appropriate site-specific water quality objectives. If water quality parameters are above *CCME Guidelines* or FEIS predictions, unless otherwise approved by the Board, a site-specific risk assessment must be conducted to identify Site Specific Water Quality Objectives for the site that are protective of the aquatic environment. Where they are required, Site Specific Water Quality Objectives shall be incorporated in the approved *Final Reclamation and Closure Plan*.

[Note: Per ECCC comment, Agnico Eagle has provided a more specific reference.]

11. The Licensee shall carry out weekly inspections of all water management structures during periods of flow and the records of inspections shall be kept for review upon request of an Inspector. More frequent inspections may be required at the request of an Inspector. This information is to be included in the *Water Management Plan*.
12. The Licensee shall implement measures to minimize the generation and deposition of dust and/or sediment into Water arising from road use.
13. The Licensee shall provide at least thirty (30) days' notice to the NWB and Inspector prior to the commencement of re-flooding of Open Pit.

PART F: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT

1. The Licensee shall direct all Contact Water from the water collection ponds to Attenuation Ponds, or as otherwise approved by the Board in writing.
2. The Licensee shall direct all Sewage to the Sewage Treatment Plant for treatment prior to its discharge to Attenuation Ponds, or as otherwise approved by the Board in writing.
3. The Licensee shall dispose of all sludge removed from the Sewage Treatment Plant and Wastewater Treatment Plant in the Waste Rock Storage Facility(s) or the Tailings Storage Facility or in a landfarm as a nutrient amendment in accordance with the Sewage Treatment Plant Operation and Maintenance Plan.



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4. The Discharge of Effluent from the Whale Tail Attenuation Pond at Monitoring Program Station ST-WT-2 shall be directed to Mammoth Lake at Monitoring Program Station ST-WT-26 for South Whale Tail Basin, and at Monitoring Program Station TBD for Lake D1 and Lake D5 through the approved diffusers and unless otherwise approved by the Board as part of a Plan shall not exceed the following Effluent quality limits:



Parameter	Unit	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Grab Sample
Conventional Constituents			
pH		6.0 to 9.5	6.0 to 9.5
Total Suspended Solids TSS	mg/L	15	30
Nutrients			
Total Ammonia (NH ₃ -N)	mg-N/L	16	32
Total Phosphorous (P)	mg-P/L	0.3	0.6
Total Metals			
Aluminum (Al)	mg/L	0.5	1.0
Arsenic (As)	mg/L	0.1	0.2
Cadmium (Cd)	mg/L	0.002	0.004
Chromium (Cr)	mg/L	0.02	0.04
Copper (Cu)	mg/L	0.1	0.2
Iron (Fe)	mg/L	1.0	2.0
Lead (Pb)	mg/L	0.05	0.1
Mercury (Hg)	mg/L	0.004	0.008
Nickel (Ni)	mg/L	0.25	0.5
Zinc (Zn)	mg/L	0.1	0.2
Other			
Total Petroleum Hydrocarbons (TPH)	mg/L	3.0	6.0

[Note: ECCC suggested that removal of TDS could be considered if Agnico Eagle presents rationale for the removal of TDS which demonstrates it is not a parameter of concern.

For clarity, Agnico Eagle is proposing to remove TDS as a regulated parameter but would continue to monitor for TDS. ECCC has not identified TDS as a parameter of potential concern (deleterious substance) in Schedule 4 of the MDMER. Further the only mining Type A Water Licences that include TDS as a regulated parameter in Nunavut are the Whale Tail, Meadowbank and Meliadine Type A Water Licences. Therefore, TDS is not considered a parameter of particular concern. Acute toxicity testing of Effluent required by the Licence and the MDMER would ensure that discharges are protective of Nunavut waters, and continuing monitoring of TDS would ensure that any trends of interest are appropriately considered.

It is also noted that several of the parameters listed in Part F, Item 4 include more stringent discharge requirements than ECCC has included in Schedule 4 of the MDMER. The current authorized discharge limits under Schedule 4 of the MDMER are as follows (note cyanide and radium 226 are not relevant to this site):

Deleterious Substance	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Composite Sample	Maximum Authorized Concentration in a Grab Sample
Arsenic	0.50 mg/L	0.75 mg/L	1.00 mg/L



Copper	0.30 mg/L	0.45 mg/L	0.60 mg/L
Cyanide	1.00 mg/L	1.50 mg/L	2.00 mg/L
Lead	0.20 mg/L	0.30 mg/L	0.40 mg/L
Nickel	0.50 mg/L	0.75 mg/L	1.00 mg/L
Zinc	0.50 mg/L	0.75 mg/L	1.00 mg/L
Total Suspended Solids	15.00 mg/L	22.50 mg/L	30.00 mg/L
Radium 226	0.37 Bq/L	0.74 Bq/L	1.11 Bq/L

* NOTE: All concentrations are total values

Therefore, the Licence effluent discharge criteria at Part F, Item 4 would remain stringent overall following the removal of TDS, as compared to the applicable federal regulatory requirements for mine discharge.

For all of these reasons, Agnico Eagle is of the view that TDS should be removed as a regulated parameter.]

- The Discharge of Effluent from a Final Discharge Point at Monitoring Program Stations ST-WT-2, at Monitoring Program Station ST-WT-26 for South Whale Tail Basin, and at Monitoring Station TBD for Lake D1 and Lake D5 shall be demonstrated to be non-Acutely Lethal.

[Note: Revised per ECCC's request to reflect the current MDMER wording and include reference to the test method - see references included in new definition "Acutely Lethal" which wording tracks the current definition of "Acutely Lethal" in the MDMER.]

- Unless otherwise approved by the Board, all water collected prior to discharge from the Non-Contact Water diversions at Monitoring Program Stations ST-WT-7 and ST-WT-13, and Whale Tail Dike Seepage at Monitoring Program Stations ST-WT-17, during Operations shall not exceed the following Effluent quality limits:

Parameter	Unit	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Grab Sample
TSS	mg/L	15	30



7. Unless otherwise approved by the Board, the Discharge of Effluent to land from the Landfarm at Monitoring Station ST-WT-27, from the Whale Tail Bulk Fuel Storage Facility at Monitoring Station ST-WT-12 and from the Secondary Containment Powerhouse Tank ST-WT-16, and shall not exceed the following Effluent quality limits:

Parameter	Unit	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Grab sample
pH		6.0 to 9.5	6.0 to 9.5
Total Arsenic (As)	mg/L	*0.5	1.0
Total Copper (Cu)	mg/L	*0.3	0.6
Total Nickel (Ni)	mg/L	*0.5	1.0
Total Zinc (Zn)	mg/L	*0.5	1.0
Total Suspended Solids (TSS)	mg/L	*15	30
Ammonia	mg/L	6.0	6.0
Benzene	µg/L	370	370
Toluene	µg/L	2	2
Ethylbenzene	µg/L	90	90
Lead	mg/L	*0.2	0.4
Oil and Grease	mg/L	5 and no visible sheen	5 and no visible sheen

* *Metal and Diamond Mining Effluent Regulations (MDMER)*

8. The Licensee shall, under Part F, Item 7, discharge Effluent to a location at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any Water body, in such a manner as to minimize surface erosion to where direct flow into a Water body is not possible and no additional impacts are created, or as otherwise approved by the Board in writing.
9. The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any Water body such that the quality, quantity or flow of Water is not impaired, or as otherwise approved by the Board in writing.
10. All Effluent at Monitoring Stations ST-WT-12 and ST-WT-16 and ST-WT-27 that exceed the Effluent quality limits under Part F, Item 7, shall be transferred to the Attenuation Ponds, or other facility for treatment.
11. The Licensee shall confirm compliance with Effluent quality limits in Part F, Items 4, 5, 6, and 7 prior to Discharge.



- ## **PART G: CONDITIONS APPLYING TO MODIFICATIONS**

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- a. The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. Such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
 - c. Such Modifications are consistent with the applicable terms and conditions of the NIRB Project Certificate No. 008;
 - d. The Board has not, within sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. The Board has not rejected the proposed Modifications.
2. Modifications for which any of the conditions referred to in Part G, Item 1 have not been met can be carried out only with approval from the Board in writing.
3. Applications for modifications shall contain:
 - a. A description of the facilities and/or works to be constructed;
 - b. The proposed location of the structure(s);
 - c. Identification of any potential impacts to the receiving environment;
 - d. A description of any monitoring required, including sampling locations, parameters measured, and frequencies of sampling;
 - e. A proposed schedule for construction;
 - f. Drawings of Engineered Structures stamped by a Professional Engineer; and
 - g. Proposed sediment and erosion control measures.
4. Where a proposed Modification is located outside the Project Footprint, the Licensee must also confirm that the proposed Modification is in conformity with the applicable land use plan and that it is not a significant modification as that term appears in section 88 and subparagraphs 89 of the *Nunavut Planning and Project Assessment Act*. For greater clarity, a Modification located within the Project Footprint is not considered a “significant modification” under the *Nunavut Planning and Project Assessment Act*.

[Note: Per request from KivIA, Agnico Eagle has proposed a definition of Project Footprint.]
5. The Licensee shall provide to the Board, within ninety (90) days of completion of the Modification, as-built plans and drawings of the Modifications referred to in this Part. These plans and drawings shall be stamped by an Engineer (where applicable).

PART H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING

1. The Licensee shall implement the *Emergency Response Plan*, and the *Spill Contingency Plan*, as approved by the Board. The Licensee shall comply with the Plan(s) and any changes deemed significant shall require the submission and subsequent approval of the Board in writing.



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2. The Licensee shall prevent any chemicals, petroleum products or unauthorized Wastes associated with the Project from entering Water.
3. The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.
4. The Licensee shall perform weekly inspections of petroleum products storage and containment facilities, fuel tanks and connectors, for leaks and settlement and shall keep a written log of inspections to be made available to an Inspector upon request. More frequent



inspections may be requested by an Inspector.

5. If the Licensee provides notification under Part J, Item 4, the Licensee shall submit to the Board an Addendum to the *Emergency Response Plan* and the *Spill Contingency Plan*, detailing the changes in operations, personnel, responsibilities, availability of equipment and access to the site for assistance.
6. The Licensee shall keep a copy of the *Emergency Response Plan* and the *Spill Contingency Plan* at each site of operation.
7. The Licensee shall conduct emergency maintenance and servicing on equipment, in designated areas, and shall implement measures to collect motor fluids and other Waste to prevent and contain spills.
8. The Licensee shall, subject to Section 16 of the *Regulations*, report any unauthorized discharges or foreseeable unauthorized discharges of waste in excess of the *Regulations* thresholds set out in the *Nunavut Spill Planning and Reporting Regulations*, and:
 - a. Employ the Spill Contingency Plan;
 - b. Report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130, fax at (number) or by electronic mail and to the Inspector at (867) 975-4295 or by electronic mail;
 - c. Information that is reported in person or by telephone must also be reported in writing to an inspector without delay; and
 - d. For each spill occurrence, submit a detailed report to the Inspector, no later than thirty (30) days after initially reporting the event, which includes the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
9. The Licensee shall, in addition to Part H, Item 8, regardless of the quantity of release of a harmful substance, report to the NWT/NU Spill Line if the release is near or into a Water body.

PART I: CONDITIONS APPLYING TO GENERAL AND AQUATIC EFFECTS MONITORING

1. The Licensee shall comply with the *Aquatic Effects Monitoring Program* (AEMP). The AEMP shall include:
 - a. Comprehensive receiving environment monitoring to identify changes to the aquatic environment associated with mine activities;
 - b. Linkage between monitoring results and adaptive management response;
 - c. Monitoring of lake productivity;
 - d. Sampling and analysis plans; and
 - e. Monitoring under Fisheries Authorizations, NWB Licence Compliance Monitoring, MDMER Environmental Effects Monitoring, and Groundwater Monitoring.



2. The Licensee shall implement the Core Receiving Environmental Monitoring Program (CREMP) and combined with Whale Tail Pit CREMP Addendum.
3. The Licensee shall implement the *Whale Tail Pit Water Quality and Flow Monitoring Plan*.
4. The Licensee shall install and maintain flow meters or other such devices, or implement suitable methods required for the measuring of Water use and Effluent discharge volumes, to be operated and maintained to the satisfaction of an Inspector.
5. The Licensee shall undertake the Monitoring Program provided in the Tables 1 and 2 of [Schedule I](#). The Licensee shall establish the locations and GPS coordinates for all additional Monitoring Program Stations in consultation with an Inspector.
6. The Licensee shall install and maintain signs that identify Monitoring Program Stations. The signs shall be posted in English, Inuktitut and French.
7. The Licensee shall measure and record the following on a Monthly basis in cubic metres or as otherwise stated:
 - a. The volume of fresh Water obtained from Nemo Lake;
 - b. The volume of fresh Water obtained from Mammoth Lake for the purposes of explosives mixing;
 - c. The volume of fresh Water obtained for drilling;
 - d. The volume of Effluent and fresh Water transferred to the pit lakes;
 - e. The volume of fresh Water obtained for dust suppressant within the Project Footprint, including the Whale Tail Pit Haul Road;



- f. The flow during periods of discharge from the Landfill, Landfarm, Waste Rock Storage Facilities, Wastewater Treatment Plant, Contact Water Collection System, and area Sumps collecting Contact Water;
 - g. The volume of water transferred from the Whale Tail Bulk Fuel Storage Facility;
 - h. The volume of sludge removed from the Sewage Treatment Plant and Wastewater Treatment Plant and Saline Water Treatment Plant; and
 - i. Tonnes of mineralized and un-mineralized waste rock stored.
8. The Licensee shall undertake the Thermal Monitoring Program detailed in the *Whale Tail Waste Rock Management Plan* as approved by the Board.
9. The Licensee shall undertake a geotechnical inspection, to be carried out annually by a Geotechnical Engineer, between the months of July and September. The inspection shall be conducted in accordance with the *Canadian Dam Safety Guidelines* where applicable and take into account all major earthworks, including:
 - a. Dikes;
 - b. Cofferdams;
 - c. Pit walls;
 - d. Underground portal;
 - e. Waste Rock Storage Facilities;
 - f. Landfill;
 - g. Landfarm;
 - h. Shoreline protection at the location of the Mammoth Lake Diffuser;
 - i. Geotechnical instrumentation;
 - j. Whale Tail Haul Road and site roads, in particular water crossings;
 - k. Quarries;
 - l. Bulk Fuel Storage Facilities, including secondary containment;
 - m. Attenuation Ponds; and
 - n. Collection Ponds and Sumps.
10. The Licensee shall submit to the Board as part of the Annual Report, the Geotechnical Engineer's Inspection Report. The Report shall include a cover letter from the Licensee outlining an implementation plan to address the recommendations of the Geotechnical Engineer.
11. The Licensee shall submit to the Board as part of the Annual Report required under Part B, Item 2, all reports and performance evaluations prepared by the Independent Geotechnical Expert Review Panel.
12. Unless otherwise approved by the Board, the Licensee shall monitor and record Seepage observations pursuant to Part I, Item 8 in accordance with the following:



Characterization of seepage including: precise location; discharge rates and volumes; respective hazard(s) and consequences and prescribed mitigative measures	Minimum Frequency of Observation
Seepage (of any kind) through any Dike(s)	Monthly
Seepage and Runoff from the Landfill(s)	Quarterly
Seepage and Runoff from Waste Rock Storage Facility	Quarterly
Seepage and Runoff from Ore piles	Quarterly
Seepage at Pit Wall and Pit Wall Freeze/Thaw and Permafrost Aggradation	Quarterly

13. The Licensee shall submit the results and interpretation of the Seepage monitoring required in Part I Item 15 in the Annual Report required under Part B, Item 2.
14. The Licensee shall implement the Inspection and Maintenance procedures for the Haul Road in accordance with the *Whale Tail Pit Haul Road Management Plan*.
15. The Licensee shall keep a digital photographic record of all the Project's watercourse crossings before, during, and after Construction has been completed.
16. The Licensee shall maintain and implement the *Quality Assurance / Quality Control Plan* that includes requirements for independent third party sampling and analysis. The QA/QC Plan shall be updated as needed in accordance with, and in consultation with, the accredited laboratory conducting the analyses. This Plan shall be developed and maintained in accordance with current Standard Methods and the *1996 Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class "A" Licensees in Meeting SNP Requirements*.
17. The Licensee shall annually review the approved QA/QC Plan and modify the plan as necessary. Proposed changes shall be submitted to an Accredited Laboratory for approval.
18. All analyses shall be conducted as described in the most recent edition of "*Standard Methods for the Examination of Water and Wastewater*" or by other such methods approved by an Analyst.
19. All compliance analyses shall be performed in an accredited laboratory according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
20. The Licensee shall submit to the Board, within thirty (30) days following the month being reported, a Monthly Monitoring Report. The Report shall include:
 - a. All data and information required by this Part and generated by the Monitoring Program in the Tables of Schedule I; and



- b. An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in Parts D and F.
21. As noted in Part B, Item 19, changes to the Schedules, including Schedule I, which provides details of the Monitoring Program, may, at the Board's discretion, be considered without requiring an Amendment to the Licence. However, the Board must approve any changes to the Monitoring Program, as outlined in Part I and Schedule I; any request for changes to the Monitoring Program should be submitted to the NWB in writing, and should include the justification for the change.

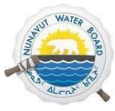
PART J: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE

1. The Licensee shall implement the *Interim Closure and Reclamation Plan*.
2. The Licensee shall submit to the Board for approval within three (3) years of Operations, an updated Interim Whale Tail Pit Closure and Reclamation Plan prepared in accordance with the "*Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories*", issued by the Mackenzie Valley Land and Water Board (MVLWB) and Aboriginal Affairs and Northern Development Canada (AANDC) in 2013 (MVLWB/AANDC 2013) and consistent with the *Mine Site Reclamation Policy for Nunavut, 2002*. The Plan shall include all mine related facilities and Whale Tail Pit Haul Road.
3. The Licensee shall submit to the Board for approval at least twelve (12) months prior to the expected end of planned mining, a Final Closure and Reclamation Plan. The Final Closure and Reclamation Plan shall incorporate revisions, which reflect the pending closed status of the mine, and include:
 - a. Soil Quality Remediation Objectives reflecting the applicable *CCME Guidelines* and the *Government of Nunavut Environmental Guideline for Site Remediation*;
 - b. Environmental Site Assessment plans in accordance with the applicable Canadian Standards Association (CSA) criteria; and
 - c. An evaluation of the human health and ecological risks associated with the Closure options proposed.
4. The Licensee shall notify the Board in writing, at least sixty (60) days prior to, or as soon as practically possible, of the Licensee's intention to enter into a Care and Maintenance Phase.
5. The Licensee shall provide the Board, within thirty (30) days of the Licensee providing notice of intent to enter into Care and Maintenance under Part J, Item 4, a Care and Maintenance Plan that details the Licensee's plans for maintaining compliance with the Terms and Conditions of the Licence.



- [Note: The inclusion of the phrase "to the extent practicable" is intended to acknowledge that natural channel drainage cannot be restored exactly to its previous state even after culvert removal. Agnico Eagle is committed to carrying out all reclamation as required by the Final Reclamation and Closure Plan.]*

- [Note: In the current licence, Item 12 requires 60 day notice to the Board before seeking Recognized Closed Mine Status under the MDMER. Agnico Eagle suggests removal as this requirement is redundant with Part B, Item 9.]



SCHEDULES

Schedule A: Scope, Definition, and Enforcement

Schedule B: General Conditions

Schedule C: Water Monitoring Reduction Framework

Schedule D: Conditions Applying to Construction

Schedule E: No Schedule for Water Use and Management

Schedule F: No Schedule for Waste Disposal and Management

Schedule G: No Schedule for Modifications

Schedule H: No Schedule for Emergency Response and Contingency Planning

Schedule I: Conditions Applying to General and Aquatic Effects Monitoring

Schedule J: No Schedule for Abandonment, Reclamation and Closure



Schedule A: Scope, Definitions, and Enforcement

[Note: Agnico Eagle has suggested removing defined terms that are not included in current licence wording.]

In this Licence: **2AM-WTP2043**

“Abandonment” means the permanent dismantlement of a facility so it is permanently incapable of its intended use. This includes the removal of associated equipment and structures;

“Act” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“Acid Rock Drainage (ARD)” means the production of acidic leachate, seepage or drainage from Underground workings, Open Pits, ore piles, waste rock, construction rock that can lead to the release of metals to groundwater or surface water during the life of the Project and after Closure;

“Acutely Lethal” means, as defined by the MDMER and as amended from time to time, *“in respect of an Effluent means that the effluent at 100% concentration kills (a) more than 50% of the rainbow trout subjected to it for a period of 96 hours, when tested in accordance with the acute lethality test set out in section 14.1 [of the MDMER]; or (b) more than 50% of the threespine stickleback subjected to it for a period of 96 hours, when tested in accordance with the acute lethality test set out in section 14.2. [of the MDMER]”*;

[Note: Agnico Eagle suggests this change for consistency with the current MDMER - MMER definition of “acutely lethal effluent” was repealed and replaced in 2018.]

“Adaptive Management” means a management plan that describes a way of managing risks associated with uncertainty and provides a flexible framework to identify specific thresholds and associated management actions to be taken by the Licensee when defined thresholds are exceeded. Mitigation measures may include special studies, operational changes, revised or new water and waste management systems, structures and or facilities, or implementing mitigation activities to prevent, stabilize or reverse a change in environmental conditions or to otherwise protect the Receiving Environment;

“Addendum” means the supplemental text that is added to a full plan or report, usually included at the end of the document and is not intended to require a full resubmission of the revised report. It may also be considered as an appendix or supplement;

“Amendment” means a change to any terms and conditions of this Licence through application to the NWB, requiring a change, addition, or deletion of specific terms and conditions of the Licence not considered as a Modification and for greater clarity, proceeding with Adaptive Management and or a New Adaptive Management Action shall not require an Amendment;

“Analyst” means an Analyst designated by the Minister under section 85 (1) of the *Act*;

“Annually” means, in the context of monitoring frequency, one sampling event occurring every



365 days with a minimum of 200 days between sampling events;

“Aquatic Effects Monitoring Program (AEMP)” means an overarching “umbrella” program that conceptually provides an opportunity to integrate results of individual, but related, monitoring programs in accordance with the Licence;

“Board” means the Nunavut Water Board established under Article 13 of the *Nunavut Agreement* and under section 14 of the *Act*;



“Canadian Council of the Minister of Environment (CCME)” means the organization of the Canadian Ministers of Environment that sets guidelines for environmental protection across Canada such as the *Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life*;

“Care and Maintenance” in respect of a mine, means the status of the facility when the Licensee ceases production or Commercial Operation temporarily for an undefined period of time;

“Closure” means when the Licensee ceases operations at a facility without the intent to resume mining activities in the future;

“Commercial Operation” in respect of a mine, means an average rate of production that is equal to or greater than 25% of the design capacity of the mine over a period of ninety consecutive days;

“Construction” means any activities undertaken to construct or build any component of, or associated with, the development of the Project, as described in the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process;

“Contact Water” means any water that has interacted with mine facilities or mining activities, including all runoff and seepage from WRSF and Ore Stockpiles;

“Contact Water Collection System” means the system of trenches, sumps and attenuation ponds designed to manage water that may interact with any mine development activities, including but not limited to pre-development activities as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time in accordance with this Licence;

“Core Receiving Environmental Monitoring Program or CREMP” means a monitoring program designed to determine the short and long-term effects in the aquatic environment resulting from the Project, to evaluate the accuracy of impact predictions, to assess the effectiveness of planned impact mitigation measures and to identify additional impact mitigation measures to avert or reduce environmental effects or Adaptive Management and which may be consolidated and streamlined with other plans in accordance with the Licence;

“Dam Safety Guidelines” means the *Canadian Dam Association (CDA) Dam Safety Guidelines (DSG)*, (published in 2007, revised in 2013 or subsequent approved editions);



“Deposit” means the placement of waste rock, tailings or other solid materials on land or, in water;

“Diffuser” means a Effluent discharge pipeline within a water body designed to discharge and enhance mixing of Effluent in the Receiving Environment as described in the *Water Management Plan*, as modified from time to time in accordance with the Licence;

“Discharge” means the release of any water or waste to the receiving environment;

“Dissolved Metals” means the suite of metals referred to in Group 2 of Table 1 – Monitoring Groups located in Schedule J of this Licence. Dissolved metals shall be analyzed on a filtered sample;

“Domestic Waste” means all solid waste generated from the accommodations, kitchen facilities and all other site facilities, excluding those hazardous wastes associated with the Project;

“Effluent” means treated or untreated liquid waste material that is discharged into the Receiving Environment from all site water management facilities;

“Emulsion Plant (Explosives Mixing Facility)” means the facility designed for storage of Ammonium Nitrate, detonators, and explosives; and designed for the mixing and storage of Ammonium Nitrate Fuel Oil (ANFO), as indicated in the *Ammonia Management Plan*, and as modified in accordance with this Licence from time to time;

“Engineer” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

“Engineered Structure” means any facility, which was designed and approved by a Professional Engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;

“Environmental Assessment” means, in respect of the Project, all material filed with the Nunavut Impact Review Board (NIRB) on the NIRB’s Public Registry (established under the authority of Article 12 of the *Nunavut Agreement*) that is associated with the NIRB’s impact assessment (Review) of the Project and associated with the scope of the activities, works and Undertakings authorized in accordance with the terms and conditions of the Licence;

“Final Discharge Point” in respect of an effluent, means, as defined in the *Metal and Diamond Mining Effluent Regulations* (as may be further amended from time to time);

“Fresh Water Intake” means the facility or facilities consisting of vertical filtration wells fitted with vertical turbine pumps connected to the pump house with piping buried under a rockfill causeway for the purpose of supplying freshwater to the Whale Tail Pit Project as described in the *Whale Tail Pit Water Management Plan* and as modified from time to time in accordance with the Licence;



“Geotechnical Engineer” means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization is the engineering properties of earth materials in dealing with manmade structures and earthworks. Such structures and earthworks can include shallow and deep foundations, retaining walls, dams, and embankments;

“Grab Sample” means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;

“Greywater” means the component of effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), but excluding sewage;

“Ground Water” means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state;

“Hazardous Waste” means materials or contaminants which are categorized as dangerous goods under the *Transportation of Dangerous Goods Act* 1992 (1992, c. 34) and/or that are no longer used for their original purpose and are intended for recycling, treatment, disposal or storage;

“High Water Mark” means the usual or average level to which a body of water rises at its highest point and remains for a sufficient time so as to change the characteristics of the land (ref. *Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities*);

“Incinerator” means the dual chamber, high temperature facility designed with the capacity to service the mine site camp as described in the Incineration Waste Management Plan and as modified from time to time in accordance with this Licence;

“Independent Geotechnical Expert Review Panel” means the panel of geotechnical specialists established by Agnico Eagle to review the designs and performance of the dikes and dams;

“Inspector” means an Inspector designated by the Minister under section 85 (1) of the *Act*;

“Interim Closure and Reclamation Plan” means a plan addressing the Reclamation of mine components which will not be closed until the end of the mining operations, and operational detail for components which are to be progressively reclaimed throughout the mine life and which may be consolidated and streamlined with other plans in accordance with the Licence;



"Landfarm" means a lined engineered facility designed to contain and treat hydrocarbon contaminated sediments and soils as described in the *Landfarm Design and Management Plan* and as modified from time to time in accordance with this Licence;

"Landfill" means the facility to be constructed and operated until the end of the mine life designed to contain non-salvageable, non-organic, non-hazardous solid wastes from mining activities that cannot be incinerated, as described in the *Whale Tail Pit Landfill and Waste Management Plan* and as may be modified from time to time under this Licence;

"Licence" means this Type "A" Water Licence 2AM-WTP2043, issued by the Nunavut Water Board in accordance with the *Act*, to Agnico Eagle Mines Limited (Agnico Eagle) for the Whale Tail Pit Project;

"Licensee" means the entity to whom the Licence is issued or to whom the Licence is subsequently assigned;

"Mammoth Channel Culvert" means the structure designed to divert non-contact water from the west shore of the open pit to Lake A16 (Mammoth Lake), if deemed necessary and as may be modified from time to time in accordance with this Licence;

"Mammoth Dike" means the structure designed to protect the mine site area from potential backwatering from Lake A16 (Mammoth Lake) during the operational and Closure phases as indicated in the *Whale Tail Pit Water Management Plan*, and as modified from time to time in accordance with this Licence;

"Maximum Average Concentration" means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe;

"Maximum Monthly Mean" means the average concentration of all samples collected over a thirty day period from the identical sampling location;

"Meadowbank Gold Mine Project" means the Meadowbank Gold Project (Meadowbank Gold Mine) as outlined in the Final Environmental Impact Statement and supplemental information submitted by Cumberland Resources Limited to the Nunavut Impact Review Board (NIRB) as well as the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted by Agnico Eagle Mines Limited to the NWB throughout the regulatory process;

"Metal Leaching" means the mobilization of metals into solution under neutral, acidic or alkaline conditions;

"Minister" means the Minister of Crown-Indigenous Relations and Northern Affairs (CIRNAC, formerly the Minister of Indigenous and Northern Affairs Canada);

"Modification" means an alteration to a physical work that introduces a new structure or revises



or eliminates an existing structure and does not alter the purpose or function of the work, but does not include Adaptive Management or a New Adaptive Management Action;

“Monitoring Program” means the program to collect data on surface water and Ground Water quality to assess impacts to the environment of an appurtenant Undertaking;

“Monthly” means, in the context of monitoring frequency, one sampling event occurring every thirty (30) days with a minimum of twenty one (21) days between sampling events;

“New Adaptive Management Action” means an Adaptive Management action that is not included in an approved plan but is recommended by the Licensee or others to prevent, stabilize, or reverse a change in environmental conditions or to otherwise protect the receiving environment;

“Non-Contact Water” means the runoff originating from areas unaffected by mining activity that does not come into contact with developed areas;

“Nunavut Agreement” means the *“Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada,”* including its preamble and schedules, and any amendments to that agreement made pursuant to it;

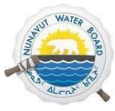
“Open Pits” means the open pits to mine the satellite deposits located on the Amaruq Exploration property approximately 150 km north of Hamlet of Baker Lake and 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut;

[Note KivIA has suggested including reference to KIA surface lease in relation to this definition. Agnico Eagle disagrees.]

“Operations” means the set of activities associated with mining, ore processing and recovery of gold; excluding Construction, Care and Maintenance, decommissioning and permanent Closure activities;

“Plans” include initial design plans submitted by the Licensee, which include objectives, methods, contingencies, roles and responsibilities, monitoring and mitigation and which may be subsumed and replaced by operational management plans based on design plans which are streamlined to better support the Licensee’s obligations under the License and the Act, site operations and inspections.

“Progressive Reclamation” means actions that can be taken during Operations before permanent Closure, to take advantage of cost and operating efficiencies by using the resources available from Operations to reduce the overall reclamation costs incurred. It enhances



environmental protection and shortens the timeframe for achieving the final Reclamation objectives and goals;

“Project” means the Whale Tail Pit Project Proposal and the Whale Tail Expansion Proposal as outlined in the Final Environmental Impact Statement, Addendum and supplemental information submitted by Agnico Eagle Mines Limited (Agnico Eagle) to the Nunavut Impact Review Board (NIRB) as well as the associated Water Licence Applications, Supporting Documents, and Technical Meeting Information Supplement documents submitted by Agnico Eagle to the NWB throughout the regulatory process;

“Project Footprint” means the Project as described at Part A, Item 1 "Scope";

“Quarry” means the sites where materials such as rock, gravel, sand or esker are excavated for use at the Project, including in the development of infrastructure and facilities, Operations and Closure;

“Quality Assurance / Quality Control (QA/QC)” Quality Assurance means the system of activities designed to better ensure that quality control is done effectively; Quality Control means the use of established procedures to achieve standards of measurement for the three principle components of quality: precision, accuracy and reliability;

“Quarterly” means, in the context of monitoring frequency, one sampling event occurring every three months with a minimum of ninety days between sampling events;

“Receiving Environment” means both the aquatic and terrestrial environments that receive any deposit or discharge of waste including Effluent, seepage, or Contact Water from the Project;

“Reclamation” means activities which facilitate the return of areas affected by the Project to a state as described in the Interim Closure and Reclamation Plan or Final Closure Plan;

“Regulations” means the *Nunavut Waters Regulations*, SOR/2013-69;



“Seepage” means any water that drains through or escapes from any structure designed to contain, withhold, divert or retain water or waste. Seepage also includes any flows that have emerged through open pits, Waste Rock storage facilities, ore stockpile areas, quarries, landfill or landfarm areas;

“Sewage” means all toilet wastes and Greywater;

“Sewage Treatment Plant” means the sewage treatment plant described in the *Whale Tail Pit Water Management Plan* as modified from time to time under this Licence;

“Short Term Maximum” means the maximum concentration of all samples collected over a 24 hour period, or less, taken from the identical sampling location;

“Site Specific Water Quality Objective” (SSWQO) means a numerical concentration or narrative statement which has been established for specified waters;

“Sump” means a structure or depression that collects, retains or transfers water or liquid waste before it is released to the Receiving Environment or Project infrastructure;

“Total Metals” means the suite of metals referred to in Group 2 of Table 1 – Monitoring Groups located in Schedule I of this Licence. Total metals shall be analyzed on an un-filtered sample;

“Underground” means the underground workings to mine the satellite deposits located on the Amaruq Exploration property approximately 150 km north of Hamlet of Baker Lake and 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut;

[Note KivIA has suggested including reference to KIA surface lease in relation to this definition. Agnico Eagle disagrees.]

“Undertaking” means an undertaking or undertakings in respect of which Water is to be used or Waste is to be deposited, as classified in Schedule 1 of the *Regulations*;

“Use” means use as defined in section 4 of the *Act*;

“Waste” means waste as defined in section 4 of the *Act*;

“Waste Disposal Facilities” means all facilities designated for the disposal of Waste or Waste Rock including: the mine site Open Pits, Underground, Sewage Treatment Plant, Wastewater Treatment Plant, Landfarm, Landfill, and Waste Rock Storage Facility;

“Waste Rock” means all rock materials that are or were produced as a result of mining operations and that have no current economic value;

“Waste Rock Storage Facility” means the structure designed for the placement of Waste Rock as described in the *Waste Rock Management Plan* and as may be modified from time to time under this Licence;



“Waste Rock Storage Facility Collection Pond” means the structure designed to collect runoff and seepage from a Waste Rock Storage Facility which is to be pumped to the attenuation ponds for treatment in the WTP as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;



“Waste Rock Storage Facility Dike” means a structure designed to confine contact water from a waste rock storage facility before it is pumped to the attenuation ponds as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;

“Wastewater” means the water generated by site activities or that originates on-site and that requires treatment or any other water management activity;

“Wastewater Treatment Plant” means the facilities designated for the treatment of contact water from attenuation and collection ponds prior to discharge to the Receiving Environment during all phases of mine operations, including during Closure/post- Closure as described in the *Whale Tail Pit Water Management Plan* and *Whale Tail Pit Waste Rock Management Plan* and as may be modified from time to time under this Licence;

“Water” means water as defined in section 4 of the *Act*;

“Water Supply Facilities” means the facilities designated for the supply of water including the Fresh Water Intakes and associated infrastructure as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;

“Water Licence Application” for the purposes of this Licence includes the totality of relevant documents filed by Agnico Eagle on the NWB and NIRB Public Registries in support of Agnico Eagle’s Water Licence Application filed on July 8, 2016 and its subsequent Water Licence Application filed on May 16, 2019, and includes Supporting Documents, and Technical Meeting Information Supplement documents;

“Weekly” means, in the context of monitoring frequency, one sampling event occurring every 7 days with a minimum of 24 hours between sampling events;

“Attenuation Pond” means a facility located at the mine site where mine site Contact Water will be discharged, be treated by the WTP prior to discharge to the receiving environment as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;

“Whale Tail Bulk Fuel Storage Facility” means the fuel storage and all associated infrastructure as described in the *Meadowbank and Whale Tail Bulk Fuel Storage Facilities: Environmental Performance Monitoring Plan* and as may be modified from time to time under this Licence;

“Whale Tail Camp” means a permanent life of mine camp proposed at the mine site proposed to include a sewage treatment plant, water intake, accommodation buildings, power plant, bulk fuel storage area, warehouse, maintenance shop as described in the Water Licence Application;



“Whale Tail Dike” means the structure designed to raise Whale Tail Lake (South Basin) and divert runoff downstream to the Lake A16 (Mammoth Lake) watershed through the Whale Tail Lake (South Basin) diversion channel, and to permit dewatering of Whale Tail Lake (North Basin) and mining of the Whale Tail Pit as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;

“Whale Tail Diversion Channel” means the structure designed to divert runoff downstream to the Mammoth Lake watershed from Whale Tail Lake (South Basin) once the Whale Tail Dike is constructed and the Whale Tail Lake (South Basin) level is raised as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;

“Whale Tail Haul Road” means the haul road and associated water crossings between the Whale Tail Pit and Project site and the Meadowbank Mine site as described in the *Whale Tail Pit Haul Road Management Plan* and as may be modified from time to time under this Licence;

“Whale Tail Lake (South Basin)” means the southern portion of Whale Tail Lake that will receive water from Whale Tail Lake (North Basin) once the Whale Tail Dike is constructed, and from which water will be diverted as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;



“Whale Tail Security Management Agreement” means the agreement between Kivalliq Inuit Association, (KIA or KivIA), Agnico Eagle Mines Limited (Agnico Eagle) and Her Majesty Queen in Right of Canada as represented by the Minister of Crown-Indigenous Relations and Northern Affairs Canada (the Minister), dated September 5, 2017 and signed by KIA, Agnico Eagle and Minister on September 26, 2017 as amended;



Schedule B: General Conditions

The Annual Report referred to in Part B, Item 2, shall include:

CONSTRUCTION

1. For the dikes, dams and structures constructed to withhold water or waste:
 - a. An overview of methods and frequency used to monitor deformations, Seepage and geothermal responses;
 - b. A comparison of measured versus predicted performance;
 - c. A discussion of any unanticipated observations including changes in risk and mitigation measures implemented to reduce risk;
 - d. As-built drawings of all mitigation works undertaken;
 - e. Any changes in the design and/or as-built condition and respective consequences of any changes to safety, water balance and water quality;
 - f. Data collected from instrumentation used to monitor earthworks and an interpretation of that data;
 - g. A summary of maintenance work undertaken as a result of settlement or deformation of dikes and dams; and
 - h. The monthly and annual quantities of Seepage from dikes and dams in cubic metres.

WATER

2. Monthly and annual volume of fresh Water obtained from water sources.
3. Summary of reporting results for the Water Balance and Water Quality model and any calibrations as required in Part E Items 7-9.

WASTE

4. A summary of the geochemical monitoring results including:
 - a. Operational acid/base accounting and paste pH test work used for Waste Rock designation (PAG and NPAG rock);
 - b. As-built volumes of Waste Rock used in construction and sent to the Waste Rock Storage Facility with estimated balance of acid generation to acid neutralization capacity in a given sample as well as metal content;
 - c. All monitoring data with respect to geochemical analyses on site and related to roads, quarries, and the Whale Tail Haul Road; and
 - d. Any geochemical outcomes or observations that could imply or lead to greater than predicted impacts to the Receiving Environment.



5. Volumes of Waste Rock used in construction and placed in the Waste Rock Storage Facility.
6. Volumes of ore stockpiled and overburden stored at Whale Tail Pit site.
7. Summary of quantities and analysis of Seepage and runoff monitoring from the Landfill, Waste Rock Storage Facility and associated dikes/berms.
8. A summary report of all general waste disposal activities including monthly and annual quantities in cubic metres of waste generated and location of disposal.
9. Reporting of Incinerator test results including the materials burned and the efficiency of the Incinerator.

SPILLS

10. A list and description of all unauthorized discharges in excess of the thresholds set out in the Nunavut *Spill Planning and Reporting Regulations* including volumes, spill report line identification number and summaries of follow-up action taken.

MODIFICATIONS

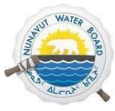
11. A summary of Modifications and/or major maintenance work carried out on all Water and Waste-related structures and facilities.

MONITORING

12. The results and interpretation of the Monitoring Program in accordance with Part I and Schedule I.
13. The results of monitoring related to the Aquatic Effects Monitoring Program (AEMP) including:
 - a. Core Receiving Environment Monitoring Program (CREMP);
 - b. Metal and Diamond Mining Effluent Regulation (MDMER) Monitoring;
 - c. Water quality and flow monitoring;
 - d. Visual Haul Road water quality monitoring;
 - e. Blast monitoring; and
 - f. Groundwater monitoring.

CLOSURE

14. A summary of any Progressive Reclamation undertaken, including photographic records of site conditions before and after completion of the work, and an outline of any Progressive Reclamation planned for the next year.
15. An updated estimate of the current restoration liability.



PLANS/REPORTS/STUDIES

16. A summary of any studies requested by the Board that relate to Water use, Waste disposal or Reclamation, and a brief description of any future studies planned.
17. Where applicable, a summary of any Plans that were revised over the past year.

GENERAL

18. A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector.

OTHER

19. A summary of public consultation and participation with local organizations and the residents of the nearby communities on water and waste-related matters, including a schedule of upcoming community events and information sessions.
20. Any other details on Water use or Waste Disposal requested by the Board by November 1st of the year being reported.



Schedule D: Conditions Applying to Construction

1. The Construction Summary Report referred to in Part D Items 15-16 shall include:
 - a All final design and Construction drawings (must be stamped and signed by a Professional Engineer);
 - b A summary of Construction activities including photographic records before, during and after Construction;
 - c As-built drawings (or piping and instrumentation diagrams, where applicable) for Waste Disposal Facilities and Water Supply Facilities;
 - d Documentation and detailed explanation of field decisions reflecting any deviations from original Construction drawings and plans, and how such deviations may affect performance of engineered structures;
 - e Discussion of mitigation measures implemented during Construction and effectiveness of measures taken;
 - f Monitoring undertaken in compliance with Part D of the Licence;
 - g Blast vibration monitoring for quarrying activities carried out in close proximity to fish bearing waters;
 - h Monitoring for sediment release from Construction areas; and
 - i Monitoring and reporting on use of Water to manage dust emissions from crushing and Construction activity.



Schedule I: Conditions Applying to General and Aquatic Effects Monitoring

TABLE 1 – MONITORING GROUP

Group	Parameters
1	pH, turbidity, hardness, alkalinity, ammonia nitrogen, total metals (aluminum, arsenic, barium, cadmium, chloride, chromium, copper, fluoride, iron, lead, manganese, mercury, molybdenum, nickel, nitrite, nitrate, selenium, silver, thallium, zinc) sulphate, TDS, TSS.
2	<p>Total and Dissolved metals: aluminum, antimony, arsenic, boron, barium, beryllium, cadmium, copper, chromium, iron, lithium, manganese, mercury, molybdenum, nickel, lead, selenium, tin, strontium, titanium, thallium, uranium, vanadium and zinc.</p> <p>Nutrients: Ammonia-nitrogen, total Kjeldahl nitrogen, nitrate nitrogen, nitrite-nitrogen, ortho-phosphate, total phosphorous, total organic carbon, total dissolved organic carbon and reactive silica.</p> <p>Conventional Parameters: bicarbonate alkalinity, chloride, carbonate alkalinity, conductivity, hardness, calcium, potassium, magnesium, sodium, sulphate, pH, total alkalinity, TDS, and TSS, turbidity.</p>
3	MDMER parameters (arsenic, copper, lead, nickel, zinc, total suspended solids, pH), sulphate, turbidity and total aluminum.
4	Total Arsenic, Total Copper, Total Lead, Total Nickel, Total Zinc, TSS, Benzene, Toluene, Ethylbenzene, Xylene, TPH, pH.
MDMER	Arsenic, copper, lead, nickel, zinc, total suspended solids, pH, effluent volumes and flow rate of discharge, acute lethality (Rainbow Trout and Daphnia magna) and environmental effects monitoring (EEM).



TABLE 2 – MONITORING PROGRAM

Station	Description	Phase	Monitoring Parameters	Frequency
<i>Mine Site</i>				
ST-DC-1 to TBD	Monitoring Program Stations during dike Construction as defined in the Whale Tail Water Quality Monitoring and Management Plan for Dike Construction and Dewatering	Construction	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in Part D, Item 5	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in Part D Item 5
ST-DD-1 to TBD	Monitoring Program Stations during dike dewatering as defined in the Whale Tail Water Quality Monitoring and Management Plan for Dike Construction and Dewatering	Construction	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in Part D, tem 5	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in part D, Item 5
ST-S-1 to TBD	Seeps (to be determined)	Operations	Group 1	Monthly or as found
		Closure	Group 1	Monthly or as found
ST-GW-1 to TBD	Groundwater wells (to be determined) as required under Groundwater Monitoring Plan	Operations	Group 2	Annually
		Closure	Group 2	Annually
ST-WT-1	Attenuation Pond, pre-treatment	Operations	Group 1	Four times per calendar year
ST-WT-2	Attenuation Pond, posttreatment; last point of control before discharge in Mammoth Lake	Operations	Volume (m ³)	Daily during periods of discharge
			Field Measurements	Weekly during periods of discharge
			Group 2	Weekly during periods of discharge



			Effluent characterization (MDMER)	Four times per calendar year
			Acute Toxicity (MDMER)	Once prior to discharge and Monthly thereafter
			Sub-lethal toxicity (MDMER)	MDMER Schedule
ST-WT-3	Waste Rock Storage Facility (WRSF) Pond prior to pumping to Attenuation Pond	Operations	Group 1	Four times per calendar year, when water is present
		Closure	Group 1	Four times per calendar year, when water is present
	Waste Rock Storage Facility (WRSF) Pond prior to discharge to Mammoth Lake	Post-Closure	Group 1	Four times per calendar year, when water is present
ST-WT-4	Whale Tail Pit or pit sump	Operations	Group 1	Four times per calendar year
ST-WT-5	Water Intake from Nemo Lake	Construction	Volume (m ³)	Monthly
		Operation	Volume (m ³)	Monthly
ST-WT-6	Lake A47	Construction	Group 2	Monthly during open water
		Operations	Group 2	Monthly during open water
		Closure	Group 2	Monthly during open water
ST-WT-7	East diversion channel	Operations	Group 3	Three times (freshet, summer, fall) per calendar year
ST-WT-8	Water Intake from Whale Tail Lake	Closure	Volume (m ³)	Monthly
ST-WT-9	North Whale Tail Lake (as the basin fills and when it is	Closure	Group 1	Four times per calendar year



	connected to the south basin and prior to or when connected to the downstream environment)	Post-Closure	Group 2	Four times per calendar year
ST-WT-10	Pit Lake (as the Pit fills)	Closure	Group 2	Four times per calendar year
		Post-Closure	Group 2	Four times per calendar year
ST-WT-11	Sewage Treatment Plant	Operations	Group 1	Four times per calendar year
		Closure	Group 1	Four times per calendar year
ST-WT-12	Secondary containment at Whale Tail Bulk Fuel Storage Facility	Operations	Group 4	Prior to discharge or transfer of effluent
		Closure	Group 4	Prior to discharge or transfer of effluent
ST-WT-13	Lake A45	Operations	Group 3	Flow, Monthly during open-water
		Closure	Group 3	Flow, Monthly during open-water until water level have returned to baseline level
ST-WT-14	Lake A16 outlet	Construction	Group 2	Monthly during open water
		Operations	Group 2	Monthly during open water
		Closure	Group 2	Monthly during open water
ST-WT-15	Lake A15	Construction	Group 2	Monthly during open water
		Operations	Group 2	Monthly during open water
		Closure	Group 2	Monthly during open water
ST-WT-16	WT Bulk Fuel Storage Facility Power House	Operation	Group 4	Prior to discharge or water transfer
		Closure	Group 4	Prior to discharge or water transfer



		Operations	Volume (m3)	During transfer
		Closure	Volume (m3)	During transfer
ST-WT-17	Whale Tail Dike Seepage	Operation	Group 1	Monthly during discharge
ST-WT-18	IVR Pit or sump	Operations	Group 1	Four times per calendar year
ST-WT-19	IVR Pit Lake	Closure	Group 2	Four times per calendar year
		Post-closure	Group 2	Four times per calendar year
ST-WT-20	Groundwater Storage Pond 1	Operations	Group 1	Four times per calendar year
ST-WT-21	Groundwater Storage Pond 2	Operations	Group 1	Four times per calendar year
ST-WT-22	Groundwater Storage Pond 3	Operations	Group 1	Four times per calendar year
ST-WT-23	IVR Attenuation Pond	Operations	Group 1	Four times per calendar year
		Closure	Group 1	Four times per calendar year
ST-WT-24	Whale Tail Pit Lake (North Wall)	Closure	Group 2	Four times per calendar year
		Post-Closure	Group 2	Four times per calendar year
ST-WT-25	Whale Tail South Discharge to Mammoth Permanent Diffuser	Construction	Group 3	Monthly during discharge
ST-WT-25A	Whale Tail South Discharge to Mammoth Temporary Diffuser	Construction	Group 3	Monthly during discharge
			Volume (m ³)	Daily during periods of discharge



ST-WT-26	Attenuation Pond, posttreatment; last point of control before discharge in Whale Tail South Basin	Operations	Field Measurements	Weekly during periods of discharge
			Group 2	Weekly during periods of discharge
			Effluent characterization (MDMER)	Four times per calendar year
			Acute toxicity (MDMER)	Once prior to discharge and Monthly thereafter
			Sub-lethal toxicity (MDMER)	MDMER Schedule
ST-WT-27	Landfarm	Operations	Group 4	Prior to discharge
		Operations	Volume	During discharge



NUNAVUT WATER BOARD RENEWAL WATER LICENCE

WATER LICENCE No. 2BB-MEA1828

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

AGNICO EAGLE MINES LIMITED

(Licensee)

C.P. 87, 765 CH. DE LA MINE GOLDEX, VAL-D'OR QUEBEC J9P 4N9

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or dispose of waste for a period subject to restrictions and conditions contained within this Licence renewal:

Licence Number/Type: 2BB-MEA1828 / TYPE "B"

Water Management Area: THELON / BAKER LAKE / QUOICH / BACK / WATERSHEDS
(5 / 8 / 9 / 31)

Location: MEADOWBANK ADVANCED EXPLORATION PROJECT -
KIVALLIQ REGION, NUNAVUT

Classification: MINING UNDERTAKING

Purpose: DIRECT WATER USE AND DEPOSIT OF WASTE

Quantity of Water use not
to Exceed: TWO HUNDRED AND NINETY-NINE (299) CUBIC METRES
PER DAY

Date of Licence Issuance
/ Effective: MARCH 7, 2018

Expiry of Licence: MARCH 6, 2028

This Licence renewal, issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

**Lootie Toomasie,
Nunavut Water Board,
Chair**

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence allows for the use of water and the deposit of waste for a Mining Undertaking classified as per Schedule I of the Regulations at the Meadowbank Advanced Exploration Project, located approximately 70-125 km north of the Hamlet of Baker Lake within the Kivalliq Region, Nunavut. Activities associated with the project include camp operation, treatment and disposal of greywater and sewage, fuel storage, environmental baseline data collection, prospecting, geological mapping, geophysical surveys, diamond and reverse circulation drilling, , bulk sampling, construction of pads, water crossings' installations, trenching and quarrying.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made or existing *Regulations* are amended by the Governor in Council under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and
- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

2. Definitions

“**Act**” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Addendum**” means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report.

“**Amendment**” means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence;

“**Appurtenant Undertaking**” means an undertaking in relation to which a use of water or a deposit of waste is permitted by a licence issued by the Board;

“**Board**” means the Nunavut Water Board established under the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Bulk Sampling**” means the activities described in the Application for Amendment 4 and supporting documents dated March 31, 2016.

“Effluent” means treated or untreated liquid waste material that is discharged into the environment from a structure such as a settling pond, landfarm or a water treatment plant;

“Engineer” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

“Fuel Storage Facility” means the fuel storage facility as described in the Application for Amendment 4 and supporting documents dated March 31, 2016;

“Greywater” means all liquid wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet wastes;

“High Water Mark” means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);

“ICP Scan” means the laboratory method for determining trace metals in water through Emission Spectroscopy using inductively coupled plasma (including from approximately 22 to 32 elements, depending on the laboratory performing the analysis);

“Inspector” means an Inspector designated by the Minister under Section 85 (1) of the *Act*;

“Licensee” means the holder of this Licence;

“Minister” means the Minister of Indigenous and Northern Affairs Canada (INAC)

“Modification” means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

“Nunavut Agreement” means the “*Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*”, including its preamble and schedules, and any amendments to that agreement made pursuant to it;

“Regulations” means the *Nunavut Waters Regulations* (SOR/2013/669 18th April, 2013);

“Sewage” means all toilet wastes and greywater;

“Spill Contingency Plan” means a Plan developed to deal with unforeseen petroleum and hazardous materials events that may occur during the operations conducted under the Licence;

“Sump” means an excavation in impermeable soil for the purpose of catching or storing water or waste;

“Toilet Wastes” means all human excreta and associated products, but does not include greywater;

“Trench Water Containment” means the lined sump or sumps, poly tank or other means of containment for water that has collected within the blasted and excavated trench(s) and subsequently removed for disposal upon confirmation of water quality;

“Waste” means, as defined in S.4 of the *Act*, any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means.

“Wastewater Treatment System (WWTS)” means the wastewater treatment system as described in the Application for Amendment 4, Application for Renewal and supporting documents dated March 31, 2016, and December 13, 2017, respectively;

“Water” or “Waters” means waters as defined in section 4 of the *Act*.

“Water Supply Facilities” means the Fresh Water Intake and associated infrastructure as described in the Amendment Application, Application for Renewal and supporting documents dated March 31, 2016, and December 13, 2017, respectively.

3. Enforcement

- a. Failure to comply with this Licence will be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*;
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*; and
- c. For the purpose of enforcing this Licence and with respect to the use of water and deposit or discharge of waste by the Licensee, Inspectors appointed under the *Act*, hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable law.

PART B: GENERAL CONDITIONS

1. The Licensee shall maintain security with the Minister in the form in accordance with the Regulations, or that is satisfactory to the Minister in the amount of \$1,200,650 (one million, two hundred thousand and six hundred and fifty).
2. The Licensee shall furnish and maintain such further or other amounts of security as may be required by the Board based on annual estimates of current Meadowbank Advanced Exploration Project restoration liability using the current version of RECLAIM, its equivalent or other similar method approved by the Board, in accordance with principles of INAC's "Mine Site Reclamation Policy for Nunavut" (2002).
3. The Licensee may, submit to the Board for approval, a written request for a reduction to the amount of security. The submission shall include supporting evidence to justify the request.
4. The security deposit shall be maintained until such time as the Minister is satisfied that the Licensee has complied with all provisions of the approved Abandonment and Restoration Plan. This clause shall survive the expiry of this Licence.
5. The amount of Water use fees shall be determined and payment of those fees shall be made in accordance with section 12 of the *Regulations*.
6. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31st of the year following the calendar year being reported, containing the following information:
 - a. The daily, monthly and annual quantities in cubic metres of all freshwater obtained for all purposes;
 - b. The daily, monthly and annual quantities in cubic metres of water pumped from the underground;
 - c. Tabular summary of all data generated under the Monitoring Program, Part J;
 - d. A summary of modification and/or major maintenance work carried out on the Water Supply Facilities, Bulk Fuel Storage and Containment Facilities, and Wastewater Treatment Facility, including all associated structures, and an outline of any work anticipated for the next year;
 - e. A list of unauthorized discharges and a summary of follow-up actions taken;
 - f. Any revisions to the Spill Contingency Plan, Water Management Plan, Waste Management Plan, Quarry Management Plan, Abandonment and Restoration Plan, as required by Part B, Item 12, submitted in the form of an Addendum;
 - g. An updated estimate of the current Meadowbank Advanced Exploration Project restoration and liability, as required under Part B, Item 2, based upon the results of the restoration research, project development monitoring, and any modifications to the site plan;
 - h. A summary of drilling/trenching activities and progressive reclamation of drill/trench sites;
 - i. Report all artesian flow occurrences as required under Part F, Item 7;
 - j. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of

- operations;
- k. A summary of any specific studies or reports requested by the Board, and a brief description of any future studies planned or proposed;
 - l. A summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted; and
 - m. Any other details on water use or waste disposal requested by the Board by the 1st of November of the year being reported.
- 7. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.
 - 8. The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of water volumes as required under Part J, Item 1.
 - 9. The Licensee shall post signs in the appropriate areas to inform the on-site personnel and public of the location of the Water Supply Facility, Wastewater Treatment System and Monitoring Stations. All signs shall be in English and Inuktitut.
 - 10. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.
 - 11. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
 - 12. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.
 - 13. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
 - 14. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:

(a) Manager of Licensing:

Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca

(b) Inspector Contact:

Manager of Field Operations, AANDC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445

15. The Licensee shall submit one paper copy and one electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut (and/or Inuinnaqtun).
16. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the NWB is received and acknowledged by the Manager of Licensing.
17. This Licence is assignable as provided for in section 44 of the *Act*.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain all domestic freshwater for the Amaruq Camp from Whale Tail Lake as outlined in the application. Drill/industrial water shall be obtained from local water source(s), proximal to the drilling targets as outlined in the application. The volume of water for the purposes of this Licence shall not exceed two hundred and ninety-nine (299) cubic metres *per day*.
2. The Licensee shall implement the Plan entitled: “Water Management and Water Balance related to Amaruq Exploration Portal/Ramp Program, Quarry and Advanced Underground Exploration and Bulk Sample Amaruq Exploration Site, Nunavut” dated November 15, 2016 and originally approved by the Board.
3. Streams cannot be used as a water source unless authorized and approved by the Board in writing.
4. If the Licensee requires water in sufficient volume that the source water body may be drawn down, the Licensee shall, at least thirty (30) days prior to commencement of use of water, submit to the Board for approval in writing, the following: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.
5. The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.
6. The Licensee shall not remove any material from below the ordinary High Water Mark of any water body unless authorized.
7. The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.

8. Sediment and erosion control measures shall be implemented prior to and maintained during the undertaking to prevent entry of sediment into water.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall locate areas designated for waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise approved by the Board in writing.
2. The Licensee shall not practice on-site land filling of domestic waste, unless otherwise approved by the Board in writing.
3. The Licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator.
4. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.
5. The Licensee shall provide to the Board, documented authorization from the community of Baker Lake, prior to the backhauling and disposal of any waste.
6. The Licensee shall backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste generated through the course of the operation at a licensed waste disposal site.
7. The Licensee shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste. These records shall be made available to an Inspector upon request.
8. The Licensee shall dispose of all Greywater to a sump located a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing. Upon commissioning of the Wastewater Treatment System “Bionest” (WWTS), the Licensee shall direct all Greywater to the WWTS, unless otherwise approved by Board in writing.
9. The Licensee shall collect and remove all Toilet Wastes to the Meadowbank Mine site for disposal, or contain in latrine pits or treat, using incineration, chemical, portable or composting toilets. Latrine pits shall be located at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural contours of the land prior to abandonment. Upon commissioning of the Wastewater Treatment System “Bionest” (WWTS), the Licensee shall direct all Toilet Wastes to the WWTS, unless otherwise

approved by Board in writing.

10. All Wastewater effluent discharged from the Wastewater Treatment System (WWTS), at Monitoring Station MEA-2 shall not exceed the following Effluent quality limits:

Parameter	Maximum Concentration of any Grab Sample
pH	6.0 to 9.5
Biochemical Oxygen Demand (BOD5)	80 mg/L
Total Suspended Solids (TSS)	100 mg/L
Fecal Coliforms	1000 CFU/100mL
Oil and Grease	5 mg/L & No visible sheen

11. All solid waste (sludge) from WWTS shall be disposed of in latrine pits that shall be located at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural contours of the land prior to abandonment.
12. The Licensee shall direct all Water accumulated in blasted or excavated trenches to a Trench Water Containment to allow for sampling prior to release. Water collected in hand-dug trenches shall be directed to a natural depression sump, as required by Part D, Item 1.
13. All Effluent discharged from Fuel Storage Facility at Monitoring Station MEA-3, shall not exceed the following Effluent quality limits:

Parameter	Maximum Concentration of any Grab Sample (µg/L)
Benzene	370
Ethylbenzene	2
Toluene	90
Lead	1
Oil and Grease	15,000 and no visible sheen

14. All Effluent discharged from trench-water containments and quarry sumps shall be carried out in accordance with Part D, Item 1, directed to a natural depression where direct flow into a water body is not possible and no additional impacts are created. All Effluent discharges shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of any Grab Sample (mg/L)
Total Ammonia	16	32
Total Arsenic	0.5	1.00
Total Chloride	1000	2000
Total Copper	0.30	0.60
Total Lead	0.20	0.40

Total Nickel	0.50	1.00
Total Zinc	0.50	1.00
Total Suspended Solids (TSS)	25	50
Total Dissolved Solids (TDS)	1400	1400
Oil and Grease	No visible sheen	No visible sheen
pH	6.0-9.5	6.0-9.5

15. All discharges shall be released in such a manner to minimize surface erosion. Upon confirming compliance required of Part D, Item 14, water to be released to the environment may be used for other industrial purposes, including use for dust suppression activities on roads and quarries as well as drilling.
16. In the event that Effluent planned for discharge exceeds the limits provided in Part D, Items 10, 13 and/or 14, the Licensee shall investigate the cause of the noted exceedance and report any findings, along with planned mitigation measures to meet these limits, prior to any discharge.
17. The Licensee shall provide at least ten (10) days' notification to an Inspector, prior to initiating the release of Effluent from any facilities in this Part. The notice shall include water quality results, an estimate of volume and the proposed receiving location.
18. The Licensee shall maintain all constructed facilities, including the Wastewater Treatment Facilities, Bulk Fuel Storage Facility, Portal/Ramp, Services and Operation Pads, Quarry and Containment Pond(s), to the satisfaction of an Inspector.

PART E: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS

1. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
2. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake corrective measures in the event of any impacts on surface drainage.
3. The Licensee shall construct all winter lake and stream crossings, including ice bridges, entirely of water, ice or snow. The Licensee shall minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring break-up.
4. With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed at a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter Water.

5. The Licensee shall not mobilize heavy equipment or vehicles for trenching or other activities unless the ground surface is capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall be suspended if rutting occurs.
6. The Licensee shall submit to the Board for review, at least sixty (60) days prior to construction, an Acid Rock Drainage and Metal Leaching (ARD-ML) Characterization Plan for Amaruq site, including underground and operations and quarrying.
7. The Licensee shall implement the Plan entitled: “Amaruq Gold Project Quarrying Management Plan” dated November 2015 and originally approved by the Board.
8. The Licensee shall submit to the Board for review within thirty (30) days prior to construction, issued-for-construction drawings for all engineered project infrastructures (i.e. roads, camp pad construction, water crossings) stamped by a qualified Engineer. A Construction Summary Report including as-built plans and drawings stamped by a qualified Engineer shall be submitted to the Board within ninety (90) days of completing construction undertakings.
9. The Licensee shall maintain a minimum of thirty-one (31) metres large undisturbed buffer zone between the periphery of quarry sites and the high water mark of any water body. The Licensee shall not excavate and/or remove material from the quarry beyond a depth of one (1) meter above the high water mark or above the groundwater table, to prevent the contamination of groundwater. The quarrying shall be in accordance with all applicable legislation and industry standards including the *Northern Land Use Guidelines, Pits and Quarries* (INAC, 2010).
10. Sediment and erosion control measures shall be implemented prior to and maintained during the construction and operation where necessary to prevent entry of sediment into water.
11. The Licensee shall ensure that all containment and runoff control structures are constructed and maintained to prevent escape of wastes to the surface or groundwater systems.
12. The Licensee shall limit any in-stream activity including crossing/fording to low water period. Machinery fording the watercourse to bring equipment required for construction to the opposite side is limited to a one-time event (over and back) and should occur only if an existing crossing at another location is not available or practical to use. In-stream activity is prohibited during fish migration.
13. The Licensee shall only use rock for construction that is determined to be non-acid generating and non-metal leaching.
14. The Licensee shall, for the purposes of clear span bridge installation, ensure that all activities remain outside of the natural channel width by the placement of abutments, footings or armoring above the ordinary high water mark so that there is no restriction to the natural channel processes.

15. With respect to construction or other earthworks where direct or indirect flow into a water body is possible, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the water.
16. All surface runoff during the construction of any facilities, where flow may directly or indirectly enter a water body, shall meet the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids	50.0	100.0

17. The Licensee shall ensure that all construction of engineered structures is supervised and field checked by an appropriately qualified and experienced Engineer in such a manner that the project specification can be enforced and, where required, and the quality control measures can be followed. The Licensee shall maintain and make available at the request of the Board and/or an Inspector, all construction records of all engineered structures.

PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS AND TRENCHING

1. The Licensee shall not conduct any land-based drilling / trenching within thirty-one (31) metres of the ordinary High Water Mark of any water body, except drilling specified in Part F, Item 2, and unless otherwise approved by the Board in writing.
2. The Licensee is authorized to conduct land-based drilling within thirty-one (31) metres of the ordinary High Water Mark of any water body during winter conditions within the project area, as identified in the Amendment Application and associated documents received on April 8, 2011.
3. The Licensee shall, when conducting drilling within thirty-one (31) metres of the ordinary High Water Mark, carry out activities on stable ground such as frozen tundra or bedrock, to prevent disturbance to the natural ground and limit erosion and sedimentation.
4. The Licensee is authorized to conduct drilling based on barge within two lakes, as described in the Amendment Application and associated documents received in July / August, 2015.
5. The Licensee shall establish water quality conditions of adjacent Waters or Waters immediately downstream of any drilling program within thirty-one (31) metres of the ordinary High Water Mark of any water body:
 - a. prior to any such drilling program as per Part J, Item 9;
 - b. upon completion of any such drilling program; and
 - c. the summer season following any such drilling program.

6. The Licensee shall dispose of all drill waste, including water, chips, muds and salts (CaCl_2) in any quantity or concentration, from land-based and on-ice drilling, in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.
7. If artesian flow is encountered, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface waters. The Licensee shall report all artesian flow occurrences within the Annual Report, including the location (GPS coordinates) and dates.
8. Drilling additives or mud shall not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water, or are demonstrated to be non-toxic.
9. For “on-ice” drilling where drill additives are not being used, return water released must be nontoxic, and not result in an increase in total suspended solids in the immediate receiving waters, above the Canadian Council of Ministers for the Environment, Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).
10. The Licensee shall establish water quality conditions prior to and upon completion of any drilling program through lake ice.
11. The Licensee shall, during trenching activities utilizing blasting, provide mitigation measures to prevent the transport of rock material, explosives residues, sediment and other materials from entering water as required by Part C, Item 8 and Part E, Item 4.
12. The Licensee shall stockpile all overburden/topsoil generated during trenching using proper erosion prevention measures. Upon completion of operation, the Licensee shall backfill, reclaim/re-contour and re-vegetate all disturbed areas.
13. The Licensee shall provide to the Board for review, at least sixty (60) days prior to the beginning of trenching operations, a proposed Trenching Plan which shall include the following:
 - a. Size and location of trenches including GPS coordinates;
 - b. Approximate dimensions (length, width and depth) of each trench;
 - c. Proposed mitigation measures for the prevention of the transport of sediments, blasting residues, fly rock and other materials, from the trench area to nearby water bodies;
 - d. Projected volume and quality of water discharged from each trench with potential treatment required; and
 - e. Proposed monitoring program to be carried out on trench waste water prior to discharge.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. such Modifications do not place the Licensee in contravention of the Licence or the Act;
 - c. such Modifications are consistent with the NIRB Screening Decision;
 - d. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.
3. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Licensee shall implement the Plan entitled “*Amaruq Gold Project Spill Contingency Plan Meadowbank Exploration Camp, Drill Sites, Portal/Ramp and Quarry*”, updated March 2016 and originally approved by the Board.
2. The Licensee shall prevent any chemicals, petroleum products or wastes associated with the project from entering Water. All sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body and inspected on a regular basis. An exception to this condition is provided for in Part H, Item 4.
3. The Licensee shall provide secondary containment for a limited fuel supply and all external pumps and motorized equipment used in drilling operations as authorized per Part F, Item 2 where drilling occurs within thirty-one (31) metres of the ordinary High Water Mark.
4. The Licensee shall conduct equipment maintenance and servicing in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other waste and contain potential spills.
5. The Licensee shall, subject to Section 16 of the Regulations, report any unauthorized deposits or foreseeable unauthorized deposits of waste and/or discharges of Effluent, and shall:
 - a. Employ the approved Spill Contingency Plan;

- b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
- c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.

PART I: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION OR TEMPORARY CLOSURE

1. The Licensee shall implement the Plan entitled “*Conceptual Closure and Reclamation Plan & Reclaim Estimate*”, updated March 2016 and originally approved by the Board.
2. The Licensee shall complete all restoration work prior to the expiry of this Licence.
3. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee’s operations.
4. The Licensee shall backfill and restore all sumps to the pre-existing natural contours of the land.
5. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, water pumps and lines, material and equipment prior to the expiry of this Licence.
6. All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.
7. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
8. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
9. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut’s Environmental Guideline for Site Remediation, 2010. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.
10. The Licensee shall restore all drill holes, trenches and disturbed areas to natural conditions immediately upon completion of the drilling or trenching. The restoration of drill holes must include the removal of any drill casing materials and if having encountered artesian flow, the capping of holes with a permanent seal. Where drill casings cannot be removed the Licensee shall cut off the casings at ground level and identify with signage.

11. The Licensee may leave the casings on site, if it intends to continue drilling in existing casings, but shall add signaling to keep the area safe for the other territory users. The drill casings left cannot stay on the field for more than 2 years after the drilling.
12. The Licensee may store drill cores produced by the appurtenant undertaking in an appropriate manner and location at least thirty-one (31) metres above the ordinary High Water Mark of any adjacent water body, where any direct flow into a water body is not possible and no additional impacts are created.
13. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp at Monitoring Station MEA-1, and for drilling and other purposes.
2. The Licensee shall, at a minimum, maintain Monitoring Stations at the following locations:

Monitoring Station	Description	Status
MEA-1	Amaruq (IVR) Camp Water Intake and sources for industrial/drilling	Volume
MEA-2	Effluent discharged from the Wastewater Treatment System “Bionest” (WWTS)	Volume and Effluent Quality
MEA-3	Effluent discharged from the Bulk Fuel Storage Facilities	Volume and Effluent Quality

3. The Licensee shall sample the effluent discharging from the WWTS at Monitoring Station MEA-2 prior to its release into environment in order to provide confirmation of effluent quality as required by Part D, Item 10, for the following parameters:

pH	Fecal Coliforms
Biochemical Oxygen Demand (BOD ₅)	Oil and Grease (and visual)
Total Suspended Solids (TSS)	

4. The Licensee shall sample the effluent discharging from the Bulk Fuel Storage Facilities at Monitoring Station MEA-3 prior to its release into environment in order to provide confirmation of effluent quality as required by Part D, Item 13.
5. The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of water are utilized for all purposes.
6. The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where wastes associated with camp operations and exploration activities are deposited including sump locations associated with drilling and drill casings left as stuck and cut off and for further drilling in casings.
7. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all drill holes located within thirty-one (31) metres of the ordinary High Water Mark, as per Part F, Item 2, and provide these locations on a map of suitable scale for review as part of the annual report.
8. The Licensee shall establish background and post drilling water quality for pH, conductivity, temperature and dissolved oxygen at the nearest downstream water body to drill locations. Monitoring is to be done just prior to commencement of drilling and weekly thereafter, concluding one week after drilling has been completed and the site restored.
9. The Licensee shall obtain representative samples of the water column below any ice where required under Part F, Items 9 and 10. Monitoring shall include, at a minimum, the following:

Group	Parameters
Physical Parameters	pH, electrical conductivity, total suspended solids.
Major Ions	Calcium, chloride, magnesium, potassium, sodium, sulphate.
Total Metals	Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, tin, titanium, uranium, vanadium and zinc.

10. The Licensee shall establish baseline water quality conditions prior to drilling within thirty-one (31) metres of the ordinary High Water Mark as per Part F, Items 2 and 3. Monitoring shall include the following:

Group	Parameters
Physical Parameters	pH, electrical conductivity, total suspended solids, turbidity.
Major Ions	Calcium, chloride, magnesium, potassium, sodium, sulphate.
Total Metals	Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, tin, titanium, uranium, vanadium and zinc.

11. The Licensee shall, where turbidity is observed in adjacent waters or waters immediately downstream of any drilling program conducted within thirty-one (31) metres of the ordinary High Water Mark of any water body, during summer following any such drilling program as per Part F, Item 5 (c), conduct additional monitoring of the parameters listed in Part J, Item 10 to determine whether any further mitigation is required.
12. The Licensee shall monitor runoff and/or discharge from the quarry sites to receiving environment, during blasting activities, during periods of flow and following significant precipitation events, on a monthly basis, for the following parameters:

Group	Parameters
Physical Parameters	pH (field and laboratory), temperature (field), alkalinity, bicarbonate, carbonate, electrical conductivity, hardness, hydroxide, ion balance, total dissolved solids, total suspended sediments.
Nutrients	Ammonia-nitrogen, nitrate nitrogen, nitrite-nitrogen, ortho-phosphate.
Major Ions	Calcium, chloride, magnesium, potassium, sodium, sulphate.
Total Metals	Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, tin, titanium, uranium, vanadium and zinc.

13. The Licensee shall, during periods of flow and just after a major rainfall event, conduct water quality testing immediately upstream and downstream of the water crossings, any significant water seeps in contact with the road and any flows originating from borrow pits or rock quarries on a monthly basis prior to construction, during the construction and upon completion for the parameters listed under Part J, Item 11.
14. The Licensee shall implement a water crossings visual inspection and maintenance program prior to, during spring freshet and after heavy rainfall events to identify issues related to watercourse crossings structural integrity and hydraulic function.

15. The Licensee shall annually review the approved by accredited laboratory Quality Assurance/Quality Control plan and modify it as necessary. Proposed changes shall be submitted to an accredited laboratory for approval.
16. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board in writing.
17. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
18. The Licensee shall include in the Annual Report required under Part B, Item 2 and in Construction Summary Report required under Part E, Item 8 all data, monitoring results and information required by this Part.
19. Additional monitoring may be requested by the Inspector.



NUNAVUT WATER BOARD

WATER LICENCE NO: 2AM-MEA1525



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Licence No. 2AM-MEA2033

Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

AGNICO-EAGLE MINES LIMITED

(Licensee)

145, KING STREET EAST, SUITE 400, TORONTO, ONTARIO M5C 2Y7

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or deposit waste for a period subject to restrictions and conditions contained within this Licence:

Licence Number/Type:	2AM-MEA1525 / Type "A"
Water Management Area:	QUOICH / BACK WATERSHEDS (09 / 31)
Location:	MEADOWBANK GOLD MINE KIVALLIQ REGION, NUNAVUT
Purpose:	WATER USE AND DEPOSIT OF WASTE
Description:	MINING UNDERTAKING
Quantity of Water not to be Exceeded:	9,120,000 CUBIC METRES ANNUALLY AS PER PART E
Date Licence Issuance:	JULY 23, 2015
Expiry of Licence:	JULY 22, 2033

This Licence issued (**Motion Number TBD**) and recorded at Gjoa Haven, Nunavut includes and is subject to the annexed conditions.

Lootie Toomasie
Nunavut Water Board
Hearing Chair

APPROVED Dan Vandal
BY: Minister of Northern Affairs

**DATE LICENCE
APPROVED:** _____



PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. SCOPE

- a. This Licence authorizes Agnico-Eagle Mines Ltd. (“AEM” or “Licensee”) to use Waters and deposit of Waste in support of a Mining Undertaking classified as per Schedule 1 of the Regulations, at the Meadowbank Gold Mine (Project) as outlined in the Type “A” Water Licence Renewal Application (Application) submitted to the Nunavut Water Board (NWB or Board) on August 05, 2014 and as reviewed throughout the regulatory process. The scope of the activities, works and Undertakings authorized under this Licence also includes Meadowbank Gold Mine Project infrastructure used by the Whale Tail Pit Project as outlined in the water licence applications submitted by AEM to the Nunavut Water Board (NWB) on July 8, 2016 and May 16, 2019.
- b. The Licensee may conduct mining, milling and associated activities at the Meadowbank Gold Mine in the Kivalliq Region of Nunavut (65° 01’ 33’’ N, 96° 04’ 01’’ W) including, in general, as follows:
 - Use of water from Third Portage Lake for mining and milling, associated activities and domestic purposes;
 - Withdrawal and use of water from unnamed lake approximately 250 metres from the Emulsion Plant for use in explosives mixing;
 - Withdrawal and use of water from Third Portage Lake and Wally Lake for the re-flooding of open pits following pit development;
 - Quarrying of materials from specified locations;
 - Operation of mine site facilities including bulk fuel storage, mill, shops, offices, laboratory, warehouse, camp, and explosives mixing;
 - Operation of a camp at the Meadowbank Mine site;
 - Operation of the Baker Lake Marshalling Facility;
 - Operation of the All Weather Access Road, site roads, airstrip, and Water crossings;
 - Construction and operation of the Portage Waste Rock Storage Facility and the Vault Waste Rock Storage Facility;
 - Operation of a Sewage Treatment Plant and controlled discharge of treated Effluent during operations;
 - Set-up and operation of a diesel fired equipment including the Waste Incinerator;
 - Construction and operation of Contact and Non-Contact Water management systems;
 - Construction and operation of an Operations Landfill and a Demolition Landfill in the Portage Waste Rock Storage Facility;
 - Operation of a Landfarm;
 - Operation of the Portage Attenuation Ponds and the Vault Attenuation Pond;



- Management and disposal of Wastes associated with the Sewage Treatment Plant, the Portage Waste Rock Storage Facility, Vault Waste Rock Storage Facility, Portage Attenuation Pond, Vault Attenuation Pond, Reclaim Pond, Operations Landfill, Demolition Landfill, Landfarm, Composter, Incinerator, and other wastes as described in the Water Licence Application;
 - Handling and storage of petroleum products and hazardous materials including explosives, cyanide and other reagents;
 - Construction of a Central Dike, Stormwater Dike, Saddle Dams, Portage Attenuation Pond and Reclaim Pond needed for the operation of the northwest arm of Second Portage Lake as a Tailings Storage Facility;
 - Deposition of tailings into the Tailings Storage Facility;
 - Controlled and regulated Discharge of Effluent to Third Portage Lake from the Portage Attenuation Pond;
 - Controlled and regulated Discharge of Effluent to Wally Lake from the Vault Attenuation Pond;
 - Re-flooding of Portage, Goose Island, and Vault open pits following pit development;
 - Management and disposal of Wastes associated with the Whale Tail Pit Project;
 - Planning for, and carrying out Adaptive Management actions (including all potential activities and facilities described in the Adaptive Management Plan, as approved); and
 - Progressive Reclamation and Abandonment planning of on-site facilities and infrastructure.
- c. This Licence is issued subject to conditions contained herein with respect to the use of Waters and the deposit of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the Act, this Licence shall be deemed to be subject to such requirements.

[Note: see Whale Tail licence for rationale for suggested revision.]

- d. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with all applicable legislation.

2. DEFINITIONS

- e. The Licensee shall refer to Schedule A for definitions of terms used in this Licence.

3. ENFORCEMENT



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- f. Failure to comply with this Licence may be a violation of the Act, subjecting the Licensee to the enforcement measures and the penalties provided for in the Act.



- g. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the Act.
- h. For the purpose of enforcing this Licence and with respect to the use of Waters and deposit of Waste by the Licensee, Inspectors appointed under the Act, hold all powers, privileges and protections that are conferred upon them by the Act or by other applicable laws.

PART B: GENERAL CONDITIONS

1. The amount of Water use fees shall be determined and payment of those fees shall be made in accordance with section 12 of the *Regulations*.
2. The Licensee shall file an Annual Report with the Board no later than March 31st in the year following the calendar year being reported. The Annual Report shall be developed in accordance with [Schedule B](#).
3. The Licensee shall retain and have a copy of this Licence available at the site of operations at all times.
4. Any communication with respect to this Licence shall be made in writing to the attention of:

Manager of Licensing, Nunavut Water Board
P. O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca
5. Any notice made to an Inspector shall be made in writing to the attention of:

Water Resources Officer
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445
6. The Licensee shall submit one (1) paper copy and one (1) electronic copy of all reports, studies, and plans to the Board unless otherwise requested by the Board. Reports or studies submitted to the Board by the Licensee shall include an executive summary in English, Inuktitut, and French.
7. This Licence is assignable as provided in Section 44 of the *Act*.



8. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.
9. Other than changes associated with Adaptive Management, the Licensee shall notify the Board of any changes in operating plans or conditions associated with this Project at least sixty (60) days prior to any such change. *[Note: see Whale Tail licence for rationale for suggested revisions.]*
10. The Licensee shall post signs in the appropriate areas to inform the public of the location of the Water Supply Facilities and the Waste Disposal Facilities. All signs must be in English, Inuktitut and French and shall be located and maintained to the satisfaction of an Inspector.
11. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written Board approval and direction. The Board may request that the Licensee alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan. *[Note: see Whale Tail licence for rationale for suggested revisions.]*
12. In the event that a Plan is not found acceptable to the Board, the Licensee shall provide a revised version to the Board for review addressing the Board's specified deficiencies within thirty (30) days of notification by the Board which clearly outlines the revisions to the Plan. The Board shall issue a final approval decision within fifteen (15) days of receipt of the revised version of the Plan. *[Note: see Whale Tail licence for rationale for suggested revisions.]*
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 must be approved by the Board.
 - a. Aquatic Effects Monitoring Program (AEMP), Version 3 (November 2015);
 - b. Core Receiving Environment Monitoring Program (CREMP), Design Document, Version 2 (November 2015);
 - c. Water Quality Monitoring and Management Plan for Dike Construction and Dewatering, Version 4 (June 2016);
 - d. Groundwater Monitoring Plan, Version 10 (July 2019);
 - e. Quality Assurance/Quality Control (QA/QC) Plan, Version 5 (April 2019);
 - f. Water Quality and Flow Monitoring Plan, Version 5 (March 2016);
 - g. Emergency Response Plan, Version 6 (Aug. 2013);
 - h. Hazardous Materials Management Plan, Version 4 (March 2019);
 - i. Spill Contingency Plan, Version 7 (April 2019);
 - j. Operational ARD/ML Testing and Sampling Plan, Version 5 (April 2019);
 - k. Meadowbank and Whale Tail Bulk Fuel Storage Facilities: Environmental Performance Monitoring Plan, Version 4, (March 2019);



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- l. Incinerator Waste Management Plan, Version 8 (September 2018);
- m. Interim Closure and Reclamation Plan, Version 0 (May 2019);



- n.
 - o. Landfarm Design and Management Plan, Version 4 (March 2017);
 - p. Landfill Design and Management Plan, Version 4 (September 2018);
 - q. 2013 Water Management Report and Plan, Version 7 (March 2019);
 - r. Ammonia Management Plan, Version 2 (March 2015);
 - s. Dewatering Dikes: Operation, Maintenance and Surveillance Manual, Version 2 (March 2019);
 - t. Tailings Storage Facility : Operation, Maintenance and Surveillance Manual, Version 9 (February 2019);
 - u. Mine Waste Rock and Tailings Management Plan, Version 9 (July 2019);
 - v. Operation and Maintenance Manual: Sewage Treatment Plan, Version 6 (March 2017); and
 - w. Freshet Action Plan, (March 2019).
14. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
15. 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 or a replacement Plan or Plans when and as the need arises, complete with a revision list detailing where significant content changes are made. *[Note: see Whale Tail licence for rationale for suggested revisions.]*
16. The Licensee may consolidate and streamline one or more approved Plans to support efficient site management and operations and communication with Inspectors and regulators. *[Note: see Whale Tail licence for rationale for suggested revisions.]*
17. The expiry of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirements. *[Note: see Whale Tail licence for rationale for suggested revisions.]*
18. The cancellation of this Licence relieves the Licensee from all obligations imposed by the Licence. *[Note: see Whale Tail licence for rationale for suggested revisions.]*
19. The Schedules attached to this Licence provide details regarding the requirements associated with specific items in the main body of the Licence and are included in the Schedule to provide greater clarity and as an aid to interpretation for the Licensee. If the



Board subsequently determines that an item in any of the Schedules requires revision in order to better reflect the intent and objectives of the Licence, the Board may at its discretion, and upon consulting and providing written notice to the Licensee and interested parties, revise the Schedule accordingly. Unless the Board directs otherwise, such revision may not necessarily be considered as an “Amendment” to the Licence.

20. Unless otherwise stated, references in the Licence to any specific legislation, policy, guideline or other regulatory requirement are deemed to refer to the regulatory requirement as may be amended or as may be expressly replaced by successor legislation, policy, guidelines or other regulatory requirements after the Licence is approved by the Minister.
[Note: see Whale Tail licence for rationale for suggested revisions.]

PART C: CONDITIONS APPLYING TO SECURITY

1. The Licensee shall, within thirty (30) days following the approval of this Amendment by the Minister, furnish and maintain security with the Minister in the amount of \$44,713,873. As set out in the Meadowbank Security Management Agreement, May 17, 2016 Version (as subsequently updated by the parties), the amount secured under this Part constitutes 50% of the total global security amount of \$89,427,746 that is required to reclaim the Undertaking, and also reflects that the remaining 50% of the global security amount will be held outside the Licence by the Kivalliq Inuit Association, in accordance with the terms and conditions of the Meadowbank Security Management Agreement.



2. The security held under Part C, Item 1 shall be in a form that is satisfactory to the Minister and consistent with the Act and Regulations.
3. The Licensee shall, within ten (10) days after furnishing security with the Minister, provide evidence to the NWB and the Kivalliq Inuit Association, that the security has been received by the Minister, indicating the amount, form, nature and conditions of the security.
4. The Licensee shall, within ten (10) days after furnishing security with the Kivalliq Inuit Association, provide evidence to the NWB and to the Minister, that the security has been received by the Kivalliq Inuit Association, indicating the amount, form, nature and conditions of the security.
5. The Licensee shall provide the Board with at least ninety (90) days written notice prior to any termination by the Licensee of the Meadowbank Security Management Agreement, or any material change to the Meadowbank Security Management Agreement that may affect the amount of security held under Part C, Item 1.
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 arising from unexpected changes or modifications of the works and activities associated with the Undertaking.
7. The Licensee shall, within twelve (12) months following the commencement of Operations and when the Licensee files a Final Reclamation and Closure Plan as required under the Licence, submit to the Board for review an updated reclamation cost estimate, using the RECLAIM Reclamation Cost Estimating Model (Version 7.0 or the most current version in use at the time the updated reclamation cost estimate is submitted to the Board).
8. Upon the Board receiving notice under Part C, Items 5 or 6, or upon receiving an updated reclamation cost estimate as required under Part C, Item 7, the Board may, on its own initiative, or upon application by the Licensee, the Minister and/or the Kivalliq Inuit Association, conduct a periodic review of the outstanding reclamation liability associated with the Undertaking and may, as the Board considers appropriate, amend the amount of security held under Part C, Item 1. If the Nunavut Water Board determines it to be necessary or upon the request of the Proponent, the Minister and or the KIA, the Nunavut Water Board may issue further direction with respect to the process for the Board's conduct of periodic reviews of security and associated amendments to the amount of security to be furnished and maintained under the Licence.
9. The Licensee may, at any time, submit to the Board for consideration and approval, a request to change the amount of security outlined in Part C, Item 1. The submission shall include supporting evidence to justify the request, and the Minister and the Kivalliq Inuit Association will be consulted by the Board during the Board's consideration of this request. Such requests may take into account the Water Monitoring Reduction Framework attached as Schedule C. *[Note: Attach Schedule C as per Whale Tail licence. see Whale Tail licence for rationale for suggested revisions.]*



10. If the Board determines it to be necessary, or upon the request of Licensee, the Minister and/or the Kivalliq Inuit Association, the Board may issue further directions under this Part with respect to the process for amending the amount of security to be furnished and maintained under the Licence.
11. The security referred to in Part C, Item 1 shall be maintained until such time as the Minister is satisfied that the Licensee has complied with all provisions of the approved Final Closure and Reclamation Plan and as it is fully or in part refunded by the Minister pursuant to Section 76(5) of the Act, subject to the following. Consideration will be given to progressive release of security by the Minister as activities included in the approved Interim Closure and Reclamation Plan are completed. This clause shall survive the expiry of the Licence or renewals thereof and until the Minister is satisfied that the Licensee has complied with all provisions of the approved Final Closure and Reclamation Plan. *[Note: see Whale Tail licence for rationale for suggested revisions.]*
12. The Board may approve modifications to the Monitoring Program for all phases of mining as set out in Schedule I without amendment or a public hearing. Requests for changes to the Monitoring Program should be forwarded to the Board in writing and shall include justification for the change. *[Note: see Whale Tail licence for rationale for suggested revisions.]*

PART D: CONDITIONS APPLYING TO NEW CONSTRUCTION

1. The Licensee shall submit to the Board for approval, at least six (6) months prior to Construction of the Saddle Dams, or new dikes, final design and construction drawings accompanied by a detailed assessment report from the Independent Geotechnical Expert Review Panel.
2. The Licence shall submit to the Board for review, at least one (1) year prior to commissioning, final design and construction drawings of the Demolition Landfill.
3. If it is determined that the easternmost channel of Third Portage Lake requires capacity upgrading, the Licensee shall submit to the Board and DFO for review, at least six (6) months prior to construction, a management plan including final design and construction drawings of the channel modification.
4. The Licensee shall use fill material for construction only from approved sources that have been demonstrated by appropriate geochemical analyses to not produce Acid Rock Drainage and to be Non-Metal Leaching, and free of contaminants.
5. The Licensee shall submit for approval, at least thirty (30) days prior to new construction, a Final Water Quality Monitoring and Management Plan for Dike Construction and Dewatering. The Plan shall include a protocol to monitor and maintain Water levels in Third Portage Lake, Second Portage Lake and Wally Lake within natural variation.
6. During new dike construction, the Licensee shall implement the action plans outlined in the approved Final Water Quality Monitoring and Management Plan for Dike Construction and



Dewatering if:

- a.* Total Suspended Solids (TSS) levels in a single sample exceed the Short Term Maximum TSS concentration defined in Part D Item 7;
 - b.* The 7-day moving average TSS concentration exceeds the Maximum Monthly Mean TSS concentration defined in Part D Item 7.
7. Unless otherwise approved by the Board, the Licensee shall compare TSS levels as required in Part D Item 6 to the following Maximum Monthly Mean and Short Term Maximum concentrations:



Parameter	Maximum Monthly Mean (mg/L)	Short Term Maximum (mg/L)
TSS in areas where there is spawning habitat and at times when eggs or larvae are expected to be present (applied at monitoring stations located closest to the high value shoal areas starting Sept 1, 2008)	6	25
TSS in all other areas and at times when eggs/larvae are not present	15	50
TSS in impounded areas (e.g. northwest arm of Second Portage Lake) at all times in all areas.	15	50

8. Unless otherwise approved by the Board, Effluent from new dewatering activities shall be monitored at Monitoring Stations ST-DD- 1 to ST-DD-TBD and not exceed the following Effluent quality limits:

Parameter	Maximum Monthly Mean	Short Term Maximum
Total Suspended Solids (TSS)	15.0 mg/L	22.5 mg/L
Turbidity	15 NTU	30 NTU
pH	6.0 to 9.0	6.0 to 9.0
Total Aluminum	1.5 mg/L	3.0 mg/L

[Note: see Whale Tail licence for rationale for suggested revisions.]

9. All Effluent from the Sewage Treatment Plant shall be directed to the Stormwater Management Pond. Any discharge of the Stormwater Management Pond shall be directed to the Tailings Storage Facility.
10. The Licensee shall implement sediment and erosion control measures prior to and during Construction, and Operations where necessary, to prevent entry of sediment into Water.
11. The Licensee shall inspect daily, all construction activities for signs of erosion that may affect surface water discharging to Third Portage Lake, Second Portage Lake and Wally Lake.
12. Unless otherwise approved by the Board, all surface runoff during the construction of any facilities, where flow may directly or indirectly enter a Water body, shall be sampled Weekly and not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids (TSS)	50.0	100.0



13. The Licensee shall, during the construction of all engineered structures, provide the required supervision and field checks by an appropriately qualified and experienced Engineer in such a manner that the project specification can be enforced and, where required, the quality control measures can be followed. The Licensee shall maintain all construction records of all engineered structures to be made available at the request of the Board and/or an Inspector.
14. The Licensee shall submit to the Board for review, within ninety (90) days of completion of each facility designed to contain, withhold, divert or retain waters or wastes during the construction phase, a Construction Summary Report prepared by a qualified Engineer(s) in accordance with [Schedule D, Item 1](#).
15. The Licensee shall prevent any chemicals, petroleum products, fuel or wastes associated with the undertaking from entering any Water body except in accordance with this Licence.

[Note: see Whale Tail licence for rationale for suggested revisions.]

16. The Licensee shall minimize disturbance to terrain, permafrost and drainage during movement of contractor's equipment and personnel around the site during construction activities.
17. The Licensee shall not store material on the surface of frozen streams or lakes except what is for immediate use.
18. The Licensee shall locate equipment storage areas on gravel, sand or other durable land, a distance of at least thirty one (31) metres above the ordinary High Water Mark of any water body in order to minimize impacts on surface drainage and water quality.
19. The Licensee shall undertake appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's operations.
20. The Licensee shall limit any in-stream activity to low Water periods. In-stream activity is prohibited during fish migration.
21. The Licensee shall, for the purposes of bridge construction, ensure that all activities remain outside of the natural channel width by the placement of abutments, footings or armouring above the ordinary High Water Mark so that there is no restriction to the natural channel processes.
22. The Licensee shall operate the Mine Site and Marshalling Area Bulk Fuel Storage Facilities in accordance with the following applicable legislation and industry standards:
 - a. *Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, 2003 (Updated in 2013) or most recent; CCME; and*
 - b. *National Fire Code, 2010 or most recent.*



[Note: see Whale Tail licence for rationale.]



23.

The Licensee shall apply the principles of Adaptive Management in construction and operations. For greater clarity, Adaptive Management strategy actions identified in an approved Adaptive Management Plan may be implemented by the Licensee upon notice to the Board and do not require Modification or Amendment to this Licence prior to implementation. *[Note: see Whale Tail licence for rationale.]*

24. New Adaptive Management Actions may be implemented by the Licensee upon 21 days written notice to the Board and do not require Modification or Amendment to this Licence prior to implementation.

25. Notice to the Board must include:

- A description of the rationale for the action (s);
- An evaluation of whether the action may change overall reclamation liability, and if applicable an estimate of any required reduction or increase to security;
- Confirmation that the primary purpose for the action(s) is to prevent, stabilize, or reverse an adverse change in environmental conditions or to otherwise protect the receiving environment;
- A description and location of any facilities and or works to be constructed;
- A description of any new monitoring required, including sampling locations,
- parameters measured and frequency of sampling;
- A proposed schedule for construction;
- Drawings of Engineered Structures stamped by a Professional Engineer (where applicable); and
- If required, any proposed sediment and erosion control measures.

PART E: CONDITIONS APPLYING TO WATER USE AND MANAGEMENT

1. Unless otherwise approved by the Board in writing, the Licensee shall obtain fresh Water from Third Portage Lake at Monitoring Station ST-1 using the Fresh Water Intake Barge for domestic camp use, mining and milling, re-flooding of Portage and Goose Pits and associated use, or as otherwise approved by the Board in writing. The use of Waters from Third Portage Lake, for all purposes, shall not exceed a total of two million three hundred fifty thousand (2,350,000) cubic metres *per* year from the Licence approval date to December 31, 2017, followed by a maximum of four million nine hundred thirty five thousand (4,935,000) cubic metres *per* year, starting in 2018 through to the Expiry of the Licence.
2. Unless otherwise approved by the Board in writing, the Licensee shall obtain fresh Water from Wally Lake at Monitoring Station ST-2 for re- flooding of Vault Pit and associated use, or as otherwise approved by the Board in writing. The use of Waters from Wally Lake shall not exceed a total of four million one hundred eighty five thousand (4,185,000) cubic metres *per* year starting in 2018 through to the Expiry of the Licence.
3. Unless otherwise approved by the Board in writing, the Licensee shall obtain fresh Water from the unnamed lake at Monitoring Station ST-3 for purposes of explosives mixing, not to exceed a maximum of two thousand four hundred (2,400) cubic metres *per* year from



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Licence issuance date to December 31, 2017, or as otherwise approved by the Board in writing.

4. Unless otherwise approved by the Board in writing, the total volume of fresh Water for all uses and from all sources, shall not exceed two million three hundred and fifty thousand (2,350,000) cubic metres *per* year from the Licence approval date to December 31, 2017 followed by nine million one hundred and twenty thousand (9,120,000) cubic metres *per* year in 2018 through to the expiry of the Licence.
5. The Licensee shall maximize to the greatest practical extent, the use of reclaim water from the Tailings Storage Facility for use in the mill.
6. The Licensee shall equip all Water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.
7. The Licensee shall submit a Water Management Plan on an annual basis to the Board for review following the commencement of Operations. The Plan must include an updated Water Balance. The Water Management Plans shall include an action plan to be implemented if predicted re-flooded pit water quality indicates that treatment is necessary. The Licensee shall not breach dikes until the water quality in the re-flooded area meets CCME Water Quality Guidelines for the Protection of Aquatic Life, baseline concentrations, or appropriate site specific water quality objectives. Subject to the Board



approval, if water quality parameters are above CCME Guidelines, a site specific risk assessment must be conducted to identify water quality objectives that are protective of the aquatic environment.

8. The Licensee shall submit a Water Quality Model for pit re-flooding as part of the Water Management Plan which shall be re-calibrated as necessary and updated at a minimum of once every two (2) years following commencement of Operations. The results and implications of the predictive model shall be reported to the Board.
9. The Licensee shall, on an annual basis during Operations and Closure, compare the predicted water quantity and quality within the pits, to the measured water quantity and quality. Should the difference between the Final Environmental Impact Statement water quantity and quality predictions and measured values be 20% or greater, then the cause(s) of the difference(s) shall be identified and the implications of the difference shall be assessed and reported to the Board.
10. The Licensee may include appropriate Site Specific Water Quality Objectives within the Receiving Environment applicable during construction and operations in the approved Water Quality and Flow Monitoring Plan, which Plan may be further modified by the Licensee and approved by the Board from time to time.
11. The Licensee shall carry out weekly inspections of all water management structures during periods of flow and the records be kept for review upon request of an Inspector. More frequent inspections may be required at the request of an Inspector. This information is to be included in the Water Management Plan.
12. The Licensee shall implement measures to minimize the generation and deposition of dust and/or sediment into Water arising from road use.
13. The Licensee shall provide at least thirty (30) days' notice to the NWB and Inspector prior to the commencement of re-flooding of each pit.

PART F: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT

1. The Licensee shall direct all Sewage and Greywater to the Sewage Treatment Plant as described in the Operation and Maintenance Manual: Sewage Treatment Plant, or as otherwise approved by the Board.
2. The Licensee shall dispose of Sewage Effluent and direct all sludge removed from the Sewage Treatment Plant to the Tailings Storage Facility or to the Landfarm as a nutrient amendment in accordance with the Operation and Maintenance Manual: Sewage Treatment Plant as approved by the Board.
3. Unless otherwise approved by the Board, the Discharge of Effluent from the Portage Attenuation Pond at Monitoring Station ST-9 shall be directed to third Portage Lake through the Third Portage Lake Outfall Diffuser and shall not exceed the following



Effluent quality limits:



Parameter	Maximum Average Concentration	Maximum Allowable Grab Sample Concentration
pH	6.0 to 9.0	6.0 to 9.0
TSS (mg/L)	15	30
Turbidity (NTU)	15	15
Total (T)-Al (mg/L)	1.5	1.5
Dissolved (D)-Al (mg/L)	1.0	1.0
T-As (mg/L)	0.3	0.6
T-Cd (mg/L)	0.002	0.004
T-CN (mg/L)	0.5	1.0
T-Cu (mg/L)	0.1	0.2
T-Hg (mg/L)	0.0004	0.0008
NH ₃ -N (mg/L)	16	32
T-Ni (mg/L)	0.2	0.4
T-NO ₃ -N (mg/L)	20	40
T-Pb (mg/L)	0.1	0.2
T-P (mg/L)	1.0	2.0
T-Zn (mg/L)	0.4	0.8
T-Cl ⁻ (mg/L)	1000	2000
Total Petroleum Hydrocarbons (TPH) (mg/L)	3	6

4. Unless otherwise approved by the Board, the Discharge of Effluent from the Vault Attenuation Pond at Monitoring Station ST-10 shall be directed to Wally Lake through the Wally Outfall Diffuser and shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration	Maximum Allowable Grab Sample Concentration
pH	6.0 to 9.0	6.0 to 9.0
TSS (mg/L)	15	30
Turbidity (NTU)	15	15
Total (T)-Al (mg/L)	1.5	3.0
Dissolved (D)-Al (mg/L)	1.0	2.0
T-As (mg/L)	0.1	0.2
T-Cd (mg/L)	0.002	0.004
T-Cu (mg/L)	0.1	0.2
T-Hg (mg/L)	0.004	0.008
NH ₃ -N (mg/L)	20	40
T-Ni (mg/L)	0.2	0.4
T-NO ₃ -N (mg/L)	50	100
T-Pb (mg/L)	0.1	0.2



T-P (mg/L)	1.5	3.0
T-Zn (mg/L)	0.2	0.4
T-Cl ⁻ (mg/L)	500	1000

[Note: see Whale Tail licence for rationale.]

- The Discharge of Effluent from a Final Discharge Point at Monitoring Program Stations ST-9 and ST-10, shall be demonstrated to be non-Acutely Lethal

[Note: see Whale Tail licence for rationale.]

- Unless otherwise approved by the Board, all water collected prior to discharge from the Non-Contact Water diversions (Monitoring Stations ST-5 and ST-6) and East Dike Seepage (Monitoring Station ST-8) during Operations shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Allowable Grab Sample Concentration (mg/L)
TSS	15	30

- Effluent from the Mine Site Bulk Fuel Storage Facility and other fuel containment facilities that are within proximity of the Stormwater Management Pond shall be directed to the Stormwater Management Pond.
- Unless otherwise approved by the Board, the Discharge of Effluent to land from fuel containment facilities at the Baker Lake Bulk Fuel Storage Facility and Meadowbank Fuel Storage Facility (ST-37 through ST-40), shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (MAC)	Maximum Concentration of any single Grab sample
pH	6.0 to 9.5	6.0 to 9.5
Total Arsenic (mg/L)	**0.5	1.0
Total Copper (mg/L)	**0.3	0.6
Total Nickel (mg/L)	**0.5	1.0
Total Zinc (mg/L)	*0.5	1.0
Total Suspended Solids (mg/L)	*15	30
Ammonia (mg/L)	6.0	6.0
Benzene (µg/L)	370	370
Toluene (µg/L)	2	2
Ethylbenzene (µg/L)	90	90
Lead (mg/L)	0.1	0.1
Oil and Grease (mg/L)	5 and no visible sheen	5 and no visible sheen



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- * Environmental Guideline for Industrial Waste Discharges in the NWT, 2004
- ** Metal and Diamond Mining Effluent Regulations (MMER)



9. The Licensee shall, under Part F, Item 8, discharge Effluent in such a manner as to minimize surface erosion at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any Water body, where direct flow into a Water body is not possible and no additional impacts are created, or as otherwise approved by the Board in writing.
10. The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any Water body such that the quality, quantity or flow of Water is not impaired, or as otherwise approved by the Board in writing.
11. The Licensee shall confirm compliance with Effluent quality limits in Part F, Items 3, 4 and 8 prior to Discharge.
12. The Licensee shall provide at least three (3) days notice to the Inspector prior to any planned Discharges from any facilities. The notice shall include the estimated volume proposed for Discharge and the receiving location.
13. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.
14. The Licensee is authorized to dispose of and contain all-non-hazardous solid Wastes at the on-site Landfills in accordance with the approved Landfill Design and Management Plan, dated March 2013, or as otherwise approved by the Board in writing.
15. The Licensee shall direct all solid Waste generated at the Baker Lake Marshalling Facility to the approved Landfill at Meadowbank Mine site.
16. The Licensee shall remove from the Project site, all solid and liquid hazardous Wastes generated through the course of the Operation, for disposal at an approved hazardous waste disposal facility.
17. With the exception of petroleum hydrocarbon contaminated soils to be remediated as per the Landfarm Management Plan, the Licensee shall maintain records of all Waste backhauled and confirmation of proper disposal through the use of Waste manifest tracking systems and registration with the Government of Nunavut, Department of Environment.
18. The Licensee shall dispose of all petroleum hydrocarbon contaminated soils and operate the Landfarm in accordance with the approved Landfarm Design and Management Plan, dated February 2013. Water accumulating in the landfarm shall be contained within the Landfarm and not be discharged to the environment.

The Licensee shall dispose of tailings and operate the Tailings Storage Facility in accordance with the approved Mine Waste Rock and Tailings Management Plan (March 2017), Meadowbank Tailings Storage Facility Management Plan for Whale Tail Pit (January



2017) submitted as part of water licence application for the Whale Tail Pit Project submitted by AEM to the NWB on July 8, 2016, and Guide to the Management of Tailings Facilities (Mining Association of Canada September 1998). The tailings solids fraction shall be permanently contained within the Tailings Storage Facility.

19. The Licensee shall incorporate Seepage management at Quarries using best management practices including ditches, diversions, sumps and berms where necessary.
20. The Licensee shall provide to the Board, at least thirty (30) days prior to any planned disposal of Waste in a facility operated by the Hamlet of Baker Lake, documented authorization from the Hamlet for the use of any waste disposal facility operated by the Hamlet.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications of Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a. The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. Such Modifications do not place the Licensee in contravention of the Licence or the Act;
 - c. Such Modifications are consistent with the NIRB Screening Determination;
 - d. The Board has not, within sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. The Board has not rejected the proposed Modifications.
2. Modifications for which any of the conditions referred to in Part G, Item 1 have not been met can be carried out only with approval from the Board in writing.
3. Applications for modifications shall contain:
 - a. A description of the facilities and/or works to be constructed;
 - b. The proposed location of the structure(s);
 - c. Identification of any potential impacts to the receiving environment;
 - d. A description of any monitoring required, including sampling locations, parameters measured, and frequencies of sampling;
 - e. Schedule for construction;
 - f. Drawings of Engineered Structures stamped by a Professional Engineer; and
 - g. Proposed sediment and erosion control measures.
4. Where a proposed Modification is located outside the existing Project Footprint, the Licensee must also confirm that the proposed Modification is in conformity with the applicable land use plan and that it is not a "significant modification" as that term appears in section 88 and subparagraphs 89 of the *Nunavut Planning and Project Assessment Act*. For greater clarity, a



Modification located within the Project Footprint is not considered a “significant modification” under the *Nunavut Planning and Project Assessment Act*. [Note: see *Whale Tail licence for rationale*.]

The Licensee shall provide to the Board, within ninety (90) days of completion of the Modification, as-built plans and drawings of the Modifications referred to in this Part. These plans and drawings shall be stamped by an Engineer (where applicable).

PART H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING

1. The Licensee shall implement and maintain the Emergency Response Plan, dated August 2013, and the Spill Contingency Plan, dated November 2013, as approved by the Board. The Licensee shall comply with the Plan and any changes deemed significant shall require the submission and subsequent approval of the Board in writing.
2. The Licensee shall prevent any chemicals, petroleum products or unauthorized Wastes associated with the Project from entering Water.
3. The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.
4. The Licensee shall perform weekly inspections of petroleum products storage and containment facilities, fuel tanks and connectors, for leaks and settlement and shall keep a written log of inspections to be made available to an Inspector upon request. More frequent inspections may be requested by an Inspector.
5. If the Licensee provides notification under Part J, Item 4, the Licensee shall submit to the Board, an Addendum to the Emergency Response Plan and the Spill Contingency Plan, detailing the changes in operations, personnel, responsibilities, availability of equipment and access to the site for assistance.
6. The Licensee shall keep a copy of the Emergency Response Plan and the Spill Contingency Plan at each site of operation.
7. The Licensee shall conduct emergency maintenance and servicing on equipment, in designated areas, and shall implement measures to collect motor fluids and other Waste to prevent and contain spills.
8. If, during the period of this Licence an unauthorized discharges or foreseeable unauthorized discharges of waste in excess of the Regulations and the thresholds set out in the Nunavut Spill Planning and Reporting Regulations, and
 - a. Employ the Spill Contingency Plan;
 - b. Report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130, fax at (number) or by electronic mail and to the Inspector at (867) 975-4295 or by electronic mail;
 - c. Information that is reported in person or by telephone must also be reported in writing to an



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PART I: CONDITIONS APPLYING TO GENERAL AND AQUATIC EFFECTS MONITORING

1. The Licensee shall comply with the Aquatic Effects Management Plan (AEMP) as approved by the Board. The AEMP shall include:
 - a. Comprehensive receiving environment monitoring to identify changes to the aquatic environment associated with mine activities;
 - b. Linkage between monitoring results and adaptive management response;
 - c. Monitoring of lake productivity;
 - d. Sampling and analysis plans; and
 - e. Monitoring under Fisheries Authorizations, NWB Licence Compliance Monitoring, Metal and Diamond Mining Effluent Regulations (MDMER) Environmental Effects Monitoring, and Groundwater Monitoring.
2. The Licensee shall implement the Core Receiving Environmental Monitoring Program (CREMP), as approved by the Board. The updated CREMP shall include all comments provided during the technical review of Application.
3. The Licensee shall implement the Water Quality and Flow Monitoring Plan, as approved by the Board.
4. The Licensee shall install and maintain flow meters or other such devices, or implement suitable methods required for the measuring of Water use and Effluent discharge volumes, to be operated and maintained to the satisfaction of an Inspector.
5. The Licensee shall undertake the Monitoring Program provided in the Tables 1 and 2 of Schedule I. The Licensee shall establish the locations and GPS coordinates for all additional monitoring stations in consultation with an Inspector.
6. The Licensee shall establish the locations for the proposed compliance and internal monitoring locations as they relate to existing drainage courses beneath the Portage and Vault Waste Rock Storage Facilities and Tailing Storage Facility dikes to ensure potential seep locations are adequately identified in accordance with the Groundwater Monitoring Plan, as approved by the Board.
7. The Licensee shall install and maintain signs that identify monitoring stations. The signs shall be posted in English, Inuktitut and French.
8. The Licensee shall measure and record the following on a Monthly basis in cubic metres or as otherwise stated:
 - a. The volume of fresh Water obtained from Third Portage Lake;
 - b. The volume of fresh Water obtained from Wally Lake;



- c. The volume of fresh Water from the unnamed lake for purposes of explosives mixing;
 - d. The volume of reclaim water obtained from the Tailings Storage Facility for process water;
 - e. The volume of Effluent and fresh Water transferred to the pit lakes;
 - f. The flow during periods of discharge from the Landfarm, Landfills, Waste Rock Storage Facilities, Sewage Treatment Plant, Contact Water Collection System, and area Sumps collecting Contact Water;
 - g. The volume of water transferred from the Marshalling Area Bulk Fuel Storage Facility;
 - h. The volume of Sewage sludge removed from the Sewage Treatment Plant;
 - i. Quantity of mill tailings placed within the Tailings Storage Facility;
 - j. Tonnes of mineralized and un-mineralized waste rock stored; and
 - k. Tonnes of ore processed through the mill.
9. The Licensee shall undertake the Thermal Monitoring Program detailed in the Mine Waste Rock and Tailings Management Plan as approved by the Board.
10. The Licensee shall undertake a geotechnical inspection, to be carried out annually by a Geotechnical Engineer, between the months of July and September. The inspection shall be conducted in accordance with the *Canadian Dam Safety Guidelines* where applicable and take into account all major earthworks, including:
- a. Dewatering Dikes;
 - b. Stormwater Dikes;
 - c. Saddle Dams;
 - d. Pit walls;
 - e. Tailings Storage Facility;
 - f. Shoreline protection at the location of the Wally Lake and Portage Lake Outfall Diffusers;
 - g. Geotechnical instrumentation;
 - h. All Weather Private Access Road and site roads, in particular water course crossings;
 - i. Quarries;
 - j. Landfills;
 - k. Landfarm;
 - l. Bulk Fuel Storage Facilities at both the Meadowbank mine site and Baker Lake Marshalling area;
 - m. Attenuation Ponds;
 - n. Reclaim Pond; and
 - o. Sumps.
11. The Licensee shall submit to the Board as part of the Annual Report, the Geotechnical Engineer's Inspection Report. The Report shall include a cover letter from the Licensee outlining an implementation plan to address the recommendations of the Geotechnical Engineer.



12. The Licensee shall submit to the Board as part of the Annual Report required under Part B, Item 2, all reports and performance evaluations prepared by the Independent Geotechnical Expert Review Panel.
13. Unless otherwise approved by the Board, the Licensee shall monitor Seepage observations pursuant to Part I, Item 6 according to the following:

Characterization of seepage including: precise location; discharge rates and volumes; respective hazard(s) and consequences and prescribed mitigative measures	Minimum Frequency of Observation
Lake water Seepage Through Dewatering Dikes	Monthly
Seepage (of any kind) Through Central Dike	Monthly
Seepage and Runoff from the Landfill(s)	Quarterly
Subsurface Seepage and Surface Runoff from Waste Rock Piles	Quarterly
Seepage at Pit Wall and Pit Wall Freeze/Thaw and Permafrost Aggradation	Quarterly

14. The Licensee shall submit the results and interpretation of the Seepage monitoring required in Part I, Item 13 in the Annual Report required under Part B, Item 2.
15. The Licensee shall obtain a digital photographic record of all the watercourse crossings before, during, and after construction has been completed.
16. The Licensee shall maintain a Quality Assurance / Quality Control Plan, accepted by the Board that includes requirements for independent third party sampling and analysis. The QA/QC Plan shall be prepared and updated as needed in accordance with and in consultation with the accredited laboratory conducting the analyses. The Plan shall include a cover letter from the accredited laboratory confirming approval of the Plan for analyses to be performed under this Licence. This Plan shall be developed in accordance with current Standard Methods and the 1996 Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class “A” (INAC).
17. The Licensee shall annually review the approved QA/QC Plan and modify the Plan as necessary. Proposed changes shall be submitted to an Accredited Laboratory for approval.
18. All analyses shall be conducted as described in the most recent edition of “*Standard Methods for the Examination of Water and Wastewater*” or by other such methods approved by an Analyst.
19. All compliance analyses shall be performed in an accredited laboratory according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.



20. The Licensee shall submit to the Board, within thirty (30) days following the month being reported, a Monthly Monitoring Report. The Report shall include:
 - a. All data and information required by this Part and generated by the Monitoring Program in the Tables of Schedule I;
 - b. An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in Parts D and F.
21. The NWB can modify the Monitoring Program as set out in Schedule I without a public hearing. Requests for changes to the Program should be forwarded to the NWB in writing, and should include the justification for the change.

PART J: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE

1. The Licensee shall complete all progressive reclamation work in accordance with the Interim Closure and Reclamation Plan referred to in this Part as approved by the Board.
2. The Licensee shall submit to the Board for approval at least twelve (12) months prior to the expected end of planned mining, a Final Closure and Reclamation Plan. The Final Plan shall incorporate revisions, which reflect the pending closed status of the mine, and include:
 - a. Soil Quality Remediation Objectives along with CCME Guidelines and the Government of Nunavut Environmental Guideline for Site Remediation;
 - b. Environmental Site Assessment plans in accordance Canadian Standards Association (CSA) criteria; and
 - c. An evaluation of the Human Health and Ecological Risk associated with closure options.
3. The Licensee shall notify the Board in writing, at least sixty (60) days prior to, or as soon as practically possible, any intent to enter into a Care and Maintenance Phase.
4. The Licensee shall provide the Board, within thirty (30) days of the Licensee providing notice of intent to enter into Care and Maintenance under Part J, Item 4, a Care and Maintenance Plan that details the Licensee's plans for maintaining compliance with the Terms and Conditions of the Licence.



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5. The Licensee shall review the Plans referred to in this Part as required by changes in operation and/or technology and modify the Plans accordingly. Revisions to the Plans should incorporate design changes and Adaptive Management required and implemented during Construction and on the basis of actual site conditions and monitoring results over the life of the Project.
6. The Licensee shall implement progressive reclamation, including progressive covering of the tailings and if practicable re-vegetation.



SCHEDULES

Schedule A: Scope, Definition, and Enforcement

Schedule B: General Conditions

Schedule C: No Schedule for Security

Schedule D: Conditions Applying to Construction

Schedule E: No Schedule for Water Use and Management

Schedule F: No Schedule for Waste Disposal and Management

Schedule G: No Schedule for Modifications

Schedule H: No Schedule for Emergency Response and Contingency Planning

Schedule I: Conditions Applying to General and Aquatic Effects Monitoring

Schedule J: No Schedule for Abandonment, Reclamation and Closure



Schedule A: Scope, Definitions, and Enforcement

[Note: Agnico Eagle has suggested removing defined terms that are not included in current licence wording.]

In this Licence: **2AM-MEA1525**

“Abandonment” means the permanent dismantlement of a facility so it is permanently incapable of its intended use. This includes the removal of associated equipment and structures;

“Act” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“Acid Rock Drainage (ARD)” means the production of acidic leachate, seepage or drainage from underground workings, open pits, ore piles, waste rock, construction rock that can lead to the release of metals to groundwater or surface water during the life of the Project and after closure;

“Acutely Lethal Effluent” means as defined by the MDMER *and* as amended from time to time. *“in respect of an Effluent means that the effluent at 100% concentration kills (a) more than 50% of the rainbow trout subjected to it for a period of 96 hours, when tested in accordance with the acute lethality test set out in section 14.1 [of the MDMER]; or (b) more than 50% of the threespine stickleback subjected to it for a period of 96 hours, when tested in accordance with the acute lethality test set out in section 14.2. [of the MDMER]”*;

“Adaptive Management” means a management plan that describes a way of managing risks associated with uncertainty and provides a flexible framework to identify specific thresholds and associated management actions to be taken when specified thresholds are exceeded. Mitigation measures may include special studies, operational changes, revised or new water and waste management systems, structures and or facilities, or implementing mitigation activities to prevent, stabilize or reverse a change in environmental conditions or to otherwise protect the receiving environment;

“Addendum” means the supplemental text that is added to a full plan or report, usually included at the end of the document and is not intended to require a full resubmission of the revised report. It may also be considered as an appendix or supplement;

“All Weather Access Road” means the all weather access road and associated water crossings between the Hamlet of Baker Lake and the Meadowbank Gold Project site as described in the *“Tehek Access Road Construction, Meadowbank Gold Project”*;

“Amendment” ; means a change to any terms and conditions of this Licence through application to the NWB, requiring a change, addition, or deletion of specific terms and conditions of the Licence not considered as a Modification and for greater clarity, proceeding with Adaptive Management and or a New Adaptive Management Action shall not require an Amendment;;

“Analyst” means an Analyst designated by the Minister under section 85 (1) of the *Act*;



“Annually” means, in the context of monitoring frequency, one sampling event occurring every 365 days with a minimum of 200 days between sampling events;

“Aquatic Effects Management Program (AEMP)” means an overarching “umbrella” program that conceptually provides an opportunity to integrate results of individual, but related, monitoring programs in accordance with the Licence;



“Baker Lake Marshalling Facility” means the facilities associated with the Meadowbank Project, located within the Hamlet of Baker Lake, that includes the barge unloading facilities, a lay-down, storage and marshalling area, a fuel tank farm, ammonium nitrate and explosive storage areas, and associated access roads

“Batch Concrete Plant” means the plant used to mix cement, aggregate, and water to produce concrete for footings, foundations and floors during construction as described in the *“Pre-Development Batch Concrete Plant Description Agnico-Eagle Meadowbank Project”*;

“Bay-Goose Dike” means the structure designed to isolate a portion of Third Portage lake, referred to as “Goose Island Basin”, to permit dewatering and mining of the Goose Island Pit and southern portion of Portage Pit as indicated in the document entitled *“Bay-Goose Dike Construction As-Built Report Meadowbank Gold Mine, Nunavut”*, dated April 2013, and illustrated in the attached As-Built DWGs 4200-01 to 4200-06, , 4200-10, 4200-11A, 4200-11B, 4200-12 to 4200-23, 4200-30 to 4200-35, 4300-00 to 4300-32, 4300-43 to 4300-52, Golder Associates Project Number 09-1428-5007;

“Biannual” means, in the context of monitoring frequency, one sampling event occurring every six months with a minimum of one hundred eighty days between sampling events;

“Board” means the Nunavut Water Board established under Article 13 of the *Nunavut Land Claims Agreement* and under section 14 of the Act;

“Canadian Council of the Minister of Environment (CCME)” means the organizations of Canadian Ministers of Environment that sets guidelines for environmental protection across Canada such as the Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life;

“Care and Maintenance” in respect of a mine, means the status of the facility when the Licensee ceases production or commercial operation temporarily for an undefined period of time;

“Central Dike” means the structure, designed to isolate the south cell portion of the Meadowbank Tailings Storage Facility for the purpose of retaining tailings as described in the approved plans and reviewed by the Independent Geotechnical Expert Review Panel.
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“Closure” means when an Operator ceases operations at a facility without the intent to resume mining activities in the future;



“Commercial Operation” in respect of a mine, means an average rate of production that is equal to or greater than 25% of the design capacity of the mine over a period of ninety consecutive days;

“Construction” means any activities undertaken to construct or build any component of, or associated with, the development of the Meadowbank Gold Project, as described in the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process;

“Contact Water” means any water that has interacted with mine facilities or mining activities, including all runoff and seepage from WRSF and Ore Stockpiles;;

“Contact Water Collection System” means the system of trenches, sumps and attenuation ponds designed to manage water that may interact with any mine development activities including but not limited to pre- development activities as described in the Water Licence Application document entitled *“2013 Water Management Report and Plan”* dated March 2014;

“Core Receiving Environmental Monitoring Program or CREMP” means a monitoring program designed to determine the short and long-term effects in the aquatic environment resulting from the Project, to evaluate the accuracy of impact predictions, to assess the effectiveness of planned impact mitigation measures and to identify additional impact mitigation measures to avert or reduce environmental effects or Adaptive Management and which may be consolidated and streamlined with other plans in accordance with the Licence;

“Dam Safety Guidelines” means the *Canadian Dam Association (CDA) Dam Safety Guidelines (DSG)*, (2007) or subsequent approved editions;

“Deleterious Substances” means a substance as defined in section 34(1) of the *Fisheries Act*;

“Deposit” means the placement of waste rock, tailings or other solids materials on land or in water;

“Discharge” means the release of any water or waste to the receiving environment;

“Dissolved Metals” means the suite of metals referred to in Group 2 of Table 1 – Monitoring Groups located in Schedule J of this Licence. Dissolved metals shall be analyzed on a filtered sample;

“Domestic Waste” means all solid waste generated from the accommodations, kitchen facilities and all other site facilities, excluding those hazardous wastes associated with the Meadowbank Gold Mine Project;

“East Dewatering Dike (Second Portage Dewatering Dike)” means the structure designed to isolate the a portion of the northwest arm of Second Portage Lake, for the purpose of dewatering and development of the North Portage Open Pit, as indicated in the document *“East Dike Construction As-Built Report Meadowbank Gold Mine, Nunavut”* December 15, 2009, and



illustrated in the attached As-Built DWGs 2100-00 to 2100-6, 2100-10 to 2100-12, 2100-14 to 2100-17, 2100-24 to 2100-30, Golder Associates Project Numbers 07-1413-0074 and 09-1428-5007;

“East Dike Seepage Discharge Diffuser” means the facility designed to discharge and enhance mixing of East Dike seepage to the Second Portage Lake, as indicated in the document *“East Dike Seepage As-Built Report”* dated October 7, 2014, and illustrated in the attached As-Built DWGs EDS-01 and WD, Golder Associates Project Number 12-1221-0010-3100;

“Effluent” means treated or untreated liquid waste material that is discharged into the Receiving Environment from all site water management facilities;

“Emulsion Plant (Explosives Mixing Facility)” means the facility designed for storage of Ammonium Nitrate, detonators, and explosives; and designed for the mixing and storage of Ammonium Nitrate Fuel Oil (ANFO), as illustrated in the document entitled *“2AM-MEA Meadowbank Gold Water Licence Application Supplementary Information on Explosive Storage Facilities”* dated November 26, 2007, DWG 600-C-0130 Plant-site Infrastructure Emulsion Plant Location and Finish Grading – Plan, dated March 2007, Hatch Project Number 325174;

“Engineer” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

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“Engineered Structure” means any facility, which was designed and approved by a Professional Engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;

“Environmental Assessment” means, for the purpose of this licence, the totality of the Nunavut Impact Review Board (NIRB) Public Registry as established under the authority of Article 12 of the NLCA, this includes everything that was submitted by the Licensee to the NIRB, the scope of which is consistent with the Water Licence Application;

“Final Discharge Point” in respect of an effluent, means as defined in the *Metal and Diamond Mining Effluent Regulations*;

“Fresh Water Intake Barge” means the pre-packaged floating water pump barge fabricated and supplied by Chamco Industries Ltd. of Vancouver, for the purpose of supplying freshwater to the Meadowbank Project as illustrated in Appendix A of the Water Licence Application document entitled *“Meadowbank Gold Project Type A Water Licence Application”* dated August 2007,



DWG Numbers C1011158-21, C1011158-22, and C1011158-23, dated 27.06.05, Chamco Job No. 1011160ABS;

“Geotechnical Engineer” means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization with the engineering properties of earth materials in dealing with man-made structures and earthworks that will be built on a site. These can include shallow and deep foundations, retaining walls, dams, and embankments;

“Grab Sample” means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;

“Greywater” means the component of effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), excluding sewage;

“Ground Water” means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state;

“Hazardous Waste” means materials or contaminant which are categorized as dangerous goods under the *Transportation of Dangerous Good Act* (1992) and/or that is no longer used for their original purpose and is intended for recycling, treatment, disposal or storage;

“High Water Mark” means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. *Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities*);

“Incinerator” means the dual chamber, high temperature facility designed with the capacity to service the camp as described in the Water Licence Application document entitled **“Incineration Waste Management Plan, Meadowbank Gold Project”** dated July 2014 and the Hatch Specification dated April, 2008 Inquiry MDB-S-M-268, REV.OB;

“Independent Geotechnical Expert Review Panel” means the panel of geotechnical specialists established by AEM to review the designs and performance of the dikes and dams;

“Inspector” means an Inspector designated by the Minister under section 85 (1) of the Act;

“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 the mining operations, and operational detail for components which are to be progressively reclaimed throughout the mine life and which may be consolidated and streamlined with other plans in accordance with the Licence;



“Landfill (Construction and Operations Landfill)” means the facility to be constructed and operated until the end of the mine life and designed to contain non-salvageable, non-organic, nonhazardous, solid wastes from mining activities that cannot be incinerated, as described in the in the Water Licence Application document entitled “Landfill Design and Management Plan” March 2013;

“Landfill #2 (Demolition Landfill)” means the facility to be developed on top of the Portage Waste Rock Storage Facility later in mine life as described in the Water Licence Application document entitled “Landfill Design and Management Plan” March 2013, and containing DWG 3, Golder Associate’s Project Number 06-1413-089;

“Landfarm” means the lined, engineered facility designed to treat petroleum hydrocarbon contaminated snow and soil that may be generated during mining activities using bioremediation as described in the Water Licence Application document entitled “Landfarm Design and Management Plan Meadowbank Gold Project” February 2013, and containing DWGs 3-1 and 3-2;

“Licence” means this Type “A” Water Licence 2AM-MEA1525, issued by the Nunavut Water Board in accordance with the *Act*, to Agnico-Eagle Mines Ltd. (AEM) for the Meadowbank Gold Mine Project;

“Licensee” means to whom the Licence 2AM-MEA1525 is issued to or assigned;

“Marshalling Area Bulk Fuel Storage Facility” means the facility consisting of six (6) 10 million L diesel fuel storage tanks and twenty (20) 100,000L fuel storage tank for Jet-A, for a total fuel capacity of sixty two (62) million litres and all associated infrastructure, as described in the Water Licence Application document entitled “Baker Lake Bulk Fuel Storage Facility: Environmental Performance Monitoring Plan” dated June 2014, indicated in the documents entitled “Baker Lake Fuel Storage Installations Final Report Phase 2-B” December 7, 2009 and illustrated in the As-Built DWGs VD2259-BKL-001 to VD2259-BKL-002, , Stavibel Engineering Project Number VD2259-2, and “Baker Lake Fuel Storage Installations Final Report Phase 3” January 2011, and illustrated in the attached As-Built DWGs 740-C-0123, 740-C-0124 and 740-C-0125, Stavibel Engineering Project Number MEAD-1-400;

“Maximum Average Concentration” means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe;

“Maximum Monthly Mean” means the average concentration of all samples collected over a thirty day period from the identical sampling location;

“Meadowbank Mine Site Bulk Fuel Storage Facility” means the facility consisting of one (1) above ground 5.6 million litre diesel fuel storage tank and all associated infrastructure as described in the Water Licence Application document entitled “Meadowbank Bulk Fuel Storage Facility: Environmental Performance Monitoring Plan” dated June 2014, as indicated in the



document entitled "*Meadowbank Fuel Storage Installations Final Report*" April 2009, and illustrated in the attached As-Built DWGs VDB2259-MDB-001, VDB2259-MDB-002, VDB2259-MDB-003, Stavibel Engineering Project Number VD2259-1;

"Metal Leaching" means the mobilization of metals into solution under neutral, acidic or alkaline conditions;

"Mine Water" means any water, including groundwater, that is pumped or flows out of any underground workings or open pit;

"Minister" means the Minister of Crown-Indigenous Relations and Northern Affairs (CIRNA, formerly the Minister of Indigenous and Northern Affairs Canada);

"Modification" means an alteration to a physical work that introduces a new structure or revises or eliminates an existing structure and does not alter the purpose or function of the work, but does not include Adaptive Management or a New Adaptive Management Action;

"Monitoring Program" means the program to collect data on surface water and Ground Water quality to assess impacts to the environment of an appurtenant undertaking;

"Monthly" means, in the context of monitoring frequency, one sampling event occurring every thirty (30) days with a minimum of twenty one (21) days between sampling events;

"New Adaptive Management Action" means an Adaptive Management action that is not included in an approved plan but is recommended by the Licensee or others to prevent, stabilize, or reverse a change in environmental conditions or to otherwise protect the receiving environment;

"Non-Contact Water" means the runoff originating from areas unaffected by mining activity that does not come into contact with developed areas;

"Nunavut Agreement" means the "*Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada*," including its preamble and schedules, and any amendments to that agreement made pursuant to it;

"Operations" means the set of activities associated with mining, ore processing and recovery of gold; excluding construction, Care and Maintenance, and decommissioning and permanent Closure activities;

"Operator" means the person who operates, has control or custody of, or is in charge of a mine or recognized closed mine;

"Portage Attenuation Pond" means the facility located in the basin at the northwest end of the northwest arm of Second Portage Lake where mine site contact water will be discharged, and where water in the pond will be reclaimed to satisfy mill process water make up requirements with any excess water being treated if required and discharged to Third Portage Lake as described in the Water Licence Application document entitled "*2013 Water Management Report*"



and Plan” dated March 2014;

“**Portage Waste Rock Storage Facility**” means the facility designed to store waste rock from the Portage open pit as described in the Water Licence Application document entitled “*Updated Mine Waste Rock and Tailings Management Plan*” dated March 2014, and illustrated in the DWGs 2-1, 3-1 to 3-7, 6-1, 9-1 and 9-2;



“Pre-development” means the phase of the Project that occurs before the start of construction to allow for the development of a stockpile of broken rock-fill material that will be required to construct the outer shells of the East Dewatering Dike;

“Progressive Reclamation” means actions that can be taken during 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 costs incurred. It enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals;

“Project” means the Meadowbank Gold Project (Meadowbank Gold Mine) as outlined in the Final Environmental Impact Statement and supplemental information submitted by Cumberland Resources Limited to the Nunavut Impact Review Board (NIRB) as well as the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted by Agnico-Eagle Mines Ltd. to the Nunavut Water Board throughout the regulatory process. It comprises an open pit mine, an all-weather private access road from Baker Lake to the mine site, and a marshalling facility in the Hamlet of Baker Lake;

“Project Footprint” means the Project as described at Part A, Item 1 "Scope";

“Quarry” means the areas of surface excavation for extracting rock material for use as construction materials along the All Weather Private Access Road, as identified in the document entitled *“Meadowbank Gold Project 2007 Annual Report All-Weather Private Access Road”*;

“Quality Assurance / Quality Control (OA/OC)” Quality Assurance means the system of activities designed to better ensure that quality control is done effectively; Quality Control means the use of established procedures to achieve standards of measurement for the three principle components of quality: precision, accuracy and reliability;

“Quarterly” means, in the context of monitoring frequency, one sampling event occurring every three months with a minimum of ninety days between sampling events;

“Reclamation” means activities which facilitate the return of areas affected by the Project to a state as described in the Interim Closure and Reclamation Plan or Final Closure Plan;

“Receiving Environment” means both the aquatic and terrestrial environments that receive any deposit or discharge of waste including Effluent, seepage or Contact Water from the Project;

“Reclaim Pond” means the facility located within the Tailings Storage Facility, designed to contain process (tailings related) water, and where water in the pond will be used to satisfy mill process water make up requirements as described in the Water Licence Application document entitled *“2013 Water Management Report and Plan”* dated March 2014;



“Regulations” means the *Nunavut Waters Regulations SOR 2013/669 18th April, 2013*;

“Rock Storage Facility – Interim Till Plug” means the structure designed and constructed as a zoned earth fill structure intended to block seepage from the Waste Rock Storage Facility to go into NP2 Lake and facilitate seepage collection on the upstream side, as described in the Water Licence Application document entitled *“Appendix E – AANDC Inspectors Direction and AEM’s Response”* dated November 20, 2013, as indicated in the *“Construction Summary Report Rock Storage Facility – Interim Till Plug”* dated October 30, 2013, and as illustrated in As-Built DWGs 1, 2 Waste Dump Temporary Till Plug As-Built;

“Saddle Dam” means the structures located around the Tailings Storage Facility including the North Saddle Dam and the South Saddle Dam where the South Saddle Dam is designed as a permanent tailings retaining structure and the North Saddle Dam is to act as a berm, as indicated in the document *“Construction Report Tailings Storage Facility Meadowbank Gold Project Nunavut”* Agnico-Eagle Mines Ltd. with collaboration of Golder Associates Ltd. June 15, 2013, and illustrated in the attached documents Saddle Dam 1 – As Built Drawings and Saddle Dam 2 – As Built Drawings, DWGs 1/1, 1/2 and 2/2 As-Built 2010;

“Seepage” means any water that drains through or escapes from any structure designed to contain, withhold, divert or retain water or waste. Seepage also includes any flows that have emerged through open pits, runoff from waste rock storage facilities, ore stockpile areas, quarries, landfill or landfarm areas;

“Sewage” means all toilet wastes and greywater;

“Sewage Treatment Plant” means the rotary biological contactor sewage treatment plant described in the Water Licence Application document entitled *“Operation & Maintenance Manual Sewage Treatment, Meadowbank Gold Project”* April 2013, and the NORDIKeau Inc. Technical Support Section 2 N/Ref.: 50255, dated June 30, 2010;

“Short Term Maximum” means the maximum concentration of all samples collected over a 24 hour period or less taken from the identical sampling location;

“Site Specific Water Quality Objective (SSWOO) means a numerical concentration or narrative statement which has been established for specified waters;

“South Camp Dike” means the dike that encloses the Goose Island area along with the Bay Zone Dewatering Dike, Goose Island Dewatering Dike, and nearby land, such that it can be isolated from Third Portage Lake as indicated in the document entitled *“South Camp Dike Construction Summary Report Meadowbank Gold Project, Nunavut”* March 2012, and illustrated



in the attached As-Built DWGs 4300-01, 4300-02 and Figures 1-4, Golder Associate's Project Number 00-1425-0828/9800;

"Stormwater Dike" means the structure designed to isolate the Portage Attenuation Pond from tailings as indicated in the document entitled *"Construction Report Tailings Storage Facility Meadowbank Gold Project Nunavut"* dated June 15, 2013, Agnico-Eagle Mines Ltd. with collaboration of Golder Associates Ltd., and illustrated in the attached document Stormwater Dike – As-Built Drawings 2010;

"Stormwater Management Pond" means the facility that incorporates the existing Tear Drop Lake designed with impervious walls to contain treated sewage and contact water as described in the Water Licence Application document entitled *"2013 Water Management Report and Plan"* dated March 2014;

"Sump" means a structure or depression that collects, retains or transfers water or liquid waste before it is released to the Receiving Environment or Project infrastructure;

"Tailings Storage Facility" means the facility designed to permanently contain the solid fraction of the mill tailings as described in the approved Mine Waste Rock and Tailings Management Plan. The Facility includes structures and future facilities reviewed by the Independent Geotechnical Expert Review Panel and described in the approved Mine Waste Rock and Tailings Management Plan.

"Third Portage Lake Outfall Diffuser" means the effluent pipe located in low value fish habitat within Third Portage Lake, designed to discharge and enhance mixing of effluent from the Portage Attenuation Pond in the receiving environment as illustrated in As-Built Drawing, DWG 1/1, dated June 26, 2013;

"Total Metals" means the suite of metals referred to in Group 2 of Table 1 – Monitoring Groups located in Schedule I of this Licence. Total metals shall be analyzed on an un-filtered sample;

"Use" means use as defined in section 4 of the Act;

"Vault Attenuation Pond" means the facility located in the Vault mining area where contact water including pit water will be discharged and treated, if required, prior to final discharge to Wally Lake as described in the Water Licence Application document entitled *"2013 Water Management Report and Plan"* dated March 2014;



“Vault Dewatering Dike” means the structure designed to isolate Vault Lake from Wally Lake, for the purpose of dewatering and development of the Vault Open Pit and allow for storage of effluent in the Vault Attenuation Pond as indicated in the document entitled *“Vault Dike Construction Summary Report Meadowbank Gold Project”* dated July 29, 2013, and illustrated in the attached document Vault Dike As-Built Drawings, DWG 4GDD-0002-00, October 22, 2012, SNC Lavalin Project Number 610548;

“Vault Haul Road Crossing” means the crossing located at the outlet of Turn Lake to Drill Tail Lake along the road that connects the Portage mining area to the Vault mining area, as described in the document entitled: *“Haul Road from Meadowbank to the Vault Deposit”* dated December 4, 2009, and illustrated in As-Built DWG’s VD2415-01-C103 and VD2415-01-C104, November 27, 2009, Stavibel Engineering’s Project Number VD2415-001;

“Vault Waste Rock Storage Facility” means the facility designed to store waste rock from the Vault open pit as described in the Water Licence Application document entitled *“Updated Mine Waste Rock and Tailings Management Plan”* dated March 2014, and illustrated in DWGs 2-1, 3-1, 3-3 to 3-7, 9-1 and 9-3;

“Wally Lake Outfall Diffuser” means the effluent pipe located in low value fish habitat within Wally Lake, designed to discharge and enhance mixing of effluent from the Vault Attenuation Pond in the receiving environment as illustrated in As-Built Drawing, DWG 1/1, dated June 26, 2013;

“Waste” means waste as defined in section 4 of the Act;

“Waste Rock” means all rock materials that are or were produced as a result of mining operations and have no current economic value;

“Waste Water” means the water generated by site activities or originates on-site that requires treatment or any other water management activity;

“Water” means water as defined in section 4 of the Act;

“Water Supply Facilities” means the facilities designated for the supply of water including the Fresh Water Intake Barge at Third Portage Lake, the Reclaim Barge, the Wally Lake Fresh Water Intake and the Emulsion Plant fresh Water intake.

“Waste Disposal Facilities” means all facilities designated for the disposal of waste including: the mine site Sewage Treatment Plant, Landfill, Landfarm, Tailings Storage Facility, Portage Waste Rock Storage Facility, Vault Waste Rock Storage Facility, Portage Attenuation Pond and Vault Attenuation Pond;

“Water Licence Application” for the purposes of this Licence includes the totality of the NWB and NIRB Public Registries established as a result of the filing of the application dated August 2014, including Supporting Documents, and Technical Meeting Information Supplement documents;



“**Weekly**” means, in the context of monitoring frequency, one sampling event occurring every 7 days with a minimum of 5 days between sampling events.

“**West Channel Dike**” means the structure designed to be located in the western outlet channel between Third Portage Lake and Second Portage Lake to allow for dewatering of the northwest arm of Second Portage Lake as indicated in the document entitled “*West Channel Dike Construction As-Built Report - Meadowbank Gold Project, Nunavut*” dated December 16, 2009, and illustrated in the attached As-Built DWGs 2100-22 and 2100-23, Golder Associate’s Project Numbers 07-1413-00742 and 09-1428-5007;

“**West Diversion Ditch Interception Sump**” means the structure designed to provide an area of capture, retention and decantation of the freshet water flow expected in the West Diversion Ditch located around the northern area of the North Cell of the Tailings Storage Facility to keep freshet surface drainage from contacting the Waste Rock Storage Facility and the Tailings Storage Facility as described in the Water Licence Application document entitled “*2013 Water Management Report and Plan*” dated March 2014, as indicated in the “*West Diversion Ditch – Interception Sump Phase 1 Construction Summary Report*” dated April 2015, and illustrated in As-Build DWG 1 – Interception Sump Phase 1;

“**Whale Tail Haul Road**” means the 64.1 km. haul road and associated water crossings between the Whale Tail Pit Project site and the Meadowbank Mine site as described in the Type “A” 2AM-WTP---- Water Licence Application document entitled “Whale Tail Pit Haul Road Management Plan” dated June 2016;

“**Whale Tail Pit**” means the satellite deposit located on the Amaruq Exploration property approximately 150 km north of Hamlet of Baker Lake and 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut that the Licensee will mine as an open pit;

“**Whale Tail Pit Project**” means the Whale Tail Pit Project Proposal as outlined in the Final Environmental Impact Statement and supplemental information submitted by AEM to the Nunavut Impact Review Board (NIRB) as well as the associated Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted by AEM to the NWB throughout the 2016-2018 and 2018-2020 regulatory process.



Schedule B: General Conditions

The Annual Report referred to in Part B, Item 2, shall include:

CONSTRUCTION

1. For the dikes, dams and structures constructed to withhold water or waste:
 - a. An overview of methods and frequency used to monitor deformations, seepage and geothermal responses;
 - b. A comparison of measured versus predicted performance;
 - c. A discussion of any unanticipated observations including changes in risk and mitigation measures implemented to reduce risk;
 - d. As-built drawings of all mitigation works undertaken;
 - e. Any changes in the design and/or as-built condition and respective consequences of any changes to safety, water balance and water quality;
 - f. Data collected from instrumentation used to monitor earthworks and an interpretation of that data;
 - g. A summary of maintenance work undertaken as a result of settlement or deformation of dikes and dams; and
 - h. The monthly and annual quantities of seepage from dikes and dams in cubic metres.

WATER

2. Monthly and annual volume of fresh Water obtained from water sources.
3. Results of lake level monitoring conducted under the protocol developed as per Part D Item 5.
4. Summary of reporting results for the Water Balance and Water Quality model and any calibrations as required in Part E Items 7-9..
5. The bathymetric survey(s) conducted prior to each year of shipping at the Baker Lake Marshalling Facility.

WASTE

6. A summary of the geochemical monitoring results including:
 - a. Operational acid/base accounting and paste pH test work used for waste rock designation (PAG and NPAG rock);
 - b. As-built volumes of waste rock used in construction and sent to the Waste Rock Storage Facilities with estimated balance of acid generation to acid neutralization capacity in a given sample as well as metal content;
 - c. All monitoring data with respect to geochemical analyses on site and related to roads, quarries, and the All Weather Access Road;
 - d. Any geochemical outcomes or observations that could imply or lead to greater than predicted impacts to the Receiving Environment;



- e. Geochemical data associated with tailings solids, tailings supernatant, cyanide leach residue, and bleed from the cyanide destruction process including an interpretation of the data; and
 - f. Results related to the road quarries and the All Weather Private Access Road.
- 7. Volumes of waste rock used in construction and placed in the Rock Storage Facilities.
 - 8. An update on the remaining capacity of the Tailings Storage Facility.
 - 9. Summary of quantities and analysis of seepage and runoff monitoring from the Landfills, Waste Rock Storage Facilities and Central Dike.
 - 10. A summary report of all general waste disposal activities including monthly and annual quantities in cubic metres of waste generated and location of disposal.
 - 11. Report of Incinerator test results including the materials burned and the efficiency of the Incinerator.

SPILLS

- 12. A list and description of all unauthorized discharges in excess of the thresholds set out in the Nunavut Spill Planning and Reporting Regulations including volumes, spill report line identification number and summaries of follow-up action taken.

MODIFICATIONS

- 13. A summary of modifications and/or major maintenance work carried out on all water and waste related structures and facilities.

MONITORING

- 14. The results and interpretation of the Monitoring Program in accordance with Part I and Schedule I.
- 15. A summary of the results of monitoring related to the Aquatic Effects Monitoring Program (AEMP) including:
 - a. Core Receiving Environment Monitoring Program (CREMP);
 - b. Metal and Diamond Mining Effluent Regulation (MMER) Monitoring;
 - c. Mine site Water Quality and Flow Monitoring (and evaluation of NP-2);
 - d. Visual AWAR water quality monitoring;
 - e. Blast Monitoring; and
 - f. Groundwater Monitoring.

CLOSURE

A summary of any Progressive Reclamation undertaken including photographic records of site conditions before and after completion of operations, and an outline of any Progressive Reclamation planned for the next year



16. An updated estimate of the current restoration liability.

PLANS/REPORTS/STUDIES

17. A summary of any studies requested by the Board that relate to Water use, Waste disposal or Reclamation, and a brief description of any future studies planned.
18. Where applicable, a summary of any Plans that were revised over the past year

GENERAL

19. A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector.

OTHER

20. A summary of public consultation and participation with local organizations and the residents of the nearby communities on water and waste related matters, including a schedule of upcoming community events and information sessions.
21. Any other details on Water use or Waste Disposal requested by the Board by November 1st of the year being reported.



Schedule D: Conditions Applying to Construction

1. The Construction Summary Report referred to in Part D Item 14 shall include:
 - a All final design and construction drawings shall be stamped and signed by a Professional Engineer.
 - b A summary of construction activities including photographic records before, during and after construction;
 - c As-built drawings (or piping and instrumentation diagrams where applicable) for Waste Disposal Facilities and Water Supply Facilities;
 - d Documentation of field decisions that deviate from original plans and any data used to support these decisions;
 - e Discussion of mitigation measures implemented during construction and effectiveness;
 - f Monitoring undertaken in accordance with Part D;
 - g Blast vibration monitoring for quarrying activities carried out in close proximity to fish bearing waters;
 - h Monitoring for sediment release from construction areas; and
 - i Monitoring and reporting on use of water to manage dust emissions from crushing and construction activity.



Schedule I: Conditions Applying to General and Aquatic Effects Monitoring

TABLE 1 – MONITORING GROUP

Group	Parameters
1	pH, turbidity, hardness, alkalinity, ammonia nitrogen, total metals (aluminum, arsenic, barium, cadmium, chloride, chromium, copper, fluoride, iron, lead, manganese, mercury, molybdenum, nickel, nitrite, nitrate, selenium, silver, thallium, zinc) sulphate, total dissolved solids (TDS), TSS, total cyanide. If CN total is detect in an analysis result; further analysis of CN Free and CN WAD will be triggered.
2	<p>Total and Dissolved metals: aluminum, antimony, arsenic, boron, barium, beryllium, cadmium, copper, chromium, iron, lithium, manganese, mercury, molybdenum, nickel, lead, selenium, tin, strontium, titanium, thallium, uranium, vanadium and zinc.</p> <p>Nutrients: Ammonia-nitrogen, total kjeldahl nitrogen, nitrate nitrogen, nitrite-nitrogen, ortho-phosphate, total phosphorous, total organic carbon, total dissolved organic carbon and reactive silica.</p> <p>Conventional Parameters: bicarbonate alkalinity, chloride, carbonate alkalinity, conductivity, hardness, calcium, potassium, magnesium, sodium, sulphate, pH, total alkalinity, TDS, and TSS, turbidity.</p> <p>Total cyanide and free cyanide.</p> <p>If CN total is detected above 0.05 mg/L in an analysis result for monitoring station in receiving environment; further analysis of CN WAD will be triggered.</p>
3	MMER parameters (total cyanide, arsenic, copper, lead, nickel, zinc, radium 226, total suspended solids, pH), sulphate, turbidity and total aluminum.
4	Total Arsenic, Total Copper, Total Lead, Total Nickel, TSS, Benzene, Toluene, Ethylbenzene, Xylene, TPH, pH.
MMER	Total cyanide, arsenic, copper, lead, nickel, zinc, radium 226, total suspended solids, pH, effluent volumes and flow rate of discharge, acute toxicity (Rainbow Trout and Daphnia magna) and environmental effects monitoring (EEM).
Full Suite	Group 2, Total Petroleum Hydrocarbons, Turbidity. Acutely Lethality tests (Rainbow Trout and Daphnia magna) for discharge only.



TABLE 2 – MONITORING PROGRAM

Station	Description	Phase	Monitoring Parameters	Frequency
<i>Mine Site</i>				
ST-DC-1 to TBD	Monitoring stations during Dike Construction as defined in Final Water Quality Monitoring and Management Plan for Dike Construction and Dewatering referred to in Part D Item 5	Construction	As defined in Final Water Quality Monitoring and Management Plan for Dike Construction and Dewatering referred to in Part D, Item 5	As defined in Final Water Quality Monitoring and Management Plan for Dike Construction and Dewatering referred to in Part D Item 5
ST-DD-1 to TBD	Monitoring Stations during Dike Dewatering as defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering referred to in Part D, Item 5	Construction	As defined in Final water Quality Monitoring and management Plan for Dike Construction and Dewatering referred to in Part D, tem 5	As defined in Final Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in part D, Item 5
ST-1	Water Intake for camp, mill and re-flooding	Water Intake for camp, mill and re-flooding	Volume (m ³)	Monthly
ST-1W	Water Intake for re-flooding	Water Intake for re-flooding	Volume (m ³)	Monthly
ST-3	Water Intake for Emulsion Plant	Late operations, closure	Volume (m ³)	Monthly
ST-4	Water Reclaimed from Tailings Storage Facility	Late operations, closure	Volume (m ³)	Monthly
ST-5	Portage Area (east) diversion ditch	Late operations, closure	Group 3	Monthly during open water



ST-6	Portage Area (west) diversion ditch	Late operations, closure	Group 3	Monthly during open water
ST-8	East Dike Seepage Discharge	Late operations, closure	Group 3	Monthly
ST-9	Portage Attenuation Pond prior to discharge through Third Portage Lake Outfall Diffuser	Early operations	Full Suite	Prior to discharge and Weekly during discharge
			Volume (m ³)	Daily during periods of discharge
			Acute Lethality	Once prior to discharge and Monthly thereafter
ST-10	Vault Attenuation Pond prior to discharge through Wally Lake Outfall Diffuser	Late operations	Full Suite	Prior to discharge and Weekly during discharge
			Volume (m ³)	Daily during periods of discharge
			Acute Lethality	Once prior to discharge and Monthly thereafter
ST-11	Tailings Storage Facility	Post closure	Group 1	Annually during open water
ST-12	Portage / Goose Pit Lake	Post closure	Full Suite	Annually during open water
ST-13	Vault Pit Lake	Post closure	Full Suite	Annually during open water
ST-14 (THE-11)	Discharge to the TSF from Landfarm sump at mine site	Late operations, closure	Group 4	Prior to discharge
			Volume (m ³)	Daily during periods of discharge
ST-16	Portage Rock Storage Facility	Late operations	Group 1	Monthly during open water
		Closure	Group 1	Bi-annually during open water
ST-17**	North Portage Pit Sump	Operations	Group 1	Monthly during open water
			Volume (m ³)	Daily during periods of discharge



	Portage Pit Lake	Late operations	Group 2	Monthly during open water
		Closure	Group 2	Bi-annually during open water
ST-19**	South Portage Pit Sump	Early operations	Group 1	Monthly during open water
			Volume (m ³)	Daily during periods of discharge
	Portage Pit Lake	Late operations	Group 2	Monthly during open water
ST-20	Goose Island Pit Sump	Early operations	Group 1	Monthly during open water
			Volume (m ³)	Daily during periods of discharge
	Goose Island Pit Lake	Late operations	Group 2	Monthly during open water
		Closure	Group 2	Bi-annually during open water
ST-21	Tailings Reclaim Pond	Late operations	Group 1	Monthly during open water
ST-22	Tailings Storage Facility	Closure (drainage runoff)	Group 2	Bi-annually during open water
ST-23	Vault Pit Sump	Late operations	Group 2	Monthly during open water
			Volume (m ³)	Daily during periods of discharge
ST-24	Vault Rock Storage Facility	Late operations	Group 1	Monthly during open water
		Closure	Group 1	Bi-annually during open water
ST-25	Vault Attenuation Pond	Late operations	Group 1	Monthly during open water
ST-26	Vault Pit Lake	Closure	Group 2	Bi-annually during open water
ST-S-1 to TBD	Seeps (to be determined)	Late operations, Closure	Group 1	Monthly or as found
ST-GW-1 to TBD	Groundwater wells (to be determined) as required under	Early operations, Late operations, Closure	Group 2	Annually



	Groundwater Monitoring Plan referred to in Part I Item 6			
ST-AEMP-1 to TBD	Receiving AEMP and CREMP	Late operations, Closure	Group 2	<p>A minimum of 5 events per year at CREMP stations. Ideally 3 during open water and 2 during winter (through ice).</p> <p>TPL assay, NP2, NP1 and Dogleg ponds to be monitored monthly during open water (July, Aug, and Sept.).</p> <p>Monthly field limnology data collected throughout year at smaller number of locations (through ice).</p>
ST-MMER-1 to TBD	Vault, East Dike and Portage effluent outfall	Late operations	MMER	Weekly during open water
ST-37	Secondary containment sump at the Bulk Fuel Storage Facility at Meadowbank	Late operations, Closure	Group 4	Prior to discharge or transfer of Effluent
ST-38	Secondary containment sump at the Bulk fuel Storage Facility in Baker Lake – Jet-A containment	Late operations, Closure	Group 4	Prior to discharge or transfer of Effluent
ST-40 (MEA-4)	Secondary containment sump at the Bulk Fuel Diesel Storage Facility in Baker Lake	Late operations, Closure	Group 4	Prior to discharge or transfer of Effluent
<p><i>Monitoring Program Stations never constructed or associated with the Construction Phase of Project with Monitoring not required and no longer conducted at Operations and Closure phase.</i></p>				



ST-2	Reclaim Water Intake	Construction, Early operations, Late operations, Closure	Volume (m ³)	Monthly
ST-7	Vault Area diversion ditch	Early operations, Late operations, Closure	Group 5, Aluminum	Monthly during open water
ST-5	Vault non-contact diversion ditch	Early operations, Late operations, Closure	Group 5, Aluminum	Monthly during open water
ST-18	Portage Attenuation Pond	Early operations	Group 2	Monthly during open water
ST-27 and ST-28 (TEH-1 & TEH-2)	Water Intake for camp and concrete batch plant purposes	Pre-development, Construction	Volume for each purpose (m3)	Monthly
ST-29 and ST-30 (TEH-3 & TEH-4)	Water, if any, accumulated in north and south predevelopment zones	Pre-development	pH, Turbidity	Weekly
			Weekly Metals using an ICP-Metals 36 element scan, Total Ammonia, Nitrate, Sulphate	Monthly
ST-31 and ST-32 (TEH-5 & TEH-6)	Water pumped from north and south predevelopment zones to Contact Water Collection System	Pre-development	pH, Turbidity	Daily during periods of pumping
ST-33 and ST-34 (TEH-7 & TEH-8)	Contact Water Collection System Lakes #1 and #2	Pre-development, Construction	pH, Turbidity, Metals using an ICP-Metals 36 element scan, Total Ammonia, Nitrate, Sulphate	Weekly during periods of pumping from the pre-development pits
ST-35 (THE-9)	Discharge from Lake #1 of Contact Water Collection System (Stormwater Management Pond) to Second Portage Lake	Pre-development, Construction	pH, TSS, T-Al, BOD5, Fecal Coliforms, T-As, T-Cu, T-CN, T-Pb, T-Ni, T-Zn, T-Radium ₂₂₆	Once prior to discharge and Weekly during periods of discharge
			Acute Lethality	Once prior to discharge and Monthly thereafter



	<i>In addition, if discharge from Bulk Fuel Storage Facility directed to lake #1</i>		<i>Volume (m³)</i>	<i>Daily during periods of discharge</i>
			<i>Benzene, Lead, Toluene, Ethylbenzene, Oil & Grease</i>	<i>Once prior to discharge and Weekly during periods of discharge</i>
<i>ST-36 (THE-10)</i>	<i>Discharge from Lake #2 of Contact Water Collection System to Second Portage Lake</i>	<i>Pre-development, Construction</i>	<i>pH, TSS, T-As, TCu, T-CN, T-Pb, T-Ni, T-Zn, T-Radium₂₂₆</i>	<i>Once prior to discharge and Weekly during periods of discharge</i>
			<i>Acute Lethality</i>	<i>Once prior to discharge and Monthly thereafter</i>
			<i>Volume (m³)</i>	<i>Daily during periods of discharge</i>
<i>Monitoring Program Stations relics of Type “B” Water Licence 8BC-MEA0709 and not applicable, replaced by Monitoring Program Stations ST-37 and ST-38 described below.</i>				
<i>ST-37 (MEA-1)</i>	<i>Water sample location at Baker Lake in close proximity to the construction facilities</i>	<i>Pre-development, Construction, Early operation, Late operation, Closure</i>	<i>Group 6</i>	<i>Annually</i>
<i>ST-38 (MEA-2)</i>	<i>East Contact Water Pond located in the south-east corner of the lay-down area</i>	<i>Pre-development, Construction, Early operation, Late operation, Closure</i>	<i>Group 6 & 7</i>	<i>Prior to discharge or transfer of Effluent</i>
			<i>Volume (m³)</i>	<i>Monthly</i>
<i>ST-39 (MEA-3)</i>	<i>West Contact Collection Pond located in the south-west corner of the lay-down area</i>	<i>Pre-development, Construction, Early operation, Late operation, Closure</i>	<i>Group 6 & 7</i>	<i>Prior to discharge or transfer of Effluent</i>
			<i>Volume (m³)</i>	<i>Monthly</i>

**** ST-17 and ST-19 in Closure will become one sampling point**



NUNAVUT WATER BOARD

WATER LICENCE NO: 2AM-WTP2043



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Licence No. 2AM-WTP2043

Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

AGNICO EAGLE MINES LIMITED

(Licensee)

145, KING STREET EAST, SUITE 400, TORONTO, ONTARIO M5C 2Y7

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or deposit waste for a period subject to restrictions and conditions contained within this Licence:

Licence Number/Type:	2AM-WTP2043 / Type "A"
Water Management Area:	THELON, QUOICH & BACK WATERSHEDS (5, 9 & 31)
Location:	WHALE TAIL PIT MINE AND HAUL ROAD KIVALLIQ REGION, NUNAVUT
Purpose:	WATER USE AND DEPOSIT OF WASTE
Description:	MINING UNDERTAKING
Quantity of Water not to be Exceeded:	up to 700,8359 CUBIC METRES ANNUALLY DURING CONSTRUCTION AND OPERATION AND up to 14,855,606 CUBIC METRES ANNUALLY DURING CLOSURE CLOSURE AS PER PART E
Date of Issuance:	MAY 1, 2020
Expiry of Licence:	December 31, 2043

This Licence issued (**Motion Number TBD**) and recorded at Gjoa Haven, Nunavut includes and is subject to the annexed conditions.

Lootie Toomasie
Nunavut Water Board
Chair

APPROVED
BY:

~~Carolyn Bennett~~ Dan Vandal
Minister of ~~Crown-Indigenous~~
~~Relations and~~ Northern Affairs

DATE LICENCE
APPROVED:



PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. SCOPE

- a This Licence authorizes the Licensee to the use of Waters and deposit of Wastes in support of a Mining Undertaking, at the ~~Whale Tail Pit~~ Project as outlined in the Type "A" Water Licence Application (Application) submitted to the Nunavut Water Board (NWB or Board) on July 8, 2016 and the Amendment Application submitted May 16, 2019 and as reviewed throughout the regulatory process.

The Licensee may conduct mining and associated activities at the Project in the Kivalliq Region of Nunavut at the following project extents:

Project Extents	Latitude	Longitude
Whale Tail Haul Road	65° 04' 53.3'' N	96° 01' 00.8'' W
	65° 23' 49.7'' N	96° 40' 35.8'' W
Project Area	65° 25' 22.2564'' N	96° 46' 07.5868'' W
	65° 25' 09.3792'' N	96° 35' 32.0875'' W
	65° 21' 10.5036'' N	96° 36' 56.2353'' W
	65° 21' 26.3220'' N	96° 46' 33.9176'' W
Whale Tail Pit Camp	65° 24' 36'' N	96° 41' 41'' W

In general, the scope of the activities, works and Undertakings authorized in accordance with the terms and conditions of the Licence are as follows:

1. Certain activities previously included in the scope of the former 2BB-MEA 1828 as follows:
 - Underground development and exploration drilling (including the portal, ramp and ventilation raises);
 - operation of stormwater management pond (A-P5) (to be converted into GSP-1).
2. ~~Extraction~~Mining including extraction of overburden, waste rock and ore via Open Pits and Underground mine facilities;
3. Withdrawal and use of water ~~from for the Project from Nemo Lake, Mammoth Lake, A53, Whale Tail South, Lake D12,~~ ponds and lakes proximal to drilling sites and Whale Tail Haul Road and other lakes listed in the Application;
4. Withdrawal and use of water ~~from Nemo Lake~~ for the Project for Construction, Operations, camp, mining, associated activities, dust suppression and domestic purposes;
5. Withdrawal and use of water ~~from Mammoth Lake~~;
6. ~~Withdrawal and use of water from Whale Tail Lake (South Basin) for camp operation and re-flooding of open pit following pit development during Closure and for withdrawal and use of water from water bodies proximal to the Haul Road for~~



~~dust suppression, for the Project for Closure, camp, associated activities, dust suppression, domestic purposes and re-flooding;~~

~~7.6.~~ Dewatering of Whale Tail Lake North Basin, Lake A53 and other water bodies as described in the Application;

~~8.7.~~ Quarrying of materials ~~from specified locations;~~

~~9.8.~~ Operation of a camp at the Project site;

~~10.9.~~ Construction and operation of the Whale Tail Haul Road, ~~and~~ site roads, including associated water crossings and bridges;

~~11.10.~~ Construction and operation of the ~~Whale Tail and IVR~~ Waste Rock Storage Facilities, and Ore Stockpiles;

~~12.11.~~ Operation of satellite mine site facilities including bulk fuel storage, shops, offices warehouse and camp;

~~13.~~ Operation of site water management facilities, including but not limited to:

- ~~• Operation of a Sewage Treatment Plant (STP);~~
- ~~• Operation of Operational Treatment Plant (O-WTP);~~
- ~~• Operation of a Saline water Treatment Plant (S-WTP);~~

~~17.12.~~ Controlled discharges of Effluent during ~~construction, operations and closure~~ Construction, Operations and Closure;



- ~~18.13.~~ Set-up and operation of diesel fired equipment including the Waste Incinerator or approved equipment;
- ~~19.14.~~ Set-up and operation of composting facilities;
- ~~20.15.~~ Construction and operation of emulsion facilities, which may include emulsion storage facilities or ~~emulsion plants~~ Emulsion Plants;
- ~~21.16.~~ Operation of the ~~Whale Tail and IVR~~ Attenuation Ponds;
- ~~22.17.~~ Management and disposal of Wastes associated with the Whale Tail satellite deposit including: ~~waste rock storage facility~~ Waste Rock Storage Facility(s), landfill, landfarm, incinerator, composter, ore stockpiles, ~~groundwater storage ponds, water treatment plants, attenuation ponds and other wastes~~ Groundwater Storage Ponds, Water Treatment Plants, Attenuation Ponds and other waste management and disposal infrastructure as described in the Application;
- ~~23.18.~~ Handling and storage of petroleum products and hazardous materials including explosives and other reagents;
- ~~24.19.~~ Construction and operation of Contact and Non-Contact Water management systems;
- ~~25.20.~~ Construction and Operation of Whale Tail site water management ~~infrastructure including facilities including:~~ Sewage Treatment Plant, Operational Water Treatment Plant, Saline Water Treatment Plant, Whale Tail Dike, Mammoth Dike, Waste Rock Storage Facility Dike, Northwest Dike, Mammoth Channel Culvert, ~~Whale Tail and IVR~~ Attenuation Ponds, and Whale Tail Diversion Channel;- ~~Whale Tail and IVR~~ Waste Rock Storage Facility water collection systems, IVR Diversion, Groundwater Storage Ponds, ~~IVR~~ dikes;
- ~~26. Controlled and regulated Discharge of Effluent to Mammoth Lake, South Whale Tail Basin, Lake D1 and Lake D5 via diffusers;~~
- ~~27.21.~~ Re-flooding of Open Pits and Underground following development;
- ~~28.22.~~ Planning for, and carrying out Adaptive Management actions (including all potential activities and facilities described in the Adaptive Management Plan, as approved);
- ~~23.~~ Planning for, and carrying out progressive Reclamation, Closure and Abandonment of on-site facilities and infrastructure.

[Note: Scope has been further revised to reduce repetition, ensure it is inclusive of all Project activities, and to provide further clarity.]

- b. This Licence is issued subject to conditions contained herein with respect to the use of Waters and the deposit of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or the existing Regulations are amended by the Governor in Council under the *Act*, this Licence shall be deemed to be subject to such requirements.

[Note: Should this wording to be clarified to explain what is meant by "new Regulations"? It is Agnico



Eagle's understanding that this clause is intended to apply to amendments to the Nunavut Waters and Nunavut Surface Rights Tribunal Act, Nunavut Waters Regulations and any new or further regulations pursuant to the Nunavut Waters and Nunavut Rights Tribunal Act. The Board may also give consideration to reference to the Nunavut Agreement in this section, as the Board's authority derives from the Nunavut Agreement.

b.c. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with all applicable legislation.

2. DEFINITIONS

a The Licensee shall refer to Schedule A for definitions of terms used in this Licence.

3. ENFORCEMENT



- a. Failure to comply with this Licence may be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*.
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*.
- c. For the purpose of enforcing this Licence and with respect to the use of Waters and deposit of Waste by the Licensee, Inspectors appointed under the *Act* hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable laws.

PART B: GENERAL CONDITIONS

1. The amount of Water use fees shall be determined and payment of those fees shall be made in accordance with section 12 of the *Regulations*.
2. The Licensee shall file an Annual Report with the Board no later than March 31st in the year following the calendar year being reported. The Annual Report shall be developed in accordance with [Schedule B](#).
3. The Licensee shall retain and have a copy of this Licence available at the site of operations at all times.
4. Any communication with respect to this Licence shall be made in writing to the attention of:

Manager of Licensing, Nunavut Water Board
P. O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca

5. Any notice made to an Inspector shall be made in writing to the attention of:

Water Resources Officer
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445

6. The Licensee shall submit one (1) electronic copy of all reports, studies, and plans to the Board unless otherwise requested by the Board. Unless otherwise directed by the Board, reports or studies submitted to the Board by the Licensee shall include an executive summary



in English, Inuktitut, and French.

7. This Licence is assignable as provided in Section 44 of the *Act*.
8. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.
9. Other than changes associated with Adaptive Management, ~~where practicable~~ the Licensee shall notify the Board of any changes in operating plans or conditions associated with this Project at least sixty (60) days prior to any such change.

[Note: This section refers to "operating plans or conditions" but Agnico Eagle's understanding is that this is intended to refer to Project phases. For example, the Board requires 60 days notice prior to moving from Operations to Closure phase. This wording is not intended to supersede other notice timelines specified in the Licence that may be less than 60 days. Agnico Eagle requests the Board give consideration to revisions to enhance clarity.]

10. The Licensee shall post signs in the appropriate areas to inform the public of the location of the Water Supply Facilities and the Waste Disposal Facilities. All signs must be in English, Inuktitut and French and shall be located and maintained to the satisfaction of an Inspector.
11. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written Board approval and direction. The Board may request that the Licensee alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan. ~~Unless the Board otherwise advises, Plans and amendments thereto submitted under this Licence shall be deemed to be approved by the Board within forty five (45) days of submission by the Licensee. For greater clarity, an approved Plan remains in force until such time as it is replaced by a new approved Plan.~~

[Note: Agnico Eagle has revised and moved the proposed "deemed approval" clause to Item 15 below. Response to ECCC comments are included in the note below Item 15.]

12. Unless otherwise directed by the Board in writing, if a Plan is not acceptable to the Board, the Licensee shall provide a revised version to the Board for review addressing the Board's specified deficiencies within thirty (30) days of notification by the Board which clearly outlines the revisions to the Plan. The Board shall issue a final approval decision ~~upon~~ within fifteen (15) days of receipt of the revised version of the Plan.

[Note: Currently, Plans may be subject to multiple intervenor comment periods which leads to very extended timelines and delays in final Board approval of Plans. Respectfully, there is no certainty as to timelines for review and approval of revised Plans which means that the most up to date Plans are delayed in implementation at site. This is not consistent with best management practices and creates significant practical challenges for the License and inspectors.]



To address this issue and to provide procedural clarity to all parties, Agnico Eagle suggests that further review by Intervenor should not be required following submission of the revised plan (where required by the Board), as in those situations Intervenor will have previously had an opportunity to provide comments to the Board and identify any potential deficiencies. Once the Board has reviewed Intervenor comments and decided what items the Licencee will be directed to address, it is for the Board alone to determine whether the Board's request has been fulfilled. The suggested timing would provide the Board with a defined period to review the changes in the revised Plan and confirm the Board-directed changes have been made, and would support planning and best management practices at site.]

~~11.13.~~13. The Licensee shall implement the following Plans also required under the Type “A” Water Licence 2AM-MEA2033 as approved (or accepted) by the Board. Any future updates to these Plans approved (or accepted) under the Type “A” Water Licence 2AM-MEA2033 or this Licence shall be applicable to both 2AM-MEA2033 and 2AM-WTP2043 Licences. Any changes to the plans deemed significant by the Board must be approved by the Board.

- a. Aquatic Effects Monitoring Program (AEMP), Version 3 (November 2015)*¹;
- b. Ammonia Management Plan - Whale Tail Pit Addendum, Version ~~WT (June 2016)~~ (April 2019)*;
- c. Core Receiving Environment Monitoring Program (CREMP), Version WT (May 2018)^;
- d. Mercury Monitoring Plan (March 2019) [*Note this Plan appears as Appendix A to the CREMP*];
- e. Dewatering Dikes: Operation, Maintenance and Surveillance Manual, Version 2 (March 2019)*;
- f. ~~Emergency Response Plan, Version WT (June 2016)^;~~
- g.f. Groundwater Monitoring Plan, Version 10 (July 2019);
- h.g. Hazardous Materials Management Plan: Meadowbank Mine Site, Whale Tail Pit Site, Baker Lake Facilities, Version WT 4 (March 2019)*;
- i.h. Quality Assurance/Quality Control (QA/QC) Plan, Version 45 (~~March~~ April 2019)* accepted by the Board;
- j.i. Operational ARD/ML Testing and Sampling Plan, Version 45 (~~March~~ April 2019)^;

¹ The Plans identified as “Version WT” are addendums^ to existing Meadowbank Mine Project’s plans; otherwise the most up-to-date Meadowbank plan is applicable*



~~k.j.~~ Spill Contingency Plan, Version ~~WT (June 2016)~~ 7 (April 2019)^.

~~12.~~14. The Licensee shall, for all Plans submitted under this Licence, implement the Plans 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 by the Board and must be approved by the Board.

- a. Whale Tail Sewage Treatment Plant Operation and Maintenance Plan, Version ~~23~~ (FebruaryMay 2019)*;
- b. Meadowbank and Whale Tail Bulk Fuel Storage Facilities: Environmental Performance Monitoring Plan, Version 4, (March 2019);
- c. Whale Tail Pit Interim Closure and Reclamation Plan, Version 3 (December 2019)^;
- d. Whale Tail Pit Landfill and Waste Management Plan, Version 2 (April 2019);
- e. Whale Tail Pit Landfarm Design and Management Plan, Version 1 (April 2019);
- f. Whale Tail Pit Incinerator and Composter Waste Management Plan, Version 1 (April 2019);
- g. Whale Tail Pit Haul Road Management Plan, Version 2 (March 2019);
- h. Whale Tail Pit Waste Rock Management Plan, Version 5 (May 2019);
- i. Whale Tail Pit Water Management Plan, Version 4 (May 2019);
- j. Whale Tail Pit Water Quality and Flow Monitoring Plan, Version 6 (March 2019); ~~and~~
- k. Whale Tail Pit Water Quality Monitoring and Management Plan for Dike Construction and Dewatering, Version 2 (May 2019);
- l. Adaptive Management Plan (January 2020);
- m. CREMP (April 2019);
- n. Thermal Monitoring Plan, Version 2 (May 2019); and
- ~~k.o.~~ Emergency Response Plan, Version 1 (May 2019);

~~13.~~15. Within sixty (60) days of approval of this Licence by the Minister, the Licensee shall submit to the Board, for approval in writing, the following updated management plans. The updates are to take into account commitments made with respect to submissions received during the technical review of the Application, where applicable.

Unless the Board otherwise advises, Plans and amendments submitted under this Licence shall be deemed to be approved by the Board within fifteen (15) days of submission by the Licensee. For greater clarity, an approved Plan remains in force until such time as it is replaced by a new approved Plan.

- a. Whale Tail Pit Waste Rock Management Plan, Version 5 (May 2019);
- b. Whale Tail Pit Water Management Plan, Version 4 (May 2019);
- c. Whale Tail Pit Interim Closure and Reclamation Plan, Version 3 (December 2019);
- d. Spill Contingency Plan, Version 7 (April 2019);
- e. Hazardous Materials Management Plan: Meadowbank Mine Site, Whale Tail Pit Site, Baker Lake Facilities, Version 4 (May 2019);
- f. Emergency Response Plan, Version 1 (May 2019)^.

~~14.~~16. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a



Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.

17. 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 or a replacement Plan or Plans when and as the need arises, complete with a revision list detailing where significant content changes are made.

[Note: Per ECCC comments, Agnico Eagle agrees that a revision list would be useful.]

[Per KivIA comments, Agnico Eagle disagrees that the licence should restrict modification of plans to only once annually. Plans should be revised as needed to reflect site conditions and operational requirements.]

18. The Licensee may consolidate and streamline one or more approved Plans to support efficient site management and operations and communication with Inspectors and regulators.

[Note: For clarity, Agnico Eagle is not proposing to reduce any obligations under the Plans. Instead this approach would permit flexibility to combine related requirements and Plans under single plans. Fewer Plans would be easier for the proponent, KIA and CIRNAC Inspectors and the Board to administer and would not reduce protection of Nunavut waters in any way. Agnico Eagle has discussed this approach with KivIA and CIRNAC and based on those discussions it appears there is general consensus this approach would be helpful.]

19. The expiry ~~or cancellation~~ of this Licence does not relieve the Licensee from any obligation imposed by the ~~Act~~ Licence, or any other regulatory requirements.

[Note: Per KivIA and ECCC comments on Item 19, Agnico Eagle suggests including this wording back in the Licence. For clarity, Agnico Eagle does not intend to permit the Licence to expire.]

20. The cancellation of this Licence relieves the Licensee from all obligations imposed by the Licence.

[Note: Per KivIA and ECCC comments on Part B, Item 19, Agnico Eagle suggests that this clarification would be helpful. As an example, at the end of the post-closure phase, Agnico Eagle's understanding is that the Licence would eventually be cancelled and would cease to be an obligation for the Licensee. Agnico Eagle's understanding that it is not the Board's intention to create perpetual obligations under the Licence for Licensees, and so is of the view this revised clause would enhance clarity on that point.]



- ~~15~~21. The Schedules attached to this Licence provide details regarding the requirements associated with specific items in the main body of the Licence and are included in the Schedule to provide greater clarity and as an aid to interpretation for the Licensee. If the Board subsequently determines that an item in any of the Schedules requires revision in order to better reflect the intent and objectives of the Licence, the Board may at its discretion, and upon consulting and providing written notice to the Licensee and interested parties, revise the Schedule accordingly. Unless the Board directs otherwise, such revision may not necessarily be considered as an “Amendment” to the Licence.
- ~~16~~22. Unless otherwise stated, references in the Licence to any specific legislation, policy, guideline or other regulatory requirement are deemed to refer to the regulatory requirement as may be amended or as may be expressly replaced by successor legislation, policy, guidelines or other regulatory requirements after the Licence is approved by the Minister.

PART C: CONDITIONS APPLYING TO SECURITY

1. The Licensee shall, within thirty (30) days following the approval of this Licence by the Minister, furnish and maintain security with the Minister in the amount for a total of \$25,331,754. As set out in the *Whale Tail Security Management Agreement*, the amount secured under this Part constitutes 50% of the total global security amount of \$50,663,508 that is required to reclaim the Undertaking and reflects that the other 50% of the global security amount will be held outside the Licence by the Kivalliq Inuit Organization, in accordance with the terms and conditions of the *Whale Tail Security Management Agreement*.
2. The security held under Part C, Item 1 shall be in a form that is satisfactory to the Minister and consistent with the *Act* and *Regulations*.
3. The Licensee shall, within ten (10) days after furnishing security with the Minister, provide evidence to the NWB and the Kivalliq Inuit Association, that the security has been received by the Minister, indicating the amount, form, nature and conditions of the security.
4. The Licensee shall, within ten (10) days after furnishing security with the Kivalliq Inuit Association, provide evidence to the NWB and to the Minister, that the security has been received by the Kivalliq Inuit Association, indicating the amount, form, nature and conditions of the security.
5. The Licensee shall provide the Board with at least ninety (90) days written notice prior to any ~~parties'~~ termination by the Licensee of the *Whale Tail Security Management Agreement*, or any material change to the *Whale Tail Security Management Agreement* that may affect the amount of security held under Part C, Item 1.

[Note: Agnico Eagle notes that while it could give prior written notice to the Board of its own intention to terminate the *Whale Tail Security Management Agreement*, it is not possible for Agnico Eagle to give prior notice of CIRNAC or KivIA's intentions with respect to the *Whale Tail Security Management Agreement*. The License should not be written in a way that could expose the Licensee to enforcement actions based on the actions of third parties]



that the Licensee does not control.]

- 5.6. 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).

7. The Licensee shall, within twelve (12) months following the commencement of Operations and when the Licensee files a Final Reclamation and Closure Plan as required under the Licence, submit to the Board for review an updated reclamation cost estimate, using the ~~CIRNAC~~ RECLAIM Reclamation Cost Estimating Model (Version 7.0 or the most current version in use at the time the updated reclamation cost estimate is submitted to the Board).
- 6.8. Upon the Board receiving notice under Part C, Items 5 or 6, or upon receiving an updated reclamation cost estimate as required under Part C, Item 7, the Board may, on its own initiative, or upon application by the Licensee, the Minister and/or the Kivalliq Inuit Association, conduct a periodic review of the outstanding reclamation liability associated with the Undertaking and may, as the Board considers appropriate, amend the amount of security held under Part C, Item 1. If the Nunavut Water Board determines it to be necessary or upon the request of the Proponent, the Minister and/or the KIA, the Nunavut Water Board may issue further direction with respect to the process for the Board's conduct of periodic reviews of security and associated amendments to the amount of security to be furnished and maintained under the Licence.
9. The Licensee may, at any time, submit to the Board for consideration and approval, a request to change the amount of security outlined in Part C, Item 1. The submission shall include supporting evidence to justify the request, and the Minister and the Kivalliq Inuit Association will be consulted by the Board during the Board's consideration of this request. Such requests ~~shall~~ may take into account the Water Monitoring Reduction Framework attached as Schedule C.

[Note: Under the Nunavut Waters Regulations and the Act the Board is to make the final decision on the determination of security, but Agnico Eagle agrees that CIRNAC and the KivIA should be consulted prior to making such determinations.]

With respect to Schedule C, see Agnico Eagle's note at Part C, Item 12 below.

It is also noted that the request to change the security should not be limited to once annually - security should be adjusted as need arises to reflect current site conditions.]

- 7.10. If the Board determines it to be necessary, or upon the request of Licensee, the Minister and/or the Kivalliq Inuit Association, the Board may issue further directions under this Part with respect to the process for amending the amount of security to be furnished and maintained under the Licence.
11. The security referred to in Part C, Item 1 shall be maintained until such time as the Minister is satisfied that the Licensee has complied with all provisions of the approved Final ~~Reclamation and Closure and Reclamation~~ Plan and as it is fully or in part refunded by the Minister pursuant to Section 76(5) of the Act, subject to the following. Consideration will be given to progressive release of security by the Minister as activities included in the



approved Interim Closure and Reclamation Plan are completed. This clause shall survive the expiry of the Licence or renewals thereof and until the Minister is satisfied that the Licensee has complied with all provisions of the approved Final Closure and Reclamation Plan. ~~full and final reclamation has been completed~~ to the satisfaction of the Minister.

[Note: Per their letter of October 11, 2017 on the Water Monitoring Reduction Framework, KivIA confirmed: "Reduction in security associated with the Project following a reduction in monitoring intensity (parameters, frequency, stations) is an acceptable approach if supported by monitoring data. Reductions in monitoring intensity following AEM's proposed rationale and our recommendations would reflect an increasingly stable and acceptable (as per the Project Certificate) post-closure aquatic environment as well as a decrease in outstanding environmental liabilities associated with the Project. We therefore agree that a staged reduction in security held by the federal government and KivIA (as agreed to in the Security Management Agreement and to the satisfaction of the NWB) commensurate with the measured decrease in project liabilities is appropriate."]

Similarly, per their letter of October 17, 2017 on the Water Quality Monitoring Reduction Framework, CIRNAC confirmed: "INAC agrees that a reduction in the amount of security being held associated with the Project can and should be decreased if appropriate reports, studies and monitoring data indicate that the site is becoming chemically and physically stable thereby also indicating that a reduction in water quality monitoring can be undertaken".]

8.12. The Board may ~~modify~~approve modifications to the Monitoring Program for all phases of mining as set out in Schedule I without amendment or a public hearing. Requests for changes to the Monitoring Program should be forwarded to the Board in writing and ~~should~~shall include justification for the change. Such requests may take into consideration the Water Monitoring Reduction Framework attached as Schedule C.

[Note: Agnico Eagle will update Schedule C memo and submit it to the Board 60 days after the issuance of the amended Licence. The update will take into consideration comments received from CIRNAC (October 17, 2017), ECCC (October 17, 2017, and KivIA (October 11, 2017). Per Part B, Item 21 of the Licence, the Board could revise Schedule C to reflect the updated Schedule C memo without need for "Amendment" to the License. Per ECCC's suggestion that this clause should be moved to a different Part of the Licence, Agnico Eagle is supportive of moving this clause to a different Part in the Licence as the Board deems appropriate.]

PART D: CONDITIONS APPLYING TO CONSTRUCTION AND OPERATION

1. The Licensee shall submit to the Board for review, at least thirty (30) days prior to Construction, final design and Construction drawings accompanied, with a detailed report, for the following:
 - a. Water Intake and causeway,
 - b. ~~Dikes, berms~~Berms, jetties);
 - c. Wastewater Treatment Plant,
 - d. Sewage Treatment Plant,
 - e. Saline Treatment Plant
 - f. Discharge Diffuser,



- ~~g. Waste Rock Storage Facility,~~
- ~~h.g. Overburden stockpiles,~~
- ~~i.h. Landfill; and~~
- ~~i. Bulk Fuel Storage Facility.~~

2. The Licensee shall submit to the Board for review, at least sixty (60) days prior to Construction, final design and Construction drawings accompanied, with a detailed report, for the following:
 - a. Dikes; and
 - b. Waste Rock Storage Facility.

[Note: Agnico Eagle notes that the Meliadine Type A Water Licence refers to a thirty (30) day review period, and so there is precedent for this approach. Accordingly, a 30 day period as described should be sufficient and would support construction proceeding on time within the limited windows available in the Arctic environment. That being said, given the ECCC comments while the majority of facilities should require a 30 day review, Agnico Eagle suggests that a 60 day review period could apply to Dikes and Waste Rock Storage Facility only]

- ~~2.3.~~ The detailed report(s) referred to in Part D, ~~Item~~Items 1 and 2 shall include:



- a. Design ~~rational~~rationale, requirements, criteria, parameters, standards analysis, methods, assumptions and limitations;
- b. Site specific data and analysis to support the design and management decisions;
- c. Geochemical analysis of Waste Rock and fill, demonstrating the Acid Rock Drainage and Metal Leaching characteristics of these materials;
- d. Construction methods and procedures outlining how infrastructure will be put in place, including Quality Assurance and Quality Control measures and equipment to be used;
- e. Technical specifications for sedimentation, erosion control and bank stabilization measures, including proposed materials, location and extent, place methods and quantities required;
- f. Timetable for submission, including date of Construction and proposed date of commissioning of infrastructure; and
- g. Where applicable, be signed and sealed by the appropriately qualified Engineer.

4. The Licensee shall submit to the Board for review, at least twenty (20) days prior to Construction, final design and Construction drawings accompanied, with a detailed report, for the:

- a. Whale Tail WRSF water collection system;
- b. IVR WRSF water collection system, ~~IVR WRSF water collection system~~;
- c. IVR diversion, ~~IVR attenuation~~;
- d. Attenuation pond infrastructure;
- e. IVR pit water management infrastructure;
- f. Dewatering A~~47,47~~;
- g. Dewatering A~~49,49~~;
- h. Dewatering A53,
- i. Dewatering A-P~~21,21~~;
- j. Dewatering A~~50,50~~;
- k. Dewatering A~~51,51~~;
- l. Dewatering A~~52,52~~;
- m. Whale Tail South Basin Diffuser;
- n. IVR Dike and spillway;
- o. Pad H Extension.

The detailed report shall include items referred to in Part D Item ~~2~~3.

[Note: Agnico Eagle presented detailed rationale for the 20 day review period during the Technical Meeting and provided to the Board with the listed items on December 20, 2019.]

5. The Whale Tail Waste Rock Storage Facility expansion and the IVR Waste Rock Storage Facility construction plans are deemed approved upon issuance of this Licence.

[Note: This timing provides notice that Agnico Eagle intends to commence construction immediately upon issuance of the Licence, and as agreed during the Technical Meeting Agnico Eagle provided these supporting materials to the intervenors and the Board in December 2019. See response to CIRNAC FC3(b) for further rationale.]

~~3.6.~~ The Licensee shall use Waste rock and fill material for Construction only from approved



sources that have been demonstrated, by appropriate geochemical analyses, to not produce Acid Rock Drainage and to be Non-Metal Leaching, and free of contaminants.

4.7. During dike construction, the Licensee shall implement the Water Quality Monitoring and Management Plan for Dike Construction and Dewatering and associated action plans outlined if:

- a. Total Suspended Solids (TSS) levels in a single sample exceed the Short Term Maximum TSS concentration defined in Part D Item ~~6~~8;
- b. The 7-day moving average TSS concentration exceeds the Maximum Monthly Mean TSS concentration defined in Part D Item ~~6-8~~.

5.8. The Licensee shall compare TSS levels as required in Part D Item 5 to the following Maximum Monthly Mean and Short Term Maximum concentrations:

Parameter	Maximum Monthly Mean (mg/L)	Short Term Maximum (mg/L)
TSS in areas where there is spawning habitat and at times when eggs or larvae are expected to be present	6	25
TSS in all other areas and at times when eggs/larvae are not present	15	50
TSS in impounded areas at all times in all areas.	15	50



- 6.9. Unless otherwise approved by the Board, Effluent from dewatering activities shall be monitored at Monitoring Program Stations ST- DD-1 to ST-DD-TBD and not exceed the following Effluent quality limits:

Parameter	Maximum Monthly Mean	Short Term Maximum
Total Suspended Solids (TSS)	15.0 mg/L	30 mg/L

[Note: Agnico Eagle agrees with ECCC that TSS should be retained as the regulated parameter for dewatering activities directed to the receiving environment and retaining turbidity and total aluminum as monitored parameters. Turbidity and aluminum are closely linked to TSS so there is redundancy in regulating all of these parameters. For pH, Agnico Eagle recommends it is retained as a monitored parameter because dewatering to the receiving environment represents the transfer of water that would be considered a 'like for like' water transfer; that is, pH in the dewatering water is expected to be similar to that in the Receiving Environment (any variability in pH between the two areas will be within the natural range of variability of pH reported in the receiving environment.)]

- 7.10. Effluent from dewatering of A-38, A-46, A-47, A-49, A-50, A-51, A-52, A-53, A-P21, A-P10, A-P67, A-P68 will be discharged to Whale Tail Lake South Basin, if discharge water quality criteria are met.

- 8.11. All Effluent from Sewage Treatment Plant shall be directed to the Whale Tail Attenuation Pond.

- 9.12. The Licensee shall monitor the ~~Whale Tail and IVR~~ Attenuation Ponds ~~and Whale Tail Lake South~~ water quality in accordance with the Licence criteria. Effluent from ~~Whale Tail~~ the Attenuation ~~Pond~~ Ponds may be discharged to Mammoth Lake ~~and/or Whale Tail South Basin~~ via ~~the Mammoth Lake~~ diffuser(s), if Effluent discharge criteria are met.

- 10.13. The Licensee shall implement sediment and erosion control measures prior to and during Construction, and Operations where necessary, to prevent entry of sediment into Water.

- 11.14. The Licensee shall inspect daily, all ~~construction~~ Construction activities for signs of erosion that may affect surface water flowing to Nemo Lake, Mammoth Lake and Whale Tail Lake.

- 12.15. Unless otherwise approved by the Board, ~~A~~all surface runoff during the ~~construction~~ Construction of any facilities, where flow may directly or indirectly enter a Water body, shall be sampled Weekly and not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids (TSS)	50.0	100.0

- 13.16. The Licensee shall, during the ~~construction~~ Construction of all engineered structures, provide the required supervision and field checks by an appropriately qualified and experienced



Engineer in such a manner that the Project specifications can be enforced and, where required, the quality control measures can be followed. The Licensee shall maintain all ~~construction~~Construction records of all ~~engineered structures~~Engineered Structures to be made available at the request of the Board and/or an Inspector.

- ~~14.~~17. The Licensee shall submit to the Board for review, within ninety (90) days of completion of each facility designed to contain, withhold, divert or retain Waters or Wastes during the construction phase, a Construction Summary Report prepared by a qualified Engineer(s) in accordance with [Schedule D, Item 1.](#)



~~15.~~18. The Licensee shall submit to the Board for review, within ninety (90) days of completion of the Whale Tail Haul Road, a Construction Summary Report prepared by a qualified Engineer(s) in accordance with [Schedule D, Item 1](#).

19. The Licensee shall prevent any chemicals, petroleum products, fuel or wastes associated with the Undertaking from entering any Water body except in accordance with this Licence.

[Note: As the overall purpose of the Licence is to set the conditions by which the Licensee may use water and manage waste in a manner that is protective of Nunavut waters, Agnico Eagle is of the view that the suggested wording provides clarity.]

~~16.~~20. The Licensee shall minimize disturbance to terrain, permafrost and drainage during movement of contractor's equipment and personnel around the site during construction activities.

~~17.~~21. The Licensee shall not store material on the surface of frozen streams or lakes except what is for immediate use.

~~18.~~22. The Licensee shall locate equipment storage areas on gravel, sand or other durable land, a distance of at least thirty one (31) metres above the ordinary High Water Mark of any water body in order to minimize impacts on surface drainage and water quality.

~~19.~~23. The Licensee shall undertake appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's operations.

~~20.~~24. The Licensee shall limit any in-stream activity to low Water periods. In-stream activity is prohibited during fish migration.

~~21.~~25. The Licensee shall, for the purposes of bridge construction, ensure that all activities remain outside of the natural channel width by the placement of abutments, footings or armouring above the ordinary High Water Mark so that there is no restriction to the natural channel processes.

~~22.~~26. The Licensee shall operate the Bulk Fuel Storage Facility in accordance with ~~all the~~ following applicable legislation and industry standards, ~~including~~:

- a. Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, 2003 (Updated in 2013) or most recent; CCME; and
- b. National Fire Code, 2010 or most recent.

[Note: To avoid potential for confusion, the specific applicable legislation and industry standards should be listed.]

~~23.~~27. The Licensee shall apply the principles of adaptive management in construction and operations. For greater clarity, Adaptive Management strategy actions identified in an



approved Adaptive Management Plan may be implemented by the Licensee upon notice to the Board and do not require Modification or Amendment to this Licence prior to implementation.

New Adaptive Management Actions may be implemented by the Licensee upon 21 days written notice to the Board and do not require Modification or Amendment to this Licence prior to implementation.

Notice to the Board must include:

- A description of the rationale for the action(s);
- An evaluation of whether the action may change overall reclamation liability, and if applicable an estimate of any required reduction or increase to security;
- Confirmation that the primary purpose for the action(s) is to prevent, stabilize, or reverse an adverse change in environmental conditions or to otherwise protect the ~~receiving environment~~ Receiving Environment;
- A description and location of any facilities and or works to be constructed;
- A description of any new monitoring required, including sampling locations, parameters measured and frequency of sampling;
- A proposed schedule for construction;
- Drawings of Engineered Structures stamped by a Professional Engineer (where applicable); and
- If required, any proposed sediment and erosion control measures.

PART E: CONDITIONS APPLYING TO WATER USE AND MANAGEMENT

1. Unless otherwise approved by the Board in writing, tThe Licensee shall obtain fresh Water ~~in~~from:

a. Nemo Lake;

b. Mammoth Lake;

c. A53;

d. Ponds/small lakes proximal to Whale Tail Haul Road; and

e. Other lakes listed as per Application,

for Construction and Operations, domestic camp use, dust suppression, drilling, dewatering, and associated use and tThe use of water for all purposes shall not exceed a total of 700,8359 m³ per year from the Licence approval date.

For illustrative purposes only, the Licencee anticipates utilizing the following volumes, from the following locations, for the following uses ~~or as otherwise approved by the Board in writing.~~
:

Purpose	Volume (Annual)	Source
Consumption (domestic camp use, construction,	209,544 m ³	Nemo Lake at Monitoring Station ST-WT-5 using the Nemo Lake Water



operations, dust suppression)		Intake
Consumption (emulsion plant)	2,500 m ³	Mammoth Lake
Dewatering	153,735 m ³	A53 and other lakes listed as per Application
Drilling	109,135 m ³	In total from all sources (this includes 25,037 m ³ from Nemo Lake)
Dust suppression around haul road	109,135 m ³	Ponds/small lakes proximal to Haul Road
	Subtotal: 584,049 m ³	
Contingency (20%)	116,810 m ³	Above described sources
	Total: 700,859 m ³	

2. Unless otherwise approved by the Board in writing, ~~the Licensee shall obtain fresh Water from:~~

~~a. Whale Tail South;~~

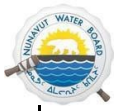
~~b. Lake D1; and/or~~

~~c. Nemo Lake.~~

~~The Licensee shall obtain fresh Water in for Closure and Post-Closure, and associated use or as and the use of water for all purposes shall not exceed a total of 2,475,934 m³ per year from the Licence approval date.~~

~~For illustrative purposes only, the Licencee anticipates utilizing the following volumes, from the following locations, for the following uses during closure, or as otherwise approved by the Board in writing:-~~

<u>Purpose</u>	Volume (Annual)	<u>LocationSource</u>
Re-flooding	10,655,000 m ³	Whale Tail South
Re-flooding	1,710,000 m ³	Lake D1
Consumption	14,672 m ³	Nemo Lake
Subtotal	12,379,672 m ³	



Contingency (20%)	2,475,934 m ³	All
Total	14,855,606 m ³	

3. The Licensee shall dewater lakes A-49, A-P67, A-47, A-46, A-P68, A-P21, A-50, A-51, A-52, A-P38, A-P10 as required for ~~construction~~Construction and ~~operations~~Operations, or as otherwise approved by the Board in writing.

4. As per Part E Item 2 above, the Licensee shall obtain fresh Water from Whale Tail Lake South Basin at Monitoring Station ST-WT-8 for re-flooding of Open Pits and associated use, or as otherwise approved by the Board in writing. ~~The use of Waters from Whale Tail South Basin shall not exceed a total of ten million six hundred fifty five thousand (10,655,000) cubic metres per year commencing when notification of Closure is received by the Board through to the Expiry of the Licence. Additional volumes of up to 1,710,000 m³ may be extracted annually from Lake D1 for re-flooding purposes and as updated in accordance with the Final Reclamation and Closure Plan.~~

[Note: the wording should be removed as it repeats information already summarized in Item 2 above.]

5. The Licensee shall equip all Water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.

6. The Licensee shall submit an updated *Water Management Plan* on an annual basis to the Board for review following the commencement of Operations. The Plan must include an updated Water Balance. The Water Management Plan shall include an action plan to be implemented if predicted re-flooded pit water quality indicates that treatment is necessary.

7. The Licensee shall submit a Water Quality Model for pit re-flooding and for WRSF contact water mixing into Mammoth Lake post-Closure as part of the Water Management Plan which shall be re-calibrated as necessary and updated annually following commencement of Operations. The results and implications of the predictive model shall be reported to the Board.

8. The Licensee shall, on an annual basis during Closure, compare the predicted water quantity and quality within the pit and lake, to the measured water quantity and quality. Should the difference between the Final Environmental Impact Statement (FEIS) water quantity and quality predictions described in Appendix 6-H of the FEIS, as supplemented by ECCC-T17 Figure (a), (b), (c), and (d) in Technical Comment Responses dated May 29, 2019 and measured values be 20% or greater,



then the cause(s) of the difference(s) shall be identified and the implications of the difference shall be assessed and reported to the Board.

[Note: Per ECCC comment, Agnico Eagle has provided a more specific reference.]

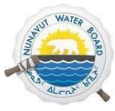
9. The Licensee may include appropriate Site Specific Water Quality Objectives site-specific water quality objectives within the ~~receiving environment~~ Receiving Environment applicable during construction and operations in the approved Water Quality and Flow Monitoring Plan, which Plan may be further modified by the Licensee and approved by the Board from time to time.
10. The Licensee shall not breach dikes until the water quality in the re-flooded area meets *CCME Water Quality Guidelines for the Protection of Aquatic Life*, ~~Final Environmental Impact Statement (FEIS) predictions~~, predictions described in Appendix 6-H of the FEIS, as supplemented by ECCC-T17 Figure (a), (b), (c), and (d) in Technical Comment Responses dated May 29, 2019, or appropriate site-specific water quality objectives. If water quality parameters are above *CCME Guidelines* or FEIS predictions, unless otherwise approved by the Board, a site-specific risk assessment must be conducted to identify Site Specific Water Quality Objectives for the site that are protective of the aquatic environment. Where they are required, Site Specific Water Quality Objectives shall be incorporated in the approved *Final Reclamation and Closure Plan*.

[Note: Per ECCC comment, Agnico Eagle has provided a more specific reference.]

11. The Licensee shall carry out weekly inspections of all water management structures during periods of flow and the records of inspections shall be kept for review upon request of an Inspector. More frequent inspections may be required at the request of an Inspector. This information is to be included in the *Water Management Plan*.
12. The Licensee shall implement measures to minimize the generation and deposition of dust and/or sediment into Water arising from road use.
13. The Licensee shall provide at least thirty (30) days' notice to the NWB and Inspector prior to the commencement of re-flooding of Open Pit.

PART E: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT

1. The Licensee shall direct all Contact Water from the water collection ponds to ~~Whale Tail and IWR~~ Attenuation Ponds, or as otherwise approved by the Board in writing.
2. The Licensee shall direct all Sewage to the Sewage Treatment Plant for treatment prior to its discharge to ~~Whale Tail~~ Attenuation Ponds, or as otherwise approved by the Board in writing.
3. The Licensee shall dispose of all sludge removed from the Sewage Treatment Plant and Wastewater Treatment Plant in the Waste Rock Storage Facility(s) or the Tailings Storage Facility or in a landfarm as a nutrient amendment in accordance with the Sewage Treatment



Plant Operation and Maintenance Plan.

4. The Discharge of Effluent from the Whale Tail Attenuation Pond at Monitoring Program Station ST-WT-2 shall be directed to Mammoth Lake at Monitoring Program Station ST-WT-26 for South Whale Tail Basin, and at Monitoring Program Station TBD for Lake D1 and Lake D5 through the approved diffusers and unless otherwise approved by the Board as part of a Plan shall not exceed the following Effluent quality limits:



Parameter	Unit	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Grab Sample
Conventional Constituents			
pH		6.0 to 9.5	6.0 to 9.5
Total Suspended Solids TSS	mg/L	15	30
Nutrients			
Total Ammonia (NH ₃ -N)	mg-N/L	16	32
Total Phosphorous (P)	mg-P/L	0.3	0.6
Total Metals			
Aluminum (Al)	mg/L	0.5	1.0
Arsenic (As)	mg/L	0.1	0.2
Cadmium (Cd)	mg/L	0.002	0.004
Chromium (Cr)	mg/L	0.02	0.04
Copper (Cu)	mg/L	0.1	0.2
Iron (Fe)	mg/L	1.0	2.0
Lead (Pb)	mg/L	0.05	0.1
Mercury (Hg)	mg/L	0.004	0.008
Nickel (Ni)	mg/L	0.25	0.5
Zinc (Zn)	mg/L	0.1	0.2
Other			
Total Petroleum Hydrocarbons (TPH)	mg/L	3.0	6.0

[Note: ECCC suggested that removal of TDS could be considered if Agnico Eagle presents rationale for the removal of TDS which demonstrates it is not a parameter of concern.]

For clarity, Agnico Eagle is proposing to remove TDS as a regulated parameter but would continue to monitor for TDS. ECCC has not identified TDS as a parameter of potential concern (deleterious substance) in Schedule 4 of the MDMER. Further the only mining Type A Water Licences that include TDS as a regulated parameter in Nunavut are the Whale Tail, Meadowbank and Meliadine Type A Water Licences. Therefore, TDS is not considered a parameter of particular concern. Acute toxicity testing of Effluent required by the Licence and the MDMER would ensure that discharges are protective of Nunavut waters, and continuing monitoring of TDS would ensure that any trends of interest are appropriately considered.

It is also noted that several of the parameters listed in Part F, Item 4 include more stringent discharge requirements than ECCC has included in Schedule 4 of the MDMER. The current authorized discharge limits under Schedule 4 of the MDMER are as follows (note cyanide and radium 226 are not relevant to this site):

<u>Deleterious Substance</u>	<u>Maximum Authorized Monthly Mean Concentration</u>	<u>Maximum Authorized Concentration in a Composite Sample</u>	<u>Maximum Authorized Concentration in a Grab Sample</u>
<u>Arsenic</u>	<u>0.50 mg/L</u>	<u>0.75 mg/L</u>	<u>1.00 mg/L</u>



Copper	0.30 mg/L	0.45 mg/L	0.60 mg/L
Cyanide	1.00 mg/L	1.50 mg/L	2.00 mg/L
Lead	0.20 mg/L	0.30 mg/L	0.40 mg/L
Nickel	0.50 mg/L	0.75 mg/L	1.00 mg/L
Zinc	0.50 mg/L	0.75 mg/L	1.00 mg/L
Total Suspended Solids	15.00 mg/L	22.50 mg/L	30.00 mg/L
Radium 226	0.37 Bq/L	0.74 Bq/L	1.11 Bq/L

* NOTE: All concentrations are total values

Therefore, the Licence effluent discharge criteria at Part F, Item 4 would remain stringent overall following the removal of TDS, as compared to the applicable federal regulatory requirements for mine discharge.

For all of these reasons, Agnico Eagle is of the view that TDS should be removed as a regulated parameter.]

5. The Discharge of Effluent from a Final Discharge Point at Monitoring Program Stations ST-WT-2, at Monitoring Program Station ST-WT-26 for South Whale Tail Basin, and at Monitoring Station TBD for Lake D1 and Lake D5 shall be demonstrated to be non-Acutely ~~non-Lethal~~ ~~in accordance with the MDMER.~~

[Note: Revised per ECCC's request to reflect the current MDMER wording and include reference to the test method - see references included in new definition "Acutely Lethal" which wording tracks the current definition of "Acutely Lethal" in the MDMER.]

- 5.6. Unless otherwise approved by the Board, All water collected prior to discharge from the Non-Contact Water diversions at Monitoring Program Stations ST-WT-7 and ST-WT-13, and Whale Tail Dike Seepage at Monitoring Program Stations ST-WT-17, during Operations shall not exceed the following Effluent quality limits:

Parameter	Unit	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Grab Sample
TSS	mg/L	15	30



6.7. Unless otherwise approved by the Board, the Discharge of Effluent to land from the Landfarm at Monitoring Station ST-WT-27, from the Whale Tail Bulk Fuel Storage Facility at Monitoring Station ST-WT-12 and from the Secondary Containment Powerhouse Tank ST-WT-16, and shall not exceed the following Effluent quality limits:

Parameter	Unit	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Grab sample
pH		6.0 to 9.5	6.0 to 9.5
Total Arsenic (As)	mg/L	*0.5	1.0
Total Copper (Cu)	mg/L	*0.3	0.6
Total Nickel (Ni)	mg/L	*0.5	1.0
Total Zinc (Zn)	mg/L	*0.5	1.0
Total Suspended Solids (TSS)	mg/L	*15	30
Ammonia	mg/L	6.0	6.0
Benzene	µg/L	370	370
Toluene	µg/L	2	2
Ethylbenzene	µg/L	90	90
Lead	mg/L	*0.2	0.4
Oil and Grease	mg/L	5 and no visible sheen	5 and no visible sheen

* Metal and Diamond Mining Effluent Regulations (MDMER)

7.8. The Licensee shall, under Part F, Item 7, discharge Effluent to a location at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any Water body, in such a manner as to minimize surface erosion to where direct flow into a Water body is not possible and no additional impacts are created, or as otherwise approved by the Board in writing.

8.9. The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any Water body such that the quality, quantity or flow of Water is not impaired, or as otherwise approved by the Board in writing.

9.10. All Effluent at Monitoring Stations ST-WT-12 and ST-WT-16 and ST-WT-27 that exceed the Effluent quality limits under Part F, Item 7, shall be transferred to the ~~WTP or Whale Tail/IVR~~ Attenuation Ponds, or other facility for treatment.

10.11. The Licensee shall confirm compliance with Effluent quality limits in Part F, Items 4, 5, 6, and 7 prior to Discharge.



- ~~11~~.12. The Licensee shall provide at least three (3) days notice to the Inspector prior to any planned Discharges from any facilities. The notice shall include the estimated volume proposed for Discharge and the receiving location.
- ~~12~~.13. Unless otherwise approved by the Board in writing, the Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters.
- ~~13~~.14. The Licensee is authorized to dispose of and contain all non-hazardous, solid Wastes at the Whale Tail Landfill in accordance with the approved *Whale Tail Pit Landfill and Waste Management Plan*, or as otherwise approved by the Board in writing.
- ~~14~~.15. With the exception of petroleum hydrocarbon contaminated soils to be remediated as per the Landfarm Management Plan, the Licensee shall remove from the Project site, all solid and liquid Hazardous Wastes generated through the course of Project activities, for disposal at an approved hazardous waste disposal facility in accordance with the approved *Hazardous Materials Management Plan*.
- ~~15~~.16. The Licensee shall maintain records of all Waste backhauled and confirmation of proper disposal through the use of Waste manifest tracking systems and registration with the Government of Nunavut, Department of Environment.
- ~~16~~.17. The Licensee shall dispose of all petroleum hydrocarbon contaminated soils in an approved landfarm facility.
- ~~17~~.18. The Licensee shall dispose of waste rock in accordance with the approved *Whale Tail Pit Waste Rock Management Plan*, or as otherwise approved by the Board in writing.
- ~~18~~.19. The Licensee shall incorporate Seepage management at Quarries using best management practices including ditches, diversions, sumps and berms where necessary.
- ~~19~~.20. The Licensee shall provide to the Board, at least thirty (30) days prior to any planned disposal of Waste in a facility operated by the Hamlet of Baker Lake, documented authorization from the Hamlet for the use of any waste disposal facility operated by the Hamlet.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications of Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:



- a. The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. Such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
 - c. Such Modifications are consistent with the applicable terms and conditions of the NIRB Project Certificate No. 008;
 - d. The Board has not, within sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. The Board has not rejected the proposed Modifications.
2. Modifications for which any of the conditions referred to in Part G, Item 1 have not been met can be carried out only with approval from the Board in writing.
3. Applications for modifications shall contain:
- a. A description of the facilities and/or works to be constructed;
 - b. The proposed location of the structure(s);
 - c. Identification of any potential impacts to the receiving environment;
 - d. A description of any monitoring required, including sampling locations, parameters measured, and frequencies of sampling;
 - e. A proposed schedule for construction;
 - f. Drawings of Engineered Structures stamped by a Professional Engineer; and
 - g. Proposed sediment and erosion control measures.
4. Where a proposed Modification is located outside the ~~existing footprint~~ Project Footprint, the Licensee must also confirm that the proposed Modification is in conformity with the applicable land use plan and that it is not a significant modification as that term appears in section 88 and subparagraphs 89 of the *Nunavut Planning and Project Assessment Act*. For greater clarity, ~~Modifications~~ a Modification located within the ~~project footprint are not deemed~~ Project Footprint is not considered a "significant modification" under the *Nunavut Planning and Project Assessment Act*.
- [Note: Per request from KivIA, Agnico Eagle has proposed a definition of Project Footprint.]*
- 4.5. The Licensee shall provide to the Board, within ninety (90) days of completion of the Modification, as-built plans and drawings of the Modifications referred to in this Part. These plans and drawings shall be stamped by an Engineer (where applicable).

PART H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING

1. The Licensee shall implement the *Emergency Response Plan*, and the *Spill Contingency Plan*, as approved by the Board. The Licensee shall comply with the Plan(s) and any changes deemed significant shall require the submission and subsequent approval of the Board in



writing.

2. The Licensee shall prevent any chemicals, petroleum products or unauthorized Wastes associated with the Project from entering Water.
3. The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.
4. The Licensee shall perform weekly inspections of petroleum products storage and containment facilities, fuel tanks and connectors, for leaks and settlement and shall keep a written log of inspections to be made available to an Inspector upon request. More frequent



5. If the Licensee provides notification under Part J, Item 4, the Licensee shall submit to the Board an Addendum to the *Emergency Response Plan* and the *Spill Contingency Plan*, detailing the changes in operations, personnel, responsibilities, availability of equipment and access to the site for assistance.
6. The Licensee shall keep a copy of the *Emergency Response Plan* and the *Spill Contingency Plan* at each site of operation.
7. The Licensee shall conduct emergency maintenance and servicing on equipment, in designated areas, and shall implement measures to collect motor fluids and other Waste to prevent and contain spills.
8. The Licensee shall, subject to Section 16 of the *Regulations*, report any unauthorized discharges or foreseeable unauthorized discharges of waste in excess of the *Regulations* thresholds set out in the *Nunavut Spill Planning and Reporting Regulations*, and:
 - a. Employ the Spill Contingency Plan;
 - b. Report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130, fax at (number) or by electronic mail and to the Inspector at (867) 975-4295 or by electronic mail;
 - c. Information that is reported in person or by telephone must also be reported in writing to an inspector without delay; and
 - d. For each spill occurrence, submit a detailed report to the Inspector, no later than thirty (30) days after initially reporting the event, which includes the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
9. The Licensee shall, in addition to Part H, Item 8, regardless of the quantity of release of a harmful substance, report to the NWT/NU Spill Line if the release is near or into a Water body.

1. The Licensee shall comply with the *Aquatic Effects Monitoring Program* (AEMP). The AEMP shall include:
 - a. Comprehensive receiving environment monitoring to identify changes to the aquatic environment associated with mine activities;
 - b. Linkage between monitoring results and adaptive management response;
 - c. Monitoring of lake productivity;
 - d. Sampling and analysis plans; and
 - e. Monitoring under Fisheries Authorizations, NWB Licence Compliance Monitoring, *MDMER* Environmental Effects Monitoring, and Groundwater Monitoring.





- f. The flow during periods of discharge from the Landfill, Landfarm, Waste Rock Storage Facilities, Wastewater Treatment Plant, Contact Water Collection System, and area Sumps collecting Contact Water;
 - g. The volume of water transferred from the Whale Tail Bulk Fuel Storage Facility;
 - h. The volume of sludge removed from the Sewage Treatment Plant and Wastewater Treatment Plant and Saline Water Treatment Plant; and
 - i. Tonnes of mineralized and un-mineralized waste rock stored.
8. The Licensee shall undertake the Thermal Monitoring Program detailed in the *Whale Tail Waste Rock Management Plan* as approved by the Board.
9. The Licensee shall undertake a geotechnical inspection, to be carried out annually by a Geotechnical Engineer, between the months of July and September. The inspection shall be conducted in accordance with the *Canadian Dam Safety Guidelines* where applicable and take into account all major earthworks, including:
 - a. Dikes;
 - b. Cofferdams;
 - c. Pit walls;
 - d. Underground portal;
 - e. Waste Rock Storage Facilities;
 - f. Landfill;
 - g. Landfarm;
 - h. Shoreline protection at the location of the Mammoth Lake Diffuser;
 - i. Geotechnical instrumentation;
 - j. Whale Tail Haul Road and site roads, in particular water crossings;
 - k. Quarries;
 - l. Bulk Fuel Storage Facilities, including secondary containment;
 - m. Attenuation Ponds; and
 - n. Collection Ponds and Sumps.
10. The Licensee shall submit to the Board as part of the Annual Report, the Geotechnical Engineer's Inspection Report. The Report shall include a cover letter from the Licensee outlining an implementation plan to address the recommendations of the Geotechnical Engineer.
11. The Licensee shall submit to the Board as part of the Annual Report required under Part B, Item 2, all reports and performance evaluations prepared by the Independent Geotechnical Expert Review Panel.
12. Unless otherwise approved by the Board, The Licensee shall monitor and record Seepage observations pursuant to Part I, Item 8 in accordance with the following:



Characterization of seepage including: precise location; discharge rates and volumes; respective hazard(s) and consequences and prescribed mitigative measures	Minimum Frequency of Observation
Seepage (of any kind) through any Dike(s)	Monthly
Seepage and Runoff from the Landfill(s)	Quarterly
Seepage and Runoff from Waste Rock Storage Facility	Quarterly
Seepage and Runoff from Ore piles	Quarterly
Seepage at Pit Wall and Pit Wall Freeze/Thaw and Permafrost Aggradation	Quarterly

13. The Licensee shall submit the results and interpretation of the Seepage monitoring required in Part I Item 15 in the Annual Report required under Part B, Item 2.
14. The Licensee shall implement the Inspection and Maintenance procedures for the Haul Road in accordance with the *Whale Tail Pit Haul Road Management Plan*.
15. The Licensee shall keep a digital photographic record of all the Project's watercourse crossings before, during, and after Construction has been completed.
16. The Licensee shall maintain and implement the *Quality Assurance / Quality Control Plan* that includes requirements for independent third party sampling and analysis. The QA/QC Plan shall be updated as needed in accordance with, and in consultation with, the accredited laboratory conducting the analyses. This Plan shall be developed and maintained in accordance with current Standard Methods and the *1996 Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class "A" Licensees in Meeting SNP Requirements*.
17. The Licensee shall annually review the approved QA/QC Plan and modify the plan as necessary. Proposed changes shall be submitted to an Accredited Laboratory for approval.
18. All analyses shall be conducted as described in the most recent edition of "*Standard Methods for the Examination of Water and Wastewater*" or by other such methods approved by an Analyst.
19. All compliance analyses shall be performed in an accredited laboratory according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
20. The Licensee shall submit to the Board, within thirty (30) days following the month being reported, a Monthly Monitoring Report. The Report shall include:
 - a. All data and information required by this Part and generated by the Monitoring Program in the Tables of Schedule I; and



- b. An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in Parts D and F.
21. As noted in Part B, Item 19, changes to the Schedules, including Schedule I, which provides details of the Monitoring Program, may, at the Board's discretion, be considered without requiring an Amendment to the Licence. However, the Board must approve any changes to the Monitoring Program, as outlined in Part I and Schedule I; any request for changes to the Monitoring Program should be submitted to the NWB in writing, and should include the justification for the change.

PART J: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE

1. The Licensee shall implement the *Interim Closure and Reclamation Plan*.
2. The Licensee shall submit to the Board for approval within three (3) years of Operations, an updated Interim Whale Tail Pit Closure and Reclamation Plan prepared in accordance with the "*Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories*", issued by the Mackenzie Valley Land and Water Board (MVLWB) and Aboriginal Affairs and Northern Development Canada (AANDC) in 2013 (MVLWB/AANDC 2013) and consistent with the *Mine Site Reclamation Policy for Nunavut, 2002*. The Plan shall include all mine related facilities and Whale Tail Pit Haul Road.
3. The Licensee shall submit to the Board for approval at least twelve (12) months prior to the expected end of planned mining, a Final Closure and Reclamation Plan. The Final Closure and Reclamation Plan shall incorporate revisions, which reflect the pending closed status of the mine, and include:
 - a. Soil Quality Remediation Objectives reflecting the applicable *CCME Guidelines* and the *Government of Nunavut Environmental Guideline for Site Remediation*;
 - b. Environmental Site Assessment plans in accordance with the applicable Canadian Standards Association (CSA) criteria; and
 - c. An evaluation of the human health and ecological risks associated with the Closure options proposed.
4. The Licensee shall notify the Board in writing, at least sixty (60) days prior to, or as soon as practically possible, of the Licensee's intention to enter into a Care and Maintenance Phase.
5. The Licensee shall provide the Board, within thirty (30) days of the Licensee providing notice of intent to enter into Care and Maintenance under Part J, Item 4, a Care and Maintenance Plan that details the Licensee's plans for maintaining compliance with the Terms and Conditions of the Licence.



- [Note: The inclusion of the phrase "to the extent practicable" is intended to acknowledge that natural channel drainage cannot be restored exactly to its previous state even after culvert removal. Agnico Eagle is committed to carrying out all reclamation as required by the Final Reclamation and Closure Plan.]

11. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut's *Environmental Guideline for Site Remediation*, (2010 version or current version in place at the time of Reclamation).

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SCHEDULES

Schedule A: Scope, Definition, and Enforcement

Schedule B: General Conditions

Schedule C: Water Monitoring Reduction Framework

Schedule D: Conditions Applying to Construction

Schedule E: No Schedule for Water Use and Management

Schedule F: No Schedule for Waste Disposal and Management

Schedule G: No Schedule for Modifications

Schedule H: No Schedule for Emergency Response and Contingency Planning

Schedule I: Conditions Applying to General and Aquatic Effects Monitoring

Schedule J: No Schedule for Abandonment, Reclamation and Closure



Schedule A: Scope, Definitions, and Enforcement

[Note: Agnico Eagle has suggested removing defined terms that are not included in current licence wording.]

In this Licence: **2AM-WTP2043**

“Abandonment” means the permanent dismantlement of a facility so it is permanently incapable of its intended use. This includes the removal of associated equipment and structures;

“Act” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“Acid Rock Drainage (ARD)” means the production of acidic leachate, seepage or drainage from Underground workings, Open Pits, ore piles, waste rock, construction rock that can lead to the release of metals to groundwater or surface water during the life of the Project and after Closure;

“Acutely Lethal Effluent” means ~~acutely lethal effluent~~, as defined ~~in the Metal and Diamond Mining Effluent Regulations and as may be further by the MDMER and as~~ amended from time to time; *“in respect of an Effluent means that the effluent at 100% concentration kills (a) more than 50% of the rainbow trout subjected to it for a period of 96 hours, when tested in accordance with the acute lethality test set out in section 14.1 [of the MDMER]; or (b) more than 50% of the threespine stickleback subjected to it for a period of 96 hours, when tested in accordance with the acute lethality test set out in section 14.2. [of the MDMER]”;*

[Note: Agnico Eagle suggests this change for consistency with the current MDMER - MMR definition of "acutely lethal effluent" was repealed and replaced in 2018.]

“Adaptive Management” means a management plan that describes a way of managing risks associated with uncertainty and provides a flexible framework to identify specific thresholds and associated management actions to be taken by the Licensee when defined thresholds are exceeded. Mitigation measures may include special studies, operational changes, revised or new water and waste management systems, structures and or facilities, or implementing mitigation activities to prevent, stabilize or reverse a change in environmental conditions or to otherwise protect the ~~receiving environment~~ **Receiving Environment**;

“Addendum” means the supplemental text that is added to a full plan or report, usually included at the end of the document and is not intended to require a full resubmission of the revised report. It may also be considered as an appendix or supplement;

“Amendment” means a change to any terms and conditions of this Licence through application to the NWB, requiring a change, addition, or deletion of specific terms and conditions of the Licence not considered as a Modification and for greater clarity, proceeding with Adaptive Management and or a New Adaptive Management Action shall not require an Amendment;

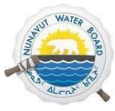
“Analyst” means an Analyst designated by the Minister under section 85 (1) of the *Act*;



“Annually” means, in the context of monitoring frequency, one sampling event occurring every 365 days with a minimum of 200 days between sampling events;

“Aquatic Effects Monitoring Program (AEMP)” means an overarching “umbrella” program that conceptually provides an opportunity to integrate results of individual, but related, monitoring programs in accordance with the Licence;

“Board” means the Nunavut Water Board established under Article 13 of the *Nunavut Agreement* and under section 14 of the *Act*;



“Canadian Council of the Minister of Environment (CCME)” means the organization of the Canadian Ministers of Environment that sets guidelines for environmental protection across Canada such as the *Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life*;

“Care and Maintenance” in respect of a mine, means the status of the facility when the Licensee ceases production or ~~commercial operation~~**Commercial Operation** temporarily for an undefined period of time;

“Closure” means when the Licensee ceases operations at a facility without the intent to resume mining activities in the future;

“Commercial Operation” in respect of a mine, means an average rate of production that is equal to or greater than 25% of the design capacity of the mine over a period of ninety consecutive days;

“Construction” means any activities undertaken to construct or build any component of, or associated with, the development of the Project, as described in the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process;

“Contact Water” means any water that has interacted with mine facilities or mining activities, including all runoff and seepage from WRSF and Ore Stockpiles;

“Contact Water Collection System” means the system of trenches, sumps and attenuation ponds designed to manage water that may interact with any mine development activities, including but not limited to pre-development activities as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time in accordance with this Licence;

“Core Receiving Environmental Monitoring Program or CREMP” means a monitoring program designed to determine the short and long-term effects in the aquatic environment resulting from the Project, to evaluate the accuracy of impact predictions, to assess the effectiveness of planned impact mitigation measures and to identify additional impact mitigation measures to avert or reduce environmental effects or Adaptive Management and which may be consolidated and streamlined with other plans in accordance with the Licence;

“Dam Safety Guidelines” means the *Canadian Dam Association (CDA) Dam Safety Guidelines (DSG)*, (published in 2007, revised in 2013 or subsequent approved editions);

~~“Deleterious Substances” means a substance as defined in section 34(1) of the Federal Fisheries Act;~~



“**Deposit**” means the placement of waste rock, tailings or other solid materials on land or, in water;

“**Diffuser**” means a Effluent discharge pipeline within a water body designed to discharge and enhance mixing of Effluent in the ~~receiving environment~~ Receiving Environment as described in the *Water Management Plan*, as modified from time to time in accordance with the Licence;

“**Discharge**” means the release of any water or waste to the receiving environment;

“**Dissolved Metals**” means the suite of metals referred to in Group 2 of Table 1 – Monitoring Groups located in Schedule J of this Licence. Dissolved metals shall be analyzed on a filtered sample;

“**Domestic Waste**” means all solid waste generated from the accommodations, kitchen facilities and all other site facilities, excluding those hazardous wastes associated with the Project;

“**Effluent**” means treated or untreated liquid waste material that is discharged into the Receiving Environment from all site water management facilities;

“**Emulsion Plant (Explosives Mixing Facility)**” means the facility designed for storage of Ammonium Nitrate, detonators, and explosives; and designed for the mixing and storage of Ammonium Nitrate Fuel Oil (ANFO), as indicated in the *Ammonia Management Plan*, and as modified in accordance with this Licence from time to time;

“**Engineer**” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

“**Engineered Structure**” means any facility, which was designed and approved by a Professional Engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;

“**Environmental Assessment**” means, in respect of the Project, all material filed with the Nunavut Impact Review Board (NIRB) on the NIRB’s Public Registry (established under the authority of Article 12 of the *Nunavut Agreement*) that is associated with the NIRB’s impact assessment (Review) of the Project and associated with the scope of the activities, works and Undertakings authorized in accordance with the terms and conditions of the Licence;

“**Final Discharge Point**” in respect of an effluent, means, as defined in the *Metal and Diamond Mining Effluent Regulations* (as may be further amended from time to time);

“**Fresh Water Intake**” means the facility or facilities consisting of vertical filtration wells fitted with vertical turbine pumps connected to the pump house with piping buried under a rockfill causeway for the purpose of supplying freshwater to the Whale Tail Pit Project as described in the *Whale Tail Pit Water Management Plan* and as modified from time to time in accordance with the Licence;



“Geotechnical Engineer” means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization is the engineering properties of earth materials in dealing with manmade structures and earthworks. Such structures and earthworks can include shallow and deep foundations, retaining walls, dams, and embankments;

“Grab Sample” means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;

“Greywater” means the component of effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), but excluding sewage;

“Ground Water” means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state;

“Hazardous Waste” means materials or contaminants which are categorized as dangerous goods under the *Transportation of Dangerous Goods Act* 1992 (1992, c. 34) and/or that are no longer used for their original purpose and are intended for recycling, treatment, disposal or storage;

“High Water Mark” means the usual or average level to which a body of water rises at its highest point and remains for a sufficient time so as to change the characteristics of the land (ref. *Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities*);

~~**“ICP Metals Scan”** means elements detected using Inductively Coupled Plasma (ICP) mass spectrometer. Metal parameters chosen to be included in an ICP Metals Scan under the Licence should be consistent with baseline data previously collected and include any metals of concern or interest;~~

“Incinerator” means the dual chamber, high temperature facility designed with the capacity to service the mine site camp as described in the Incineration Waste Management Plan and as modified from time to time in accordance with this Licence;

“Independent Geotechnical Expert Review Panel” means the panel of geotechnical specialists established by Agnico Eagle to review the designs and performance of the dikes and dams;

“Inspector” means an Inspector designated by the Minister under section 85 (1) of the *Act*;

“Interim Closure and Reclamation Plan” means a plan addressing the Reclamation of mine components which will not be closed until the end of the mining operations, and operational detail for components which are to be progressively reclaimed throughout the mine life and which may be consolidated and streamlined with other plans in accordance with the Licence;



"Landfarm" means a lined engineered facility designed to contain and treat hydrocarbon contaminated sediments and soils as described in the *Landfarm Design and Management Plan* and as modified from time to time in accordance with this Licence;

"Landfill" means the facility to be constructed and operated until the end of the mine life designed to contain non-salvageable, non-organic, non-hazardous solid wastes from mining activities that cannot be incinerated, as described in the *Whale Tail Pit Landfill and Waste Management Plan* and as may be modified from time to time under this Licence;

"Licence" means this Type "A" Water Licence 2AM-WTP2043, issued by the Nunavut Water Board in accordance with the *Act*, to Agnico Eagle Mines Limited (Agnico Eagle) for the Whale Tail Pit Project;

"Licensee" means the entity to whom the Licence is issued or to whom the Licence is subsequently assigned;

"Mammoth Channel Culvert" means the structure designed to divert non-contact water from the west shore of the open pit to Lake A16 (Mammoth Lake), if deemed necessary and as may be modified from time to time in accordance with this Licence;

"Mammoth Dike" means the structure designed to protect the mine site area from potential backwatering from Lake A16 (Mammoth Lake) during the operational and Closure phases as indicated in the *Whale Tail Pit Water Management Plan*, and as modified from time to time in accordance with this Licence;

"Maximum Average Concentration" means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe;

"Maximum Monthly Mean" means the average concentration of all samples collected over a thirty day period from the identical sampling location;

"Meadowbank Gold Mine Project" means the Meadowbank Gold Project (Meadowbank Gold Mine) as outlined in the Final Environmental Impact Statement and supplemental information submitted by Cumberland Resources Limited to the Nunavut Impact Review Board (NIRB) as well as the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted by Agnico Eagle Mines Limited to the NWB throughout the regulatory process;

"Metal Leaching" means the mobilization of metals into solution under neutral, acidic or alkaline conditions;

"Minister" means the Minister of Crown-Indigenous Relations and Northern Affairs (CIRNAC, formerly the Minister of Indigenous and Northern Affairs Canada);

"Modification" means an alteration to a physical work that introduces a new structure or revises



or eliminates an existing structure and does not alter the purpose or function of the work, but does not include Adaptive Management or a New Adaptive Management Action;

“Monitoring Program” means the program to collect data on surface water and Ground Water quality to assess impacts to the environment of an appurtenant Undertaking;

“Monthly” means, in the context of monitoring frequency, one sampling event occurring every thirty (30) days with a minimum of twenty one (21) days between sampling events;

“New Adaptive Management Action” means an Adaptive Management action that is not included in an approved plan but is recommended by the Licensee or others to prevent, stabilize, or reverse a change in environmental conditions or to otherwise protect the receiving environment;

“Non-Contact Water” means the runoff originating from areas unaffected by mining activity that does not come into contact with developed areas;

~~“North Channel” means the structure designed to divert non-contact water from the north shore of the open pit to Lake A16 (Mammoth Lake) in accordance with the Whale Tail Pit Water Management Plan, if deemed necessary and as modified from time to time in accordance with the Licence;~~

~~“Northeast Dike” means the structure designed to raise Lake A47, Lake A48, Lake A113, Pond A-P38, and Pond A-P68, and to divert runoff to the Lake C38 (Nemo Lake) watershed as indicated in the Whale Tail Pit Water Management Plan and as modified from time to time in accordance with the Licence;~~

~~“Northeast Pond” means the facility to divert non-contact water towards the C Watershed runoff that will be drawn down into the open pit before the dike will be decommissioned as described in the Whale Tail Pit Water Management Plan and as modified from time to time in accordance with the Licence;~~

“Nunavut Agreement” means the “*Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada*,” including its preamble and schedules, and any amendments to that agreement made pursuant to it;

“Open Pits” means the open pits to mine the satellite deposits located on the Amaruq Exploration property approximately 150 km north of Hamlet of Baker Lake and 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut;

~~*[Note KivIA has suggested including reference to KIA surface lease in relation to this definition. Agnico Eagle disagrees.]*~~

“Operations” means the set of activities associated with mining, ore processing and recovery of gold; excluding Construction, Care and Maintenance, decommissioning and permanent Closure activities;

“Plans” include initial design plans submitted by the Licensee, which include objectives, methods, contingencies, roles and responsibilities, monitoring and mitigation and which may be subsumed



and replaced by operational management plans based on design plans which are streamlined to better support the Licensee's obligations under the License and the Act, site operations and inspections.

"Progressive Reclamation" means actions that can be taken during Operations before permanent Closure, to take advantage of cost and operating efficiencies by using the resources available from Operations to reduce the overall reclamation costs incurred. It enhances



environmental protection and shortens the timeframe for achieving the final Reclamation objectives and goals;

“**Project**” means the Whale Tail Pit Project Proposal and the Whale Tail Expansion Proposal as outlined in the Final Environmental Impact Statement, Addendum and supplemental information submitted by Agnico Eagle Mines Limited (Agnico Eagle) to the Nunavut Impact Review Board (NIRB) as well as the associated Water Licence Applications, Supporting Documents, and Technical Meeting Information Supplement documents submitted by Agnico Eagle to the NWB throughout the regulatory process;

“**Project Footprint**” means the Project as described at Part A, Item 1 “Scope”;

“**Quarry**” means the sites where materials such as rock, gravel, sand or esker are excavated for use at the Project, including in the development of infrastructure and facilities, Operations and Closure;

“**Quality Assurance / Quality Control (QA/QC)**” Quality Assurance means the system of activities designed to better ensure that quality control is done effectively; Quality Control means the use of established procedures to achieve standards of measurement for the three principle components of quality: precision, accuracy and reliability;

“**Quarterly**” means, in the context of monitoring frequency, one sampling event occurring every three months with a minimum of ninety days between sampling events;

“**Receiving Environment**” means both the aquatic and terrestrial environments that receive any deposit or discharge of waste including Effluent, seepage, or Contact Water from the Project;

“**Reclamation**” means activities which facilitate the return of areas affected by the Project to a state as described in the Interim Closure and Reclamation Plan or Final Closure Plan;

“**Regulations**” means the *Nunavut Waters Regulations*, SOR/2013-69;



“**Seepage**” means any water that drains through or escapes from any structure designed to contain, withhold, divert or retain water or waste. Seepage also includes any flows that have emerged through open pits, Waste Rock storage facilities, ore stockpile areas, quarries, landfill or landfarm areas;

“**Sewage**” means all toilet wastes and ~~greywater~~ Greywater;

“**Sewage Treatment Plant**” means the sewage treatment plant described in the *Whale Tail Pit Water Management Plan* as modified from time to time under this Licence;

“**Short Term Maximum**” means the maximum concentration of all samples collected over a 24 hour period, or less, taken from the identical sampling location;

“**Site Specific Water Quality Objective**” (SSWQO) means a numerical concentration or narrative statement which has been established for specified waters;

“**Sump**” means a structure or depression that collects, retains or transfers water or liquid waste before it is released to the Receiving Environment or Project infrastructure;

“**Total Metals**” means the suite of metals referred to in Group 2 of Table 1 – Monitoring Groups located in Schedule I of this Licence. Total metals shall be analyzed on an un-filtered sample;

“**Underground**” means the underground workings to mine the satellite deposits located on the Amaruq Exploration property approximately 150 km north of Hamlet of Baker Lake and 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut;

[Note KivIA has suggested including reference to KIA surface lease in relation to this definition. Agnico Eagle disagrees.]

“**Undertaking**” means an undertaking or undertakings in respect of which Water is to be used or Waste is to be deposited, as classified in Schedule 1 of the *Regulations*;

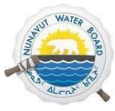
“**Use**” means use as defined in section 4 of the *Act*;

“**Waste**” means waste as defined in section 4 of the *Act*;

“**Waste Disposal Facilities**” means all facilities designated for the disposal of Waste or Waste Rock including: the mine site Open Pits, Underground, Sewage Treatment Plant, Wastewater Treatment Plant, Landfarm, Landfill, and Waste Rock Storage Facility;

“**Waste Rock**” means all rock materials that are or were produced as a result of mining operations and that have no current economic value;

“**Waste Rock Storage Facility**” means the structure designed for the placement of Waste Rock as described in the *Waste Rock Management Plan* and as may be modified from time to time under this Licence;



“Waste Rock Storage Facility Collection Pond” means the structure designed to collect runoff and seepage from a Waste Rock Storage Facility which is to be pumped to the attenuation ponds for treatment in the WTP as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;



“Waste Rock Storage Facility Dike” means a structure designed to confine contact water from a waste rock storage facility before it is pumped to the attenuation ponds as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;

“Wastewater” means the water generated by site activities or that originates on-site and that requires treatment or any other water management activity;

“Wastewater Treatment Plant” means the facilities designated for the treatment of contact water from attenuation and collection ponds prior to discharge to the ~~receiving environment~~**Receiving Environment** during all phases of mine operations, including during Closure/post- Closure as described in the *Whale Tail Pit Water Management Plan* and *Whale Tail Pit Waste Rock Management Plan* and as may be modified from time to time under this Licence;

“Water” means water as defined in section 4 of the *Act*;

“Water Supply Facilities” means the facilities designated for the supply of water including the Fresh Water Intakes and associated infrastructure as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;

“Water Licence Application” for the purposes of this Licence includes the totality of relevant documents filed by Agnico Eagle on the NWB and NIRB Public Registries in support of Agnico Eagle’s Water Licence Application filed on July 8, 2016 and its subsequent Water Licence Application filed on May 16, 2019, and includes Supporting Documents, and Technical Meeting Information Supplement documents;

“Weekly” means, in the context of monitoring frequency, one sampling event occurring every 7 days with a minimum of 24 hours between sampling events;

“Attenuation Pond” means a facility located at the mine site where mine site Contact Water will be discharged, be treated by the WTP prior to discharge to the receiving environment as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;

“Whale Tail Bulk Fuel Storage Facility” means the fuel storage and all associated infrastructure as described in the *Meadowbank and Whale Tail Bulk Fuel Storage Facilities: Environmental Performance Monitoring Plan* and as may be modified from time to time under this Licence;

“Whale Tail Camp” means a permanent life of mine camp proposed at the mine site proposed to include a sewage treatment plant, water intake, accommodation buildings, power plant, bulk fuel storage area, warehouse, maintenance shop as described in the Water Licence Application;



“Whale Tail Dike” means the structure designed to raise Whale Tail Lake (South Basin) and divert runoff downstream to the Lake A16 (Mammoth Lake) watershed through the Whale Tail Lake (South Basin) diversion channel, and to permit dewatering of Whale Tail Lake (North Basin) and mining of the Whale Tail Pit as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;

“Whale Tail Diversion Channel” means the structure designed to divert runoff downstream to the Mammoth Lake watershed from Whale Tail Lake (South Basin) once the Whale Tail Dike is constructed and the Whale Tail Lake (South Basin) level is raised as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;

“Whale Tail Haul Road” means the haul road and associated water crossings between the Whale Tail Pit and Project site and the Meadowbank Mine site as described in the *Whale Tail Pit Haul Road Management Plan* and as may be modified from time to time under this Licence;

“Whale Tail Lake (South Basin)” means the southern portion of Whale Tail Lake that will receive water from Whale Tail Lake (North Basin) once the Whale Tail Dike is constructed, and from which water will be diverted as described in the *Whale Tail Pit Water Management Plan* and as may be modified from time to time under this Licence;



“Whale Tail Security Management Agreement” means the agreement between Kivalliq Inuit Association, (KIA or KivIA), Agnico Eagle Mines Limited (Agnico Eagle) and Her Majesty Queen in Right of Canada as represented by the Minister of Crown-Indigenous Relations and Northern Affairs Canada (the Minister), dated September 5, 2017 and signed by KIA, Agnico Eagle and Minister on September 26, 2017 as amended ~~on [date, 2020]~~;



Schedule B: General Conditions

The Annual Report referred to in Part B, Item 2, shall include:

CONSTRUCTION

1. For the dikes, dams and structures constructed to withhold water or waste:
 - a. An overview of methods and frequency used to monitor deformations, Seepage and geothermal responses;
 - b. A comparison of measured versus predicted performance;
 - c. A discussion of any unanticipated observations including changes in risk and mitigation measures implemented to reduce risk;
 - d. As-built drawings of all mitigation works undertaken;
 - e. Any changes in the design and/or as-built condition and respective consequences of any changes to safety, water balance and water quality;
 - f. Data collected from instrumentation used to monitor earthworks and an interpretation of that data;
 - g. A summary of maintenance work undertaken as a result of settlement or deformation of dikes and dams; and
 - h. The monthly and annual quantities of Seepage from dikes and dams in cubic metres.

WATER

2. Monthly and annual volume of fresh Water obtained from water sources.
3. Summary of reporting results for the Water Balance and Water Quality model and any calibrations as required in Part E Items 7-9.

WASTE

4. A summary of the geochemical monitoring results including:
 - a. Operational acid/base accounting and paste pH test work used for Waste Rock designation (PAG and NPAG rock);
 - b. As-built volumes of Waste Rock used in construction and sent to the Waste Rock Storage Facility with estimated balance of acid generation to acid neutralization capacity in a given sample as well as metal content;
 - c. All monitoring data with respect to geochemical analyses on site and related to roads, quarries, and the Whale Tail Haul Road; and
 - d. Any geochemical outcomes or observations that could imply or lead to greater than predicted impacts to the Receiving Environment.



5. Volumes of Waste Rock used in construction and placed in the Waste Rock Storage Facility.
6. Volumes of ore stockpiled and overburden stored at Whale Tail Pit site.
7. Summary of quantities and analysis of Seepage and runoff monitoring from the Landfill, Waste Rock Storage Facility and associated dikes/berms.
8. A summary report of all general waste disposal activities including monthly and annual quantities in cubic metres of waste generated and location of disposal.
9. Reporting of Incinerator test results including the materials burned and the efficiency of the Incinerator.

SPIILLS

10. A list and description of all unauthorized discharges in excess of the thresholds set out in the Nunavut *Spill Planning and Reporting Regulations* including volumes, spill report line identification number and summaries of follow-up action taken.

MODIFICATIONS

11. A summary of Modifications and/or major maintenance work carried out on all Water and Waste-related structures and facilities.

MONITORING

12. The results and interpretation of the Monitoring Program in accordance with Part I and Schedule I.
13. ~~A summary of the~~The results of monitoring related to the Aquatic Effects Monitoring Program (AEMP) including:
 - a. Core Receiving Environment Monitoring Program (CREMP);
 - b. Metal and Diamond Mining Effluent Regulation (MDMER) Monitoring;
 - c. Water quality and flow monitoring;
 - d. Visual Haul Road water quality monitoring;
 - e. Blast monitoring; and
 - f. Groundwater monitoring.

CLOSURE

14. A summary of any Progressive Reclamation undertaken, including photographic records of site conditions before and after completion of the work, and an outline of any Progressive Reclamation planned for the next year.
15. An updated estimate of the current restoration liability.



PLANS/REPORTS/STUDIES

16. A summary of any studies requested by the Board that relate to Water use, Waste disposal or Reclamation, and a brief description of any future studies planned.
17. Where applicable, a summary of any Plans that were revised over the past year.

GENERAL

18. A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector.

OTHER

19. A summary of public consultation and participation with local organizations and the residents of the nearby communities on water and waste-related matters, including a schedule of upcoming community events and information sessions.
20. Any other details on Water use or Waste Disposal requested by the Board by November 1st of the year being reported.



Schedule D: Conditions Applying to Construction

1. The Construction Summary Report referred to in Part D Items 15-16 shall include:
 - a All final design and Construction drawings (must be stamped and signed by a Professional Engineer);
 - b A summary of Construction activities including photographic records before, during and after Construction;
 - c As-built drawings (or piping and instrumentation diagrams, where applicable) for Waste Disposal Facilities and Water Supply Facilities;
 - d Documentation and detailed explanation of field decisions reflecting any deviations from original Construction drawings and plans, and how such deviations may affect performance of engineered structures;
 - e Discussion of mitigation measures implemented during Construction and effectiveness of measures taken;
 - f Monitoring undertaken in compliance with Part D of the Licence;
 - g Blast vibration monitoring for quarrying activities carried out in close proximity to fish bearing waters;
 - h Monitoring for sediment release from Construction areas; and
 - i Monitoring and reporting on use of Water to manage dust emissions from crushing and Construction activity.



Schedule I: Conditions Applying to General and Aquatic Effects Monitoring

TABLE 1 – MONITORING GROUP

Group	Parameters
1	pH, turbidity, hardness, alkalinity, ammonia nitrogen, total metals (aluminum, arsenic, barium, cadmium, chloride, chromium, copper, fluoride, iron, lead, manganese, mercury, molybdenum, nickel, nitrite, nitrate, selenium, silver, thallium, zinc) sulphate, TDS, TSS.
2	<p>Total and Dissolved metals: aluminum, antimony, arsenic, boron, barium, beryllium, cadmium, copper, chromium, iron, lithium, manganese, mercury, molybdenum, nickel, lead, selenium, tin, strontium, titanium, thallium, uranium, vanadium and zinc.</p> <p>Nutrients: Ammonia-nitrogen, total Kjeldahl nitrogen, nitrate nitrogen, nitrite-nitrogen, ortho-phosphate, total phosphorous, total organic carbon, total dissolved organic carbon and reactive silica.</p> <p>Conventional Parameters: bicarbonate alkalinity, chloride, carbonate alkalinity, conductivity, hardness, calcium, potassium, magnesium, sodium, sulphate, pH, total alkalinity, TDS, and TSS, turbidity.</p>
3	MDMER parameters (arsenic, copper, lead, nickel, zinc, total suspended solids, pH), sulphate, turbidity and total aluminum.
4	Total Arsenic, Total Copper, Total Lead, Total Nickel, Total Zinc, TSS, Benzene, Toluene, Ethylbenzene, Xylene, TPH, pH.
MDMER	Arsenic, copper, lead, nickel, zinc, total suspended solids, pH, effluent volumes and flow rate of discharge, acute lethality (Rainbow Trout and Daphnia magna) and environmental effects monitoring (EEM).



TABLE 2 – MONITORING PROGRAM

Station	Description	Phase	Monitoring Parameters	Frequency
<i>Mine Site</i>				
ST-DC-1 to TBD	Monitoring Program Stations during dike Construction as defined in the Whale Tail Water Quality Monitoring and Management Plan for Dike Construction and Dewatering	Construction	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in Part D, Item 5	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in Part D Item 5
ST-DD-1 to TBD	Monitoring Program Stations during dike dewatering as defined in the Whale Tail Water Quality Monitoring and Management Plan for Dike Construction and Dewatering	Construction	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in Part D, tem 5	As defined in Water Quality Monitoring and Management Plan for Dike Construction and Dewatering as referred to in part D, Item 5
ST-S-1 to TBD	Seeps (to be determined)	Operations	Group 1	Monthly or as found
		Closure	Group 1	Monthly or as found
ST-GW-1 to TBD	Groundwater wells (to be determined) as required under Groundwater Monitoring Plan	Operations	Group 2	Annually
		Closure	Group 2	Annually
ST-WT-1	Attenuation Pond, pre-treatment	Operations	Group 1	Four times per calendar year
ST-WT-2	Attenuation Pond, posttreatment; last point of control before discharge in Mammoth Lake	Operations	Volume (m ³)	Daily during periods of discharge
			Field Measurements	Weekly during periods of discharge
			Group 2	Weekly during periods of discharge



			Effluent characterization (MDMER)	Four times per calendar year
			Acute Toxicity (MDMER)	Once prior to discharge and Monthly thereafter
			Sub-lethal toxicity (MDMER)	MDMER Schedule
ST-WT-3	Waste Rock Storage Facility (WRSF) Pond prior to pumping to Attenuation Pond	Operations	Group 1	Four times per calendar year, when water is present
		Closure	Group 1	Four times per calendar year, when water is present
	Waste Rock Storage Facility (WRSF) Pond prior to discharge to Mammoth Lake	Post-Closure	Group 1	Four times per calendar year, when water is present
ST-WT-4	Whale Tail Pit or pit sump	Operations	Group 1	Four times per calendar year
ST-WT-5	Water Intake from Nemo Lake	Construction	Volume (m ³)	Monthly
		Operation	Volume (m ³)	Monthly
ST-WT-6	Lake A47	Construction	Group 2	Monthly during open water
		Operations	Group 2	Monthly during open water
		Closure	Group 2	Monthly during open water
ST-WT-7	East diversion channel	Operations	Group 3	Three times (freshet, summer, fall) per calendar year
ST-WT-8	Water Intake from Whale Tail Lake	Closure	Volume (m ³)	Monthly
ST-WT-9	North Whale Tail Lake (as the basin fills and when it is	Closure	Group 1	Four times per calendar year



	connected to the south basin and prior to or when connected to the downstream environment)	Post-Closure	Group 2	Four times per calendar year
ST-WT-10	Pit Lake (as the Pit fills)	Closure	Group 2	Four times per calendar year
		Post-Closure	Group 2	Four times per calendar year
ST-WT-11	Sewage Treatment Plant	Operations	Group 1	Four times per calendar year
		Closure	Group 1	Four times per calendar year
ST-WT-12	Secondary containment at Whale Tail Bulk Fuel Storage Facility	Operations	Group 4	Prior to discharge or transfer of effluent
		Closure	Group 4	Prior to discharge or transfer of effluent
ST-WT-13	Lake A45	Operations	Group 3	Flow, Monthly during open-water
		Closure	Group 3	Flow, Monthly during open-water until water level have returned to baseline level
ST-WT-14	Lake A16 outlet	Construction	Group 2	Monthly during open water
		Operations	Group 2	Monthly during open water
		Closure	Group 2	Monthly during open water
ST-WT-15	Lake A15	Construction	Group 2	Monthly during open water
		Operations	Group 2	Monthly during open water
		Closure	Group 2	Monthly during open water
ST-WT-16	WT Bulk Fuel Storage Facility Power House	Operation	Group 4	Prior to discharge or water transfer
		Closure	Group 4	Prior to discharge or water transfer



		Operations	Volume (m3)	During transfer
		Closure	Volume (m3)	During transfer
ST-WT-17	Whale Tail Dike Seepage	Operation	Group 1	Monthly during discharge
ST-WT-18	IVR Pit or sump	Operations	Group 1	Four times per calendar year
ST-WT-19	IVR Pit Lake	Closure	Group 2	Four times per calendar year
		Post-closure	Group 2	Four times per calendar year
ST-WT-20	Groundwater Storage Pond 1	Operations	Group 1	Four times per calendar year
ST-WT-21	Groundwater Storage Pond 2	Operations	Group 1	Four times per calendar year
ST-WT-22	Groundwater Storage Pond 3	Operations	Group 1	Four times per calendar year
ST-WT-23	IVR Attenuation Pond	Operations	Group 1	Four times per calendar year
		Closure	Group 1	Four times per calendar year
ST-WT-24	Whale Tail Pit Lake (North Wall)	Closure	Group 2	Four times per calendar year
		Post-Closure	Group 2	Four times per calendar year
ST-WT-25	Whale Tail South Discharge to Mammoth Permanent Diffuser	Construction	Group 3	Monthly during discharge
ST-WT-25A	Whale Tail South Discharge to Mammoth Temporary Diffuser	Construction	Group 3	Monthly during discharge
			Volume (m ³)	Daily during periods of discharge



ST-WT-26	Attenuation Pond, posttreatment; last point of control before discharge in Whale Tail South Basin	Operations	Field Measurements	Weekly during periods of discharge
			Group 2	Weekly during periods of discharge
			Effluent characterization (MDMER)	Four times per calendar year
			Acute toxicity (MDMER)	Once prior to discharge and Monthly thereafter
			Sub-lethal toxicity (MDMER)	MDMER Schedule
ST-WT-27	Landfarm	Operations	Group 4	Prior to discharge
		Operations	Volume	During discharge



NUNAVUT WATER BOARD RENEWAL WATER LICENCE

WATER LICENCE No. 2BB-MEA1828

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

AGNICO EAGLE MINES LIMITED

(Licensee)

C.P. 87, 765 CH. DE LA MINE GOLDEX, VAL-D'OR QUEBEC J9P 4N9

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or dispose of waste for a period subject to restrictions and conditions contained within this Licence renewal:

Licence Number/Type: 2BB-MEA1828 / TYPE "B"

Water Management Area: THELON / BAKER LAKE / QUOICH / BACK / WATERSHEDS
(5 / 8 / 9 / 31)

Location: MEADOWBANK ADVANCED EXPLORATION PROJECT -
KIVALLIQ REGION, NUNAVUT

Classification: MINING UNDERTAKING

Purpose: DIRECT WATER USE AND DEPOSIT OF WASTE

Quantity of Water use not
to Exceed: TWO HUNDRED AND NINETY-NINE (299) CUBIC METRES
PER DAY

Date of Licence Issuance
/ Effective: MARCH 7, 2018

Expiry of Licence: MARCH 6, 2028

This Licence renewal, issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

**Lootie Toomasie,
Nunavut Water Board,
Chair**

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence allows for the use of water and the deposit of waste for a Mining Undertaking classified as per Schedule I of the Regulations at the Meadowbank Advanced Exploration Project, located approximately 70-125 km north of the Hamlet of Baker Lake within the Kivalliq Region, Nunavut. Activities associated with the project include camp operation, treatment and disposal of greywater and sewage, fuel storage, environmental baseline data collection, prospecting, geological mapping, geophysical surveys, diamond and reverse circulation drilling, , bulk sampling, construction of pads, water crossings' installations, trenching and quarrying.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made or existing *Regulations* are amended by the Governor in Council under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and
- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

2. Definitions

“**Act**” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Addendum**” means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report.

“**Amendment**” means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence;

“**Appurtenant Undertaking**” means an undertaking in relation to which a use of water or a deposit of waste is permitted by a licence issued by the Board;

“**Board**” means the Nunavut Water Board established under the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Bulk Sampling**” means the activities described in the Application for Amendment 4 and supporting documents dated March 31, 2016.

“Effluent” means treated or untreated liquid waste material that is discharged into the environment from a structure such as a settling pond, landfarm or a water treatment plant;

“Engineer” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

“Fuel Storage Facility” means the fuel storage facility as described in the Application for Amendment 4 and supporting documents dated March 31, 2016;

“Greywater” means all liquid wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet wastes;

“High Water Mark” means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);

“ICP Scan” means the laboratory method for determining trace metals in water through Emission Spectroscopy using inductively coupled plasma (including from approximately 22 to 32 elements, depending on the laboratory performing the analysis);

“Inspector” means an Inspector designated by the Minister under Section 85 (1) of the *Act*;

“Licensee” means the holder of this Licence;

“Minister” means the Minister of Indigenous and Northern Affairs Canada (INAC)

“Modification” means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

“Nunavut Agreement” means the *“Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada”*, including its preamble and schedules, and any amendments to that agreement made pursuant to it;

“Regulations” means the *Nunavut Waters Regulations* (SOR/2013/669 18th April, 2013);

“Sewage” means all toilet wastes and greywater;

“Spill Contingency Plan” means a Plan developed to deal with unforeseen petroleum and hazardous materials events that may occur during the operations conducted under the Licence;

“Sump” means an excavation in impermeable soil for the purpose of catching or storing water or waste;

“Toilet Wastes” means all human excreta and associated products, but does not include greywater;

“Trench Water Containment” means the lined sump or sumps, poly tank or other means of containment for water that has collected within the blasted and excavated trench(s) and subsequently removed for disposal upon confirmation of water quality;

“Waste” means, as defined in S.4 of the *Act*, any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means.

“Wastewater Treatment System (WWTS)” means the wastewater treatment system as described in the Application for Amendment 4, Application for Renewal and supporting documents dated March 31, 2016, and December 13, 2017, respectively;

“Water” or “Waters” means waters as defined in section 4 of the *Act*.

“Water Supply Facilities” means the Fresh Water Intake and associated infrastructure as described in the Amendment Application, Application for Renewal and supporting documents dated March 31, 2016, and December 13, 2017, respectively.

3. Enforcement

- a. Failure to comply with this Licence will be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*;
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*; and
- c. For the purpose of enforcing this Licence and with respect to the use of water and deposit or discharge of waste by the Licensee, Inspectors appointed under the *Act*, hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable law.

PART B: GENERAL CONDITIONS

1. The Licensee shall maintain security with the Minister in the form in accordance with the Regulations, or that is satisfactory to the Minister in the amount of ~~[TBD—Under consideration]~~ \$1,200,650 (one million, two hundred thousand and six hundred and fifty).
2. The Licensee shall furnish and maintain such further or other amounts of security as may be required by the Board based on annual estimates of current Meadowbank Advanced Exploration Project restoration liability using the current version of RECLAIM, its equivalent or other similar method approved by the Board, in accordance with principles of INAC's "Mine Site Reclamation Policy for Nunavut" (2002).
3. The Licensee may, submit to the Board for approval, a written request for a reduction to the amount of security. The submission shall include supporting evidence to justify the request.
4. The security deposit shall be maintained until such time as the Minister is satisfied that the Licensee has complied with all provisions of the approved Abandonment and Restoration Plan. This clause shall survive the expiry of this Licence.
5. The amount of Water use fees shall be determined and payment of those fees shall be made in accordance with section 12 of the *Regulations*.
6. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31st of the year following the calendar year being reported, containing the following information:
 - a. The daily, monthly and annual quantities in cubic metres of all freshwater obtained for all purposes;
 - b. The daily, monthly and annual quantities in cubic metres of water pumped from the underground;
 - c. Tabular summary of all data generated under the Monitoring Program, Part J;
 - d. A summary of modification and/or major maintenance work carried out on the Water Supply Facilities, Bulk Fuel Storage and Containment Facilities, and Wastewater Treatment Facility, including all associated structures, and an outline of any work anticipated for the next year;
 - e. A list of unauthorized discharges and a summary of follow-up actions taken;
 - f. Any revisions to the Spill Contingency Plan, Water Management Plan, Waste Management Plan, Quarry Management Plan, Abandonment and Restoration Plan, as required by Part B, Item 12, submitted in the form of an Addendum;
 - g. An updated estimate of the current Meadowbank Advanced Exploration Project restoration and liability, as required under Part B, Item 2, based upon the results of the restoration research, project development monitoring, and any modifications to the site plan;
 - h. A summary of drilling/trenching activities and progressive reclamation of drill/trench sites;
 - i. Report all artesian flow occurrences as required under Part F, Item 7;
 - j. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of

- operations;
- k. A summary of any specific studies or reports requested by the Board, and a brief description of any future studies planned or proposed;
 - l. A summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted; and
 - m. Any other details on water use or waste disposal requested by the Board by the 1st of November of the year being reported.
- 7. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.
 - 8. The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of water volumes as required under Part J, Item 1.
 - 9. The Licensee shall post signs in the appropriate areas to inform the on-site personnel and public of the location of the Water Supply Facility, Wastewater Treatment System and Monitoring Stations. All signs shall be in English and Inuktitut.
 - 10. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.
 - 11. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
 - 12. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.
 - 13. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
 - 14. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:

(a) Manager of Licensing:

Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca

(b) Inspector Contact:

Manager of Field Operations, AANDC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445

15. The Licensee shall submit one paper copy and one electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut (and/or Inuinnaqtun).
16. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the NWB is received and acknowledged by the Manager of Licensing.
17. This Licence is assignable as provided for in section 44 of the *Act*.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain all domestic freshwater for the Amaruq Camp from Whale Tail Lake as outlined in the application. Drill/industrial water shall be obtained from local water source(s), proximal to the drilling targets as outlined in the application. The volume of water for the purposes of this Licence shall not exceed two hundred and ninety-nine (299) cubic metres *per day*.
2. The Licensee shall implement the Plan entitled: “Water Management and Water Balance related to Amaruq Exploration Portal/Ramp Program, Quarry and Advanced Underground Exploration and Bulk Sample Amaruq Exploration Site, Nunavut” dated November 15, 2016 and originally approved by the Board.
3. Streams cannot be used as a water source unless authorized and approved by the Board in writing.
4. If the Licensee requires water in sufficient volume that the source water body may be drawn down, the Licensee shall, at least thirty (30) days prior to commencement of use of water, submit to the Board for approval in writing, the following: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.
5. The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.
6. The Licensee shall not remove any material from below the ordinary High Water Mark of any water body unless authorized.
7. The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.

8. Sediment and erosion control measures shall be implemented prior to and maintained during the undertaking to prevent entry of sediment into water.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall locate areas designated for waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise approved by the Board in writing.
2. The Licensee shall not practice on-site land filling of domestic waste, unless otherwise approved by the Board in writing.
3. The Licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator.
4. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.
5. The Licensee shall provide to the Board, documented authorization from the community of Baker Lake, prior to the backhauling and disposal of any waste.
6. The Licensee shall backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste generated through the course of the operation at a licensed waste disposal site.
7. The Licensee shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste. These records shall be made available to an Inspector upon request.
8. The Licensee shall dispose of all Greywater to a sump located a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing. Upon commissioning of the Wastewater Treatment System “Bionest” (WWTS), the Licensee shall direct all Greywater to the WWTS, unless otherwise approved by Board in writing.
9. The Licensee shall collect and remove all Toilet Wastes to the Meadowbank Mine site for disposal, or contain in latrine pits or treat, using incineration, chemical, portable or composting toilets. Latrine pits shall be located at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural contours of the land prior to abandonment. Upon commissioning of the Wastewater Treatment System “Bionest” (WWTS), the Licensee shall direct all Toilet Wastes to the WWTS, unless otherwise

approved by Board in writing.

10. All Wastewater effluent discharged from the Wastewater Treatment System (WWTS), at Monitoring Station MEA-2 shall not exceed the following Effluent quality limits:

Parameter	Maximum Concentration of any Grab Sample
pH	6.0 to 9.5
Biochemical Oxygen Demand (BOD5)	80 mg/L
Total Suspended Solids (TSS)	100 mg/L
Fecal Coliforms	1000 CFU/100mL
Oil and Grease	5 mg/L & No visible sheen

11. All solid waste (sludge) from WWTS shall be disposed of in latrine pits that shall be located at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural contours of the land prior to abandonment.
12. The Licensee shall direct all Water accumulated in blasted or excavated trenches to a Trench Water Containment to allow for sampling prior to release. Water collected in hand-dug trenches shall be directed to a natural depression sump, as required by Part D, Item 1.
13. All Effluent discharged from Fuel Storage Facility at Monitoring Station MEA-3, shall not exceed the following Effluent quality limits:

Parameter	Maximum Concentration of any Grab Sample (µg/L)
Benzene	370
Ethylbenzene	2
Toluene	90
Lead	1
Oil and Grease	15,000 and no visible sheen

14. All Effluent discharged from trench-water containments and quarry sumps shall be carried out in accordance with Part D, Item 1, directed to a natural depression where direct flow into a water body is not possible and no additional impacts are created. All Effluent discharges shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of any Grab Sample (mg/L)
Total Ammonia	16	32
Total Arsenic	0.5	1.00
Total Chloride	1000	2000
Total Copper	0.30	0.60
Total Lead	0.20	0.40

Total Nickel	0.50	1.00
Total Zinc	0.50	1.00
Total Suspended Solids (TSS)	25	50
Total Dissolved Solids (TDS)	1400	1400
Oil and Grease	No visible sheen	No visible sheen
pH	6.0-9.5	6.0-9.5

15. All discharges shall be released in such a manner to minimize surface erosion. Upon confirming compliance required of Part D, Item 14, water to be released to the environment may be used for other industrial purposes, including use for dust suppression activities on roads and quarries as well as drilling.
16. In the event that Effluent planned for discharge exceeds the limits provided in Part D, Items 10, 13 and/or 14, the Licensee shall investigate the cause of the noted exceedance and report any findings, along with planned mitigation measures to meet these limits, prior to any discharge.
17. The Licensee shall provide at least ten (10) days' notification to an Inspector, prior to initiating the release of Effluent from any facilities in this Part. The notice shall include water quality results, an estimate of volume and the proposed receiving location.
18. The Licensee shall maintain all constructed facilities, including the Wastewater Treatment Facilities, Bulk Fuel Storage Facility, Portal/Ramp, Services and Operation Pads, Quarry and Containment Pond(s), to the satisfaction of an Inspector.

PART E: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS

1. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
2. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake corrective measures in the event of any impacts on surface drainage.
3. The Licensee shall construct all winter lake and stream crossings, including ice bridges, entirely of water, ice or snow. The Licensee shall minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring break-up.
4. With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed at a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter Water.

5. The Licensee shall not mobilize heavy equipment or vehicles for trenching or other activities unless the ground surface is capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall be suspended if rutting occurs.
6. The Licensee shall submit to the Board for review, at least sixty (60) days prior to construction, an Acid Rock Drainage and Metal Leaching (ARD-ML) Characterization Plan for Amaruq site, including underground and operations and quarrying.
7. The Licensee shall implement the Plan entitled: “Amaruq Gold Project Quarrying Management Plan” dated November 2015 and originally approved by the Board.
8. The Licensee shall submit to the Board for review within thirty (30) days prior to construction, issued-for-construction drawings for all engineered project infrastructures (i.e. roads, camp pad construction, water crossings) stamped by a qualified Engineer. A Construction Summary Report including as-built plans and drawings stamped by a qualified Engineer shall be submitted to the Board within ninety (90) days of completing construction undertakings.
9. The Licensee shall maintain a minimum of thirty-one (31) metres large undisturbed buffer zone between the periphery of quarry sites and the high water mark of any water body. The Licensee shall not excavate and/or remove material from the quarry beyond a depth of one (1) meter above the high water mark or above the groundwater table, to prevent the contamination of groundwater. The quarrying shall be in accordance with all applicable legislation and industry standards including the *Northern Land Use Guidelines, Pits and Quarries* (INAC, 2010).
10. Sediment and erosion control measures shall be implemented prior to and maintained during the construction and operation where necessary to prevent entry of sediment into water.
11. The Licensee shall ensure that all containment and runoff control structures are constructed and maintained to prevent escape of wastes to the surface or groundwater systems.
12. The Licensee shall limit any in-stream activity including crossing/fording to low water period. Machinery fording the watercourse to bring equipment required for construction to the opposite side is limited to a one-time event (over and back) and should occur only if an existing crossing at another location is not available or practical to use. In-stream activity is prohibited during fish migration.
13. The Licensee shall only use rock for construction that is determined to be non-acid generating and non-metal leaching.
14. The Licensee shall, for the purposes of clear span bridge installation, ensure that all activities remain outside of the natural channel width by the placement of abutments, footings or armoring above the ordinary high water mark so that there is no restriction to the natural channel processes.

15. With respect to construction or other earthworks where direct or indirect flow into a water body is possible, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the water.
16. All surface runoff during the construction of any facilities, where flow may directly or indirectly enter a water body, shall meet the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids	50.0	100.0

17. The Licensee shall ensure that all construction of engineered structures is supervised and field checked by an appropriately qualified and experienced Engineer in such a manner that the project specification can be enforced and, where required, and the quality control measures can be followed. The Licensee shall maintain and make available at the request of the Board and/or an Inspector, all construction records of all engineered structures.

PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS AND TRENCHING

1. The Licensee shall not conduct any land-based drilling / trenching within thirty-one (31) metres of the ordinary High Water Mark of any water body, except drilling specified in Part F, Item 2, and unless otherwise approved by the Board in writing.
2. The Licensee is authorized to conduct land-based drilling within thirty-one (31) metres of the ordinary High Water Mark of any water body during winter conditions within the project area, as identified in the Amendment Application and associated documents received on April 8, 2011.
3. The Licensee shall, when conducting drilling within thirty-one (31) metres of the ordinary High Water Mark, carry out activities on stable ground such as frozen tundra or bedrock, to prevent disturbance to the natural ground and limit erosion and sedimentation.
4. The Licensee is authorized to conduct drilling based on barge within two lakes, as described in the Amendment Application and associated documents received in July / August, 2015.
5. The Licensee shall establish water quality conditions of adjacent Waters or Waters immediately downstream of any drilling program within thirty-one (31) metres of the ordinary High Water Mark of any water body:
 - a. prior to any such drilling program as per Part J, Item 9;
 - b. upon completion of any such drilling program; and
 - c. the summer season following any such drilling program.

6. The Licensee shall dispose of all drill waste, including water, chips, muds and salts (CaCl_2) in any quantity or concentration, from land-based and on-ice drilling, in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.
7. If artesian flow is encountered, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface waters. The Licensee shall report all artesian flow occurrences within the Annual Report, including the location (GPS coordinates) and dates.
8. Drilling additives or mud shall not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water, or are demonstrated to be non-toxic.
9. For “on-ice” drilling where drill additives are not being used, return water released must be nontoxic, and not result in an increase in total suspended solids in the immediate receiving waters, above the Canadian Council of Ministers for the Environment, Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).
10. The Licensee shall establish water quality conditions prior to and upon completion of any drilling program through lake ice.
11. The Licensee shall, during trenching activities utilizing blasting, provide mitigation measures to prevent the transport of rock material, explosives residues, sediment and other materials from entering water as required by Part C, Item 8 and Part E, Item 4.
12. The Licensee shall stockpile all overburden/topsoil generated during trenching using proper erosion prevention measures. Upon completion of operation, the Licensee shall backfill, reclaim/re-contour and re-vegetate all disturbed areas.
13. The Licensee shall provide to the Board for review, at least sixty (60) days prior to the beginning of trenching operations, a proposed Trenching Plan which shall include the following:
 - a. Size and location of trenches including GPS coordinates;
 - b. Approximate dimensions (length, width and depth) of each trench;
 - c. Proposed mitigation measures for the prevention of the transport of sediments, blasting residues, fly rock and other materials, from the trench area to nearby water bodies;
 - d. Projected volume and quality of water discharged from each trench with potential treatment required; and
 - e. Proposed monitoring program to be carried out on trench waste water prior to discharge.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. such Modifications do not place the Licensee in contravention of the Licence or the Act;
 - c. such Modifications are consistent with the NIRB Screening Decision;
 - d. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.
3. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Licensee shall implement the Plan entitled “*Amaruq Gold Project Spill Contingency Plan Meadowbank Exploration Camp, Drill Sites, Portal/Ramp and Quarry*”, updated March 2016 and originally approved by the Board.
2. The Licensee shall prevent any chemicals, petroleum products or wastes associated with the project from entering Water. All sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body and inspected on a regular basis. An exception to this condition is provided for in Part H, Item 4.
3. The Licensee shall provide secondary containment for a limited fuel supply and all external pumps and motorized equipment used in drilling operations as authorized per Part F, Item 2 where drilling occurs within thirty-one (31) metres of the ordinary High Water Mark.
4. The Licensee shall conduct equipment maintenance and servicing in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other waste and contain potential spills.
5. The Licensee shall, subject to Section 16 of the Regulations, report any unauthorized deposits or foreseeable unauthorized deposits of waste and/or discharges of Effluent, and shall:
 - a. Employ the approved Spill Contingency Plan;

- b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
- c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.

PART I: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION OR TEMPORARY CLOSURE

- 1. The Licensee shall implement the Plan entitled “*Conceptual Closure and Reclamation Plan & Reclaim Estimate*”, updated March 2016 and originally approved by the Board.
- 2. The Licensee shall complete all restoration work prior to the expiry of this Licence.
- 3. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee’s operations.
- 4. The Licensee shall backfill and restore all sumps to the pre-existing natural contours of the land.
- 5. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, water pumps and lines, material and equipment prior to the expiry of this Licence.
- 6. All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.
- 7. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
- 8. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
- 9. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut’s Environmental Guideline for Site Remediation, 2010. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.
- 10. The Licensee shall restore all drill holes, trenches and disturbed areas to natural conditions immediately upon completion of the drilling or trenching. The restoration of drill holes must include the removal of any drill casing materials and if having encountered artesian flow, the capping of holes with a permanent seal. Where drill casings cannot be removed the Licensee shall cut off the casings at ground level and identify with signage.

11. The Licensee may leave the casings on site, if it intends to continue drilling in existing casings, but shall add signaling to keep the area safe for the other territory users. The drill casings left cannot stay on the field for more than 2 years after the drilling.
12. The Licensee may store drill cores produced by the appurtenant undertaking in an appropriate manner and location at least thirty-one (31) metres above the ordinary High Water Mark of any adjacent water body, where any direct flow into a water body is not possible and no additional impacts are created.
13. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp at Monitoring Station MEA-1, and for drilling and other purposes.
2. The Licensee shall, at a minimum, maintain Monitoring Stations at the following locations:

Monitoring Station	Description	Status
MEA-1	Amaruq (IVR) Camp Water Intake and sources for industrial/drilling	Volume
MEA-2	Effluent discharged from the Wastewater Treatment System “Bionest” (WWTS)	Volume and Effluent Quality
MEA-3	Effluent discharged from the Bulk Fuel Storage Facilities	Volume and Effluent Quality

3. The Licensee shall sample the effluent discharging from the WWTS at Monitoring Station MEA-2 prior to its release into environment in order to provide confirmation of effluent quality as required by Part D, Item 10, for the following parameters:

pH	Fecal Coliforms
Biochemical Oxygen Demand (BOD ₅)	Oil and Grease (and visual)
Total Suspended Solids (TSS)	

4. The Licensee shall sample the effluent discharging from the Bulk Fuel Storage Facilities at Monitoring Station MEA-3 prior to its release into environment in order to provide confirmation of effluent quality as required by Part D, Item 13.
5. The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of water are utilized for all purposes.
6. The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where wastes associated with camp operations and exploration activities are deposited including sump locations associated with drilling and drill casings left as stuck and cut off and for further drilling in casings.
7. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all drill holes located within thirty-one (31) metres of the ordinary High Water Mark, as per Part F, Item 2, and provide these locations on a map of suitable scale for review as part of the annual report.
8. The Licensee shall establish background and post drilling water quality for pH, conductivity, temperature and dissolved oxygen at the nearest downstream water body to drill locations. Monitoring is to be done just prior to commencement of drilling and weekly thereafter, concluding one week after drilling has been completed and the site restored.
9. The Licensee shall obtain representative samples of the water column below any ice where required under Part F, Items 9 and 10. Monitoring shall include, at a minimum, the following:

Group	Parameters
Physical Parameters	pH, electrical conductivity, total suspended solids.
Major Ions	Calcium, chloride, magnesium, potassium, sodium, sulphate.
Total Metals	Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, tin, titanium, uranium, vanadium and zinc.

10. The Licensee shall establish baseline water quality conditions prior to drilling within thirty-one (31) metres of the ordinary High Water Mark as per Part F, Items 2 and 3. Monitoring shall include the following:

Group	Parameters
Physical Parameters	pH, electrical conductivity, total suspended solids, turbidity.
Major Ions	Calcium, chloride, magnesium, potassium, sodium, sulphate.
Total Metals	Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, tin, titanium, uranium, vanadium and zinc.

11. The Licensee shall, where turbidity is observed in adjacent waters or waters immediately downstream of any drilling program conducted within thirty-one (31) metres of the ordinary High Water Mark of any water body, during summer following any such drilling program as per Part F, Item 5 (c), conduct additional monitoring of the parameters listed in Part J, Item 10 to determine whether any further mitigation is required.
12. The Licensee shall monitor runoff and/or discharge from the quarry sites to receiving environment, during blasting activities, during periods of flow and following significant precipitation events, on a monthly basis, for the following parameters:

Group	Parameters
Physical Parameters	pH (field and laboratory), temperature (field), alkalinity, bicarbonate, carbonate, electrical conductivity, hardness, hydroxide, ion balance, total dissolved solids, total suspended sediments.
Nutrients	Ammonia-nitrogen, nitrate nitrogen, nitrite-nitrogen, ortho-phosphate.
Major Ions	Calcium, chloride, magnesium, potassium, sodium, sulphate.
Total Metals	Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, tin, titanium, uranium, vanadium and zinc.

13. The Licensee shall, during periods of flow and just after a major rainfall event, conduct water quality testing immediately upstream and downstream of the water crossings, any significant water seeps in contact with the road and any flows originating from borrow pits or rock quarries on a monthly basis prior to construction, during the construction and upon completion for the parameters listed under Part J, Item 11.
14. The Licensee shall implement a water crossings visual inspection and maintenance program prior to, during spring freshet and after heavy rainfall events to identify issues related to watercourse crossings structural integrity and hydraulic function.

15. The Licensee shall annually review the approved by accredited laboratory Quality Assurance/Quality Control plan and modify it as necessary. Proposed changes shall be submitted to an accredited laboratory for approval.
16. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board in writing.
17. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
18. The Licensee shall include in the Annual Report required under Part B, Item 2 and in Construction Summary Report required under Part E, Item 8 all data, monitoring results and information required by this Part.
19. Additional monitoring may be requested by the Inspector.



NUNAVUT WATER BOARD

WATER LICENCE NO: 2AM-MEA1525



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Licence No. 2AM-MEA2033

Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

AGNICO-EAGLE MINES LIMITED

(Licensee)

145, KING STREET EAST, SUITE 400, TORONTO, ONTARIO M5C 2Y7

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or deposit waste for a period subject to restrictions and conditions contained within this Licence:

Licence Number/Type:	<u>2AM-MEA1525 / Type "A"</u>
Water Management Area:	<u>QUOICH / BACK WATERSHEDS (09 / 31)</u>
Location:	<u>MEADOWBANK GOLD MINE KIVALLIQ REGION, NUNAVUT</u>
Purpose:	<u>WATER USE AND DEPOSIT OF WASTE</u>
Description:	<u>MINING UNDERTAKING</u>
Quantity of Water not to be Exceeded:	<u>9,120,000 CUBIC METRES ANNUALLY AS PER PART E</u>
Date Licence Issuance:	<u>JULY 23, 2015</u>
Expiry of Licence:	<u>JULY 22, 2033</u>

This Licence issued (**Motion Number TBD**) and recorded at Gjoa Haven, Nunavut includes and is subject to the annexed conditions.

Lootie Toomasie
Nunavut Water Board
Hearing Chair

APPROVED
BY: **Dan Vandal**
Minister of ~~Crown Indigenous~~
~~Relations and~~ Northern Affairs-
~~Canada~~

DATE LICENCE
APPROVED: _____



PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. SCOPE

- a. This Licence authorizes Agnico-Eagle Mines Ltd. (“AEM” or “Licensee”) to use Waters and deposit of Waste in support of a Mining Undertaking classified as per Schedule 1 of the Regulations, at the Meadowbank Gold Mine (Project) as outlined in the Type “A” Water Licence Renewal Application (Application) submitted to the Nunavut Water Board (NWB or Board) on August 05, 2014 and as reviewed throughout the regulatory process. The scope of the activities, works and Undertakings authorized under this Licence also includes Meadowbank Gold Mine Project infrastructure used by the Whale Tail Pit Project as outlined in the water licence applications submitted by AEM to the Nunavut Water Board (NWB) on July 8, 2016 and May 16, 2019.
- b. The Licensee may conduct mining, milling and associated activities at the Meadowbank Gold Mine in the Kivalliq Region of Nunavut (65° 01’ 33’’ N, 96° 04’ 01’’ W) including, in general, as follows:
 - Use of water from Third Portage Lake for mining and milling, associated activities and domestic purposes;
 - Withdrawal and use of water from unnamed lake approximately 250 metres from the Emulsion Plant for use in explosives mixing;
 - Withdrawal and use of water from Third Portage Lake and Wally Lake for the re-flooding of open pits following pit development;
 - Quarrying of materials from specified locations;
 - Operation of mine site facilities including bulk fuel storage, mill, shops, offices, laboratory, warehouse, camp, and explosives mixing;
 - Operation of a camp at the Meadowbank Mine site;
 - Operation of the Baker Lake Marshalling Facility;
 - Operation of the All Weather Access Road, site roads, airstrip, and Water crossings;
 - Construction and operation of the Portage Waste Rock Storage Facility and the Vault Waste Rock Storage Facility;
 - Operation of a Sewage Treatment Plant and controlled discharge of treated Effluent during operations;
 - Set-up and operation of a diesel fired equipment including the Waste Incinerator;
 - Construction and operation of Contact and Non-Contact Water management systems;
 - Construction and operation of an Operations Landfill and a Demolition Landfill in the Portage Waste Rock Storage Facility;
 - Operation of a Landfarm;
 - Operation of the Portage Attenuation Ponds and the Vault Attenuation Pond;



- Management and disposal of Wastes associated with the Sewage Treatment Plant, the Portage Waste Rock Storage Facility, Vault Waste Rock Storage Facility, Portage Attenuation Pond, Vault Attenuation Pond, Reclaim Pond, Operations Landfill, Demolition Landfill, Landfarm, Composter, Incinerator, and other wastes as described in the Water Licence Application;
- Handling and storage of petroleum products and hazardous materials including explosives, cyanide and other reagents;
- Construction of a Central Dike, Stormwater Dike, Saddle Dams, Portage Attenuation Pond and Reclaim Pond needed for the operation of the northwest arm of Second Portage Lake as a Tailings Storage Facility;
- Deposition of tailings into the Tailings Storage Facility;
- Controlled and regulated Discharge of Effluent to Third Portage Lake from the Portage Attenuation Pond;
- Controlled and regulated Discharge of Effluent to Wally Lake from the Vault Attenuation Pond;
- Re-flooding of Portage, Goose Island, and Vault open pits following pit development;
- Management and disposal of Wastes associated with the Whale Tail Pit Project;
- Planning for, and carrying out Adaptive Management actions (including all potential activities and facilities described in the Adaptive Management Plan, as approved); and
- Progressive Reclamation and Abandonment planning of on-site facilities and infrastructure.

c. This Licence is issued subject to conditions contained herein with respect to the use of Waters and the deposit of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the Act, this Licence shall be deemed to be subject to such requirements.

[Note: see Whale Tail licence for rationale for suggested revision.]

e.d. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with all applicable legislation.

2. DEFINITIONS

a.c. The Licensee shall refer to Schedule A for definitions of terms used in this Licence.

3. ENFORCEMENT



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a.f. Failure to comply with this Licence may be a violation of the Act, subjecting the Licensee to the enforcement measures and the penalties provided for in the Act.



b.g. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the Act.

e.h. For the purpose of enforcing this Licence and with respect to the use of Waters and deposit of Waste by the Licensee, Inspectors appointed under the Act, hold all powers, privileges and protections that are conferred upon them by the Act or by other applicable laws.

PART B: GENERAL CONDITIONS

1. The amount of Water use fees shall be determined and payment of those fees shall be made in accordance with section 12 of the *Regulations*.
2. The Licensee shall file an Annual Report with the Board no later than March 31st in the year following the calendar year being reported. The Annual Report shall be developed in accordance with [Schedule B](#).
3. The Licensee shall retain and have a copy of this Licence available at the site of operations at all times.
4. Any communication with respect to this Licence shall be made in writing to the attention of:

Manager of Licensing, Nunavut Water Board
P. O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca

5. Any notice made to an Inspector shall be made in writing to the attention of:

Water Resources Officer
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445

6. The Licensee shall submit one (1) paper copy and one (1) electronic copy of all reports, studies, and plans to the Board unless otherwise requested by the Board. Reports or studies submitted to the Board by the Licensee shall include an executive summary in English, Inuktitut, and French.
7. This Licence is assignable as provided in Section 44 of the *Act*.



8. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.
9. Other than changes associated with Adaptive Management, ~~where practicable he~~the Licensee shall notify the Board of any changes in operating plans or conditions associated with this Project at least sixty (60) days prior to any such change. *[Note: see Whale Tail licence for rationale for suggested revisions.]*
10. The Licensee shall post signs in the appropriate areas to inform the public of the location of the Water Supply Facilities and the Waste Disposal Facilities. All signs must be in English, Inuktitut and French and shall be located and maintained to the satisfaction of an Inspector.
11. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written Board approval and direction. The Board may request that the Licensee alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan. ~~Unless the Board otherwise advises, Plans and amendments thereto submitted under this Licence shall be deemed to be approved by the Board within forty five days of submission by the Licensee. For greater clarity, an approved Plan remains in force until such time as it is replaced by a new approved Plan.~~*[Note: see Whale Tail licence for rationale for suggested revisions.]*
12. In the event that a Plan is not found acceptable to the Board, the Licensee shall provide a revised version to the Board for review addressing the Board's specified deficiencies within thirty (30) days of notification by the Board which clearly outlines the revisions to the Plan. The Board shall issue a final approval decision ~~upon~~within fifteen (15) days of receipt of the revised version of the Plan. *[Note: see Whale Tail licence for rationale for suggested revisions.]*
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 must be approved by the Board.
 - a. Aquatic Effects ~~Management~~Monitoring Program (AEMP), Version 3 (November 2015);
 - b. Core Receiving Environment Monitoring Program (CREMP), Design Document, Version 2 (November 2015);
 - c. Water Quality Monitoring and Management Plan for Dike Construction and Dewatering, Version 4 (June 2016);
 - d. Groundwater Monitoring Plan, Version 10 (July 2019);
 - e. Quality Assurance/Quality Control (QA/QC) Plan, Version ~~45~~ 45 (~~March~~April 2019)-
~~accepted by the Board~~;
 - f. Water Quality and Flow Monitoring Plan, Version 5 (March 2016);
 - g. Emergency Response Plan, Version 6 (Aug. 2013);
 - h. Hazardous ~~Material~~Materials Management Plan, Version 4 (March 2019);



- i. Spill Contingency Plan, Version 7 (April 2019);
- ~~j.~~ Operational ARD/ML Testing and Sampling Plan, Version ~~25~~ (~~Nov. 2013~~ April 2019);
- ~~k.j.~~ ~~Baker Lake Bulk Fuel Storage Facility: Environmental Performance Monitoring Plan,~~
~~Version 4 (August 2018);~~
- ~~k.~~ Meadowbank and Whale Tail Bulk Fuel Storage ~~Facility~~ Facilities: Environmental
Performance Monitoring Plan, Version 4, (March ~~2018~~ 2019);
- ~~l.~~ Incinerator Waste Management Plan, Version 8 (September 2018);
- ~~m.~~ Interim Closure and Reclamation Plan, Version 0 (May 2019);



~~n.~~

~~a.~~ Landfarm Design and Management Plan, Version 4 (March 2017);

~~p.~~ Landfill Design and Management Plan, Version 4 (September 2018);

~~q.~~ 2013 Water Management Report and Plan, Version 7 (March 2019);

~~r.~~ Ammonia Management Plan, Version 2 (March 2015);

~~s.~~ Dewatering **Dike-Dikes**: Operation, Maintenance and Surveillance Manual, Version 82 (~~February~~ **March** 2019);

~~t.~~ Tailings Storage Facility : Operation, Maintenance and Surveillance Manual, Version 9 (February 2019);

~~u.~~ Mine Waste Rock and Tailings Management Plan, Version 9 (July 2019);

~~v.~~ Operation and Maintenance Manual: Sewage Treatment Plan, Version 6 (March 2017); and

~~w.~~ Freshet Action Plan, (March 2019).

25.14. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.

26.15. 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 or a replacement Plan or Plans when and as the need arises, complete with a revision list detailing where significant content changes are made. [Note: see Whale Tail licence for rationale for suggested revisions.]

27.16. The Licensee may consolidate and streamline one or more approved Plans to support efficient site management and operations and communication with Inspectors and regulators. [Note: see Whale Tail licence for rationale for suggested revisions.]

17. The expiry ~~or cancellation~~ of this Licence does not relieve the Licensee from any obligation imposed by the ~~Act~~ Licence, or any other regulatory requirements. [Note: see Whale Tail licence for rationale for suggested revisions.]

28.18. The cancellation of this Licence relieves the Licensee from all obligations imposed by the Licence. [Note: see Whale Tail licence for rationale for suggested revisions.]

29.19. The Schedules attached to this Licence provide details regarding the requirements associated with specific items in the main body of the Licence and are included in the Schedule to provide greater clarity and as an aid to interpretation for the Licensee. If the



Board subsequently determines that an item in any of the Schedules requires revision in order to better reflect the intent and objectives of the Licence, the Board may at its discretion, and upon consulting and providing written notice to the Licensee and interested parties, revise the Schedule accordingly. Unless the Board directs otherwise, such revision may not necessarily be considered as an “Amendment” to the Licence.

~~29.20.~~ **20.**—Unless otherwise stated, references in the Licence to any specific legislation, policy, guideline or other regulatory requirement are deemed to refer to the regulatory requirement as may be amended or as may be expressly replaced by successor legislation, policy, guidelines or other regulatory requirements after the Licence is approved by the Minister.
[Note: see Whale Tail licence for rationale for suggested revisions.]

PART C: CONDITIONS APPLYING TO SECURITY

1. The Licensee shall, within thirty (30) days following the approval of this Amendment by the Minister, furnish and maintain security with the Minister in the amount of \$44,713,873. As set out in the Meadowbank Security Management Agreement, May 17, 2016 Version (as subsequently updated by the parties), the amount secured under this Part constitutes 50% of the total global security amount of \$89,427,746 that is required to reclaim the Undertaking, and also reflects that the remaining 50% of the global security amount will be held outside the Licence by the Kivalliq Inuit Association, in accordance with the terms and conditions of the Meadowbank Security Management Agreement.



2. The security held under Part C, Item 1 shall be in a form that is satisfactory to the Minister and consistent with the Act and Regulations.
3. The Licensee shall, within ten (10) days after furnishing security with the Minister, provide evidence to the NWB and the Kivalliq Inuit Association, that the security has been received by the Minister, indicating the amount, form, nature and conditions of the security.
4. The Licensee shall, within ten (10) days after furnishing security with the Kivalliq Inuit Association, provide evidence to the NWB and to the Minister, that the security has been received by the Kivalliq Inuit Association, indicating the amount, form, nature and conditions of the security.
5. The Licensee shall provide the Board with at least ninety (90) days written notice prior to any ~~parties'~~ termination by the Licencee of the ~~Whale-TailMeadowbank~~ Security Management Agreement, or any material change to the ~~Whale-TailMeadowbank~~ Security Management Agreement that may affect the amount of security held under Part C, Item 1.
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 arising from unexpected changes or modifications of the works and activities associated with the Undertaking.
7. The Licensee shall, within twelve (12) months following the commencement of Operations and when the Licensee files a Final Reclamation and Closure Plan as required under the Licence, submit to the Board for review an updated reclamation cost estimate, using the ~~CIRNAC~~ RECLAIM Reclamation Cost Estimating Model (Version 7.0 or the most current version in use at the time the updated reclamation cost estimate is submitted to the Board).
8. Upon the Board receiving notice under Part C, Items 5 or 6, or upon receiving an updated reclamation cost estimate as required under Part C, Item 7, the Board may, on its own initiative, or upon application by the Licensee, the Minister and/or the Kivalliq Inuit Association, conduct a periodic review of the outstanding reclamation liability associated with the Undertaking and may, as the Board considers appropriate, amend the amount of security held under Part C, Item 1. If the Nunavut Water Board determines it to be necessary or upon the request of the Proponent, the Minister and or the KIA, the Nunavut Water Board may issue further direction with respect to the process for the Board's conduct of periodic reviews of security and associated amendments to the amount of security to be furnished and maintained under the Licence.
9. The Licensee may, at any time, submit to the Board for consideration and approval, a request to change the amount of security outlined in Part C, Item 1. The submission shall include supporting evidence to justify the request, and the Minister and the Kivalliq Inuit Association will be consulted by the Board during the Board's consideration of this request. Such requests may take into account the Water Monitoring Reduction Framework attached as Schedule C. [Note: Attach Schedule C as per Whale Tail licence. see Whale Tail licence for rationale for suggested revisions.]



10. If the Board determines it to be necessary, or upon the request of Licensee, the Minister and/or the Kivalliq Inuit Association, the Board may issue further directions under this Part with respect to the process for amending the amount of security to be furnished and maintained under the Licence.
11. The security referred to in Part C, Item 1 shall be maintained until such time as the Minister is satisfied that the Licensee has complied with all provisions of the approved Final ~~Reclamation and~~ Closure and Reclamation Plan and as it is fully or in part refunded by the Minister pursuant to Section 76(5) of the Act, subject to the following. Consideration will be given to progressive release of security by the Minister as activities included in the approved Interim Closure and Reclamation Plan are completed. This clause shall survive the expiry of the Licence or renewals thereof and until ~~full and final reclamation has been completed to the satisfaction of the Minister~~ is satisfied that the Licensee has complied with all provisions of the approved Final Closure and Reclamation Plan. [Note: see Whale Tail licence for rationale for suggested revisions.]
12. The Board may ~~modify~~approve modifications to the Monitoring Program for all phases of mining as set out in Schedule I without amendment or a public hearing. Requests for changes to the Monitoring Program should be forwarded to the Board in writing and ~~should~~shall include justification for the change. [Note: see Whale Tail licence for rationale for suggested revisions.]

PART D: CONDITIONS APPLYING TO NEW CONSTRUCTION

1. The Licensee shall submit to the Board for approval, at least six (6) months prior to Construction of the Saddle Dams, or new dikes, final design and construction drawings accompanied by a detailed assessment report from the Independent Geotechnical Expert Review Panel.
2. The Licence shall submit to the Board for review, at least one (1) year prior to commissioning, final design and construction drawings of the Demolition Landfill.
3. If it is determined that the easternmost channel of Third Portage Lake requires capacity upgrading, the Licensee shall submit to the Board and DFO for review, at least six (6) months prior to construction, a management plan including final design and construction drawings of the channel modification.
4. The Licensee shall use fill material for construction only from approved sources that have been demonstrated by appropriate geochemical analyses to not produce Acid Rock Drainage and to be Non-Metal Leaching, and free of contaminants.
5. The Licensee shall submit for approval, at least thirty (30) days prior to new construction, a Final Water Quality Monitoring and Management Plan for Dike Construction and Dewatering. The Plan shall include a protocol to monitor and maintain Water levels in Third Portage Lake, Second Portage Lake and Wally Lake within natural variation.
6. During new dike construction, the Licensee shall implement the action plans outlined in the



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approved Final Water Quality Monitoring and Management Plan for Dike Construction and Dewatering if:

- a.* Total Suspended Solids (TSS) levels in a single sample exceed the Short Term Maximum TSS concentration defined in Part D Item 7;
- b.* The 7-day moving average TSS concentration exceeds the Maximum Monthly Mean TSS concentration defined in Part D Item 7.

7. Unless otherwise approved by the Board, ~~t~~The Licensee shall compare TSS levels as required in Part D Item 6 to the following Maximum Monthly Mean and Short Term Maximum concentrations:



Parameter	Maximum Monthly Mean (mg/L)	Short Term Maximum (mg/L)
TSS in areas where there is spawning habitat and at times when eggs or larvae are expected to be present (applied at monitoring stations located closest to the high value shoal areas starting Sept 1, 2008)	6	25
TSS in all other areas and at times when eggs/larvae are not present	15	50
TSS in impounded areas (e.g. northwest arm of Second Portage Lake) at all times in all areas.	15	50

8. Unless otherwise approved by the Board, Effluent from new dewatering activities shall be monitored at Monitoring Stations ST-DD- 1 to ST-DD-TBD and not exceed the following Effluent quality limits:

Parameter	Maximum Monthly Mean	Short Term Maximum
Total Suspended Solids (TSS)	15.0 mg/L	22.5 mg/L
Turbidity	15 NTU	30 NTU
pH	6.0 to 9.0	6.0 to 9.0
Total Aluminum	1.5 mg/L	3.0 mg/L

[Note: see Whale Tail licence for rationale for suggested revisions.]

9. All Effluent from the Sewage Treatment Plant shall be directed to the Stormwater Management Pond. Any discharge of the Stormwater Management Pond shall be directed to the Tailings Storage Facility.
10. The Licensee shall implement sediment and erosion control measures prior to and during Construction, and Operations where necessary, to prevent entry of sediment into Water.
11. The Licensee shall inspect daily, all construction activities for signs of erosion that may affect surface water discharging to Third Portage Lake, Second Portage Lake and Wally Lake.
12. Unless otherwise approved by the Board, aAll surface runoff during the construction of any facilities, where flow may directly or indirectly enter a Water body, shall be sampled Weekly and not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids (TSS)	50.0	100.0



13. The Licensee shall, during the construction of all engineered structures, provide the required supervision and field checks by an appropriately qualified and experienced Engineer in such a manner that the project specification can be enforced and, where required, the quality control measures can be followed. The Licensee shall maintain all construction records of all engineered structures to be made available at the request of the Board and/or an Inspector.
14. The Licensee shall submit to the Board for review, within ninety (90) days of completion of each facility designed to contain, withhold, divert or retain waters or wastes during the construction phase, a Construction Summary Report prepared by a qualified Engineer(s) in accordance with [Schedule D, Item 1](#).

15. The Licensee shall prevent any chemicals, petroleum products, fuel or wastes associated with the undertaking from entering any Water body except in accordance with this Licence.

[Note: see Whale Tail licence for rationale for suggested revisions.]

16. The Licensee shall minimize disturbance to terrain, permafrost and drainage during movement of contractor's equipment and personnel around the site during construction activities.
17. The Licensee shall not store material on the surface of frozen streams or lakes except what is for immediate use.
18. The Licensee shall locate equipment storage areas on gravel, sand or other durable land, a distance of at least thirty one (31) metres above the ordinary High Water Mark of any water body in order to minimize impacts on surface drainage and water quality.
19. The Licensee shall undertake appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's operations.
20. The Licensee shall limit any in-stream activity to low Water periods. In-stream activity is prohibited during fish migration.
21. The Licensee shall, for the purposes of bridge construction, ensure that all activities remain outside of the natural channel width by the placement of abutments, footings or armouring above the ordinary High Water Mark so that there is no restriction to the natural channel processes.
22. The Licensee shall operate the Mine Site and Marshalling Area Bulk Fuel Storage Facilities in accordance with [all the following](#) applicable legislation and industry standards, ~~including~~:
 - a. *Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, 2003 (Updated in 2013) or most recent; CCME; and*
 - b. *National Fire Code, 2010 or most recent.*



| *[Note: see Whale Tail licence for rationale.]*



22.23.

The Licensee shall apply the principles of Adaptive Management in construction and operations. For greater clarity, Adaptive Management strategy actions identified in an approved Adaptive Management Plan may be implemented by the Licensee upon notice to the Board and do not require Modification or Amendment to this Licence prior to implementation. [Note: see Whale Tail licence for rationale.]

22.24.

New Adaptive Management Actions may be implemented by the Licensee upon 21 days written notice to the Board and do not require Modification or Amendment to this Licence prior to implementation.

22.25.

Notice to the Board must include:

- A description of the rationale for the action (s);
- An evaluation of whether the action may change overall reclamation liability, and if applicable an estimate of any required reduction or increase to security;
- Confirmation that the primary purpose for the action(s) is to prevent, stabilize, or reverse an adverse change in environmental conditions or to otherwise protect the receiving environment;
- A description and location of any facilities and or works to be constructed;
- A description of any new monitoring required, including sampling locations, parameters measured and frequency of sampling;
- A proposed schedule for construction;
- Drawings of Engineered Structures stamped by a Professional Engineer (where applicable); and
- If required, any proposed sediment and erosion control measures.

PART E: CONDITIONS APPLYING TO WATER USE AND MANAGEMENT

1.

Unless otherwise approved by the Board in writing, tThe Licensee shall obtain fresh Water from Third Portage Lake at Monitoring Station ST-1 using the Fresh Water Intake Barge for domestic camp use, mining and milling, re-flooding of Portage and Goose Pits and associated use, or as otherwise approved by the Board in writing. The use of Waters from Third Portage Lake, for all purposes, shall not exceed a total of two million three hundred fifty thousand (2,350,000) cubic metres *per* year from the Licence approval date to December 31, 2017, followed by a maximum of four million nine hundred thirty five thousand (4,935,000) cubic metres *per* year, starting in 2018 through to the Expiry of the Licence.

2.

Unless otherwise approved by the Board in writing, tThe Licensee shall obtain fresh Water from Wally Lake at Monitoring Station ST-2 for re- flooding of Vault Pit and associated use, or as otherwise approved by the Board in writing. The use of Waters from Wally Lake shall not exceed a total of four million one hundred eighty five thousand (4,185,000) cubic metres *per* year starting in 2018 through to the Expiry of the Licence.

3.

Unless otherwise approved by the Board in writing, tThe Licensee shall obtain fresh Water from the unnamed lake at Monitoring Station ST-3 for purposes of explosives mixing, not to exceed a maximum of two thousand four hundred (2,400) cubic metres *per* year from



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Licence issuance date to December 31, 2017, or as otherwise approved by the Board in writing.

4. Unless otherwise approved by the Board in writing, tThe total volume of fresh Water for all uses and from all sources, shall not exceed two million three hundred and fifty thousand (2,350,000) cubic metres *per* year from the Licence approval date to December 31, 2017 followed by nine million one hundred and twenty thousand (9,120,000) cubic metres *per* year in 2018 through to the expiry of the Licence.
5. The Licensee shall maximize to the greatest practical extent, the use of reclaim water from the Tailings Storage Facility for use in the mill.
6. The Licensee shall equip all Water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.
7. The Licensee shall submit a Water Management Plan on an annual basis to the Board for review following the commencement of Operations. The Plan must include an updated Water Balance. The Water Management Plans shall include an action plan to be implemented if predicted re-flooded pit water quality indicates that treatment is necessary. The Licensee shall not breach dikes until the water quality in the re-flooded area meets CCME Water Quality Guidelines for the Protection of Aquatic Life, baseline concentrations, or appropriate site specific water quality objectives. Subject to the Board



approval, if water quality parameters are above CCME Guidelines, a site specific risk assessment must be conducted to identify water quality objectives that are protective of the aquatic environment.

8. The Licensee shall submit a Water Quality Model for pit re-flooding as part of the Water Management Plan which shall be re-calibrated as necessary and updated at a minimum of once every two (2) years following commencement of Operations. The results and implications of the predictive model shall be reported to the Board.
9. The Licensee shall, on an annual basis during Operations and Closure, compare the predicted water quantity and quality within the pits, to the measured water quantity and quality. Should the difference between the Final Environmental Impact Statement water quantity and quality predictions and measured values be 20% or greater, then the cause(s) of the difference(s) shall be identified and the implications of the difference shall be assessed and reported to the Board.
10. The Licensee may include appropriate Site Specific Water Quality Objectives within the Receiving Environment applicable during construction and operations in the approved Water Quality and Flow Monitoring Plan, which Plan may be further modified by the Licensee and approved by the Board from time to time.
11. The Licensee shall carry out weekly inspections of all water management structures during periods of flow and the records be kept for review upon request of an Inspector. More frequent inspections may be required at the request of an Inspector. This information is to be included in the Water Management Plan.
12. The Licensee shall implement measures to minimize the generation and deposition of dust and/or sediment into Water arising from road use.
13. The Licensee shall provide at least thirty (30) days' notice to the NWB and Inspector prior to the commencement of re-flooding of each pit.

PART F: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT

1. The Licensee shall direct all Sewage and Greywater to the Sewage Treatment Plant as described in the Operation and Maintenance Manual: Sewage Treatment Plant, or as otherwise approved by the Board.
2. The Licensee shall dispose of Sewage Effluent and direct all sludge removed from the Sewage Treatment Plant to the Tailings Storage Facility or to the Landfarm as a nutrient amendment in accordance with the Operation and Maintenance Manual: Sewage Treatment Plant as approved by the Board.
3. Unless otherwise approved by the Board, the Discharge of Effluent from the Portage Attenuation Pond at Monitoring Station ST-9 shall be directed to third Portage Lake through the Third Portage Lake Outfall Diffuser and shall not exceed the following



Effluent quality limits:



Parameter	Maximum Average Concentration	Maximum Allowable Grab Sample Concentration
pH	6.0 to 9.0	6.0 to 9.0
TSS (mg/L)	15	30
Turbidity (NTU)	15	15
Total (T)-Al (mg/L)	1.5	1.5
Dissolved (D)-Al (mg/L)	1.0	1.0
T-As (mg/L)	0.3	0.6
T-Cd (mg/L)	0.002	0.004
T-CN (mg/L)	0.5	1.0
T-Cu (mg/L)	0.1	0.2
T-Hg (mg/L)	0.0004	0.0008
NH ₃ -N (mg/L)	16	32
T-Ni (mg/L)	0.2	0.4
T-NO ₃ -N (mg/L)	20	40
T-Pb (mg/L)	0.1	0.2
T-P (mg/L)	1.0	2.0
T-Zn (mg/L)	0.4	0.8
T-Cl ⁻ (mg/L)	1000	2000
Total Petroleum Hydrocarbons (TPH) (mg/L)	3	6

4. Unless otherwise approved by the Board, the Discharge of Effluent from the Vault Attenuation Pond at Monitoring Station ST-10 shall be directed to Wally Lake through the Wally Outfall Diffuser and shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration	Maximum Allowable Grab Sample Concentration
pH	6.0 to 9.0	6.0 to 9.0
TSS (mg/L)	15	30
TDS (mg/L)	1400	1400
Turbidity (NTU)	15	15
Total (T)-Al (mg/L)	1.5	3.0
Dissolved (D)-Al (mg/L)	1.0	2.0
T-As (mg/L)	0.1	0.2
T-Cd (mg/L)	0.002	0.004
T-Cu (mg/L)	0.1	0.2
T-Hg (mg/L)	0.004	0.008
NH ₃ -N (mg/L)	20	40
T-Ni (mg/L)	0.2	0.4
T-NO ₃ -N (mg/L)	50	100
T-Pb (mg/L)	0.1	0.2



T-P (mg/L)	1.5	3.0
T-Zn (mg/L)	0.2	0.4
T-Cl ⁻ (mg/L)	500	1000

[Note: see Whale Tail licence for rationale.]

5. The Discharge of Effluent from a Final Discharge Point at Monitoring Program Stations ST-9 and ST-10, shall be demonstrated to be non-Acutely Lethal ~~under the following test and as stipulated in Schedule I of the Licence:~~

~~Acute Lethality of Effluents to Rainbow Trout (as per Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/13 Second Edition December 2000 (with May 2007 amendments)).~~

[Note: see Whale Tail licence for rationale.]

6. ~~Unless otherwise approved by the Board,~~ All water collected prior to discharge from the Non-Contact Water diversions (Monitoring Stations ST-5 and ST-6) and East Dike Seepage (Monitoring Station ST-8) during Operations shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Allowable Grab Sample Concentration (mg/L)
TSS	15	30

7. Effluent from the Mine Site Bulk Fuel Storage Facility and other fuel containment facilities that are within proximity of the Stormwater Management Pond shall be directed to the Stormwater Management Pond.
8. ~~Unless otherwise approved by the Board,~~ The Discharge of Effluent to land from fuel containment facilities at the Baker Lake Bulk Fuel Storage Facility and Meadowbank Fuel Storage Facility (ST-37 through ST-40), shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (MAC)	Maximum Concentration of any single Grab sample
pH	6.0 to 9.5	6.0 to 9.5
Total Arsenic (mg/L)	**0.5	1.0
Total Copper (mg/L)	**0.3	0.6
Total Nickel (mg/L)	**0.5	1.0
Total Zinc (mg/L)	*0.5	1.0
Total Suspended Solids (mg/L)	*15	30
Ammonia (mg/L)	6.0	6.0
Benzene (µg/L)	370	370
Toluene (µg/L)	2	2



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Ethylbenzene ($\mu\text{g/L}$)	90	90
Lead (mg/L)	0.1	0.1
Oil and Grease (mg/L)	5 and no visible sheen	5 and no visible sheen

* Environmental Guideline for Industrial Waste Discharges in the NWT, 2004

** Metal and Diamond Mining Effluent Regulations (MMER)



9. The Licensee shall, under Part F, Item 8, discharge Effluent in such a manner as to minimize surface erosion at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any Water body, where direct flow into a Water body is not possible and no additional impacts are created, or as otherwise approved by the Board in writing.
10. The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any Water body such that the quality, quantity or flow of Water is not impaired, or as otherwise approved by the Board in writing.
11. The Licensee shall confirm compliance with Effluent quality limits in Part F, Items 3, 4 and 8 prior to Discharge.
12. The Licensee shall provide at least three (3) days notice to the Inspector prior to any planned Discharges from any facilities. The notice shall include the estimated volume proposed for Discharge and the receiving location.
13. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.
14. The Licensee is authorized to dispose of and contain all-non-hazardous solid Wastes at the on-site Landfills in accordance with the approved Landfill Design and Management Plan, dated March 2013, or as otherwise approved by the Board in writing.
15. The Licensee shall direct all solid Waste generated at the Baker Lake Marshalling Facility to the approved Landfill at Meadowbank Mine site.
16. The Licensee shall remove from the Project site, all solid and liquid hazardous Wastes generated through the course of the Operation, for disposal at an approved hazardous waste disposal facility.
17. With the exception of petroleum hydrocarbon contaminated soils to be remediated as per the Landfarm Management Plan, the Licensee shall maintain records of all Waste backhauled and confirmation of proper disposal through the use of Waste manifest tracking systems and registration with the Government of Nunavut, Department of Environment.
18. The Licensee shall dispose of all petroleum hydrocarbon contaminated soils and operate the Landfarm in accordance with the approved Landfarm Design and Management Plan, dated February 2013. Water accumulating in the landfarm shall be contained within the Landfarm and not be discharged to the environment.

The Licensee shall dispose of tailings and operate the Tailings Storage Facility in accordance with the approved Mine Waste Rock and Tailings Management Plan (March 2017), Meadowbank Tailings Storage Facility Management Plan for Whale Tail Pit (January



2017) submitted as part of water licence application for the Whale Tail Pit Project submitted by AEM to the NWB on July 8, 2016, and Guide to the Management of Tailings Facilities (Mining Association of Canada September 1998). The tailings solids fraction shall be permanently contained within the Tailings Storage Facility.

19. The Licensee shall incorporate Seepage management at Quarries using best management practices including ditches, diversions, sumps and berms where necessary.
20. The Licensee shall provide to the Board, at least thirty (30) days prior to any planned disposal of Waste in a facility operated by the Hamlet of Baker Lake, documented authorization from the Hamlet for the use of any waste disposal facility operated by the Hamlet.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications of Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a. The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. Such Modifications do not place the Licensee in contravention of the Licence or the Act;
 - c. Such Modifications are consistent with the NIRB Screening Determination;
 - d. The Board has not, within sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. The Board has not rejected the proposed Modifications.
2. Modifications for which any of the conditions referred to in Part G, Item 1 have not been met can be carried out only with approval from the Board in writing.
3. Applications for modifications shall contain:
 - a. A description of the facilities and/or works to be constructed;
 - b. The proposed location of the structure(s);
 - c. Identification of any potential impacts to the receiving environment;
 - d. A description of any monitoring required, including sampling locations, parameters measured, and frequencies of sampling;
 - e. Schedule for construction;
 - f. Drawings of Engineered Structures stamped by a Professional Engineer; and
 - g. Proposed sediment and erosion control measures.
4. Where a proposed Modification is located outside the existing Project ~~footprint~~Footprint, the Licensee must also confirm that the proposed Modification is in conformity with the applicable land use plan and that it is not a "significant modification" as that term appears in section ~~145~~88 and ~~146~~subparagraphs 89 of the *Nunavut Planning and Project Assessment Act*.



For greater clarity, ~~Modifications~~ a Modification located within the ~~project footprint~~ are Project Footprint is not ~~deemed~~ considered a “significant ~~modifications~~ modification” under the *Nunavut Planning and Project Assessment Act*. [Note: see Whale Tail licence for rationale.]

5. The Licensee shall provide to the Board, within ninety (90) days of completion of the Modification, as-built plans and drawings of the Modifications referred to in this Part. These plans and drawings shall be stamped by an Engineer-
(where applicable).

PART H: CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING

1. The Licensee shall implement and maintain the Emergency Response Plan, dated August 2013, and the Spill Contingency Plan, dated November 2013, as approved by the Board. The Licensee shall comply with the Plan and any changes deemed significant shall require the submission and subsequent approval of the Board in writing.
2. The Licensee shall prevent any chemicals, petroleum products or unauthorized Wastes associated with the Project from entering Water.
3. The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.
4. The Licensee shall perform weekly inspections of petroleum products storage and containment facilities, fuel tanks and connectors, for leaks and settlement and shall keep a written log of inspections to be made available to an Inspector upon request. More frequent inspections may be requested by an Inspector.
5. If the Licensee provides notification under Part J, Item 4, the Licensee shall submit to the Board, an Addendum to the Emergency Response Plan and the Spill Contingency Plan, detailing the changes in operations, personnel, responsibilities, availability of equipment and access to the site for assistance.
6. The Licensee shall keep a copy of the Emergency Response Plan and the Spill Contingency Plan at each site of operation.
7. The Licensee shall conduct emergency maintenance and servicing on equipment, in designated areas, and shall implement measures to collect motor fluids and other Waste to prevent and contain spills.
8. If, during the period of this Licence an unauthorized discharges or foreseeable unauthorized discharges of waste in excess of the Regulations and the thresholds set out in the Nunavut Spill Planning and Reporting Regulations, and
 - a. Employ the Spill Contingency Plan;
 - b. Report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130, fax at (number) or by electronic mail and to the Inspector at (867) 975-4295 or by electronic mail;



- c. Information that is reported in person or by telephone must also be reported in writing to an Inspector without delay; and
 - d. For each spill occurrence, submit a detailed report to the Inspector, no later than thirty (30) days after initially reporting the event, which includes the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
9. The Licensee shall, in addition to Part H, Item 8, regardless of the quantity of release of a harmful substance, report to the NWT/NU Spill Line if the release is near or into a Water body.



PART I: CONDITIONS APPLYING TO GENERAL AND AQUATIC EFFECTS MONITORING

1. The Licensee shall comply with the Aquatic Effects Management Plan (AEMP) as approved by the Board. The AEMP shall include:
 - a. Comprehensive receiving environment monitoring to identify changes to the aquatic environment associated with mine activities;
 - b. Linkage between monitoring results and adaptive management response;
 - c. Monitoring of lake productivity;
 - d. Sampling and analysis plans; and
 - e. Monitoring under Fisheries Authorizations, NWB Licence Compliance Monitoring, Metal and Diamond Mining Effluent Regulations (MDMER) Environmental Effects Monitoring, and Groundwater Monitoring.
2. The Licensee shall implement the Core Receiving Environmental Monitoring Program (CREMP), as approved by the Board. The updated CREMP shall include all comments provided during the technical review of Application.
3. The Licensee shall implement the Water Quality and Flow Monitoring Plan, as approved by the Board.
4. The Licensee shall install and maintain flow meters or other such devices, or implement suitable methods required for the measuring of Water use and Effluent discharge volumes, to be operated and maintained to the satisfaction of an Inspector.
5. The Licensee shall undertake the Monitoring Program provided in the Tables 1 and 2 of Schedule I. The Licensee shall establish the locations and GPS coordinates for all additional monitoring stations in consultation with an Inspector.
6. The Licensee shall establish the locations for the proposed compliance and internal monitoring locations as they relate to existing drainage courses beneath the Portage and Vault Waste Rock Storage Facilities and Tailing Storage Facility dikes to ensure potential seep locations are adequately identified in accordance with the Groundwater Monitoring Plan, as approved by the Board.
7. The Licensee shall install and maintain signs that identify monitoring stations. The signs shall be posted in English, Inuktitut and French.
8. The Licensee shall measure and record the following on a Monthly basis in cubic metres or as otherwise stated:
 - a. The volume of fresh Water obtained from Third Portage Lake;
 - b. The volume of fresh Water obtained from Wally Lake;



- c. The volume of fresh Water from the unnamed lake for purposes of explosives mixing;
 - d. The volume of reclaim water obtained from the Tailings Storage Facility for process water;
 - e. The volume of Effluent and fresh Water transferred to the pit lakes;
 - f. The flow during periods of discharge from the Landfarm, Landfills, Waste Rock Storage Facilities, Sewage Treatment Plant, Contact Water Collection System, and area Sumps collecting Contact Water;
 - g. The volume of water transferred from the Marshalling Area Bulk Fuel Storage Facility;
 - h. The volume of Sewage sludge removed from the Sewage Treatment Plant;
 - i. Quantity of mill tailings placed within the Tailings Storage Facility;
 - j. Tonnes of mineralized and un-mineralized waste rock stored; and
 - k. Tonnes of ore processed through the mill.
9. The Licensee shall undertake the Thermal Monitoring Program detailed in the Mine Waste Rock and Tailings Management Plan as approved by the Board.
10. The Licensee shall undertake a geotechnical inspection, to be carried out annually by a Geotechnical Engineer, between the months of July and September. The inspection shall be conducted in accordance with the *Canadian Dam Safety Guidelines* where applicable and take into account all major earthworks, including:
- a. Dewatering Dikes;
 - b. Stormwater Dikes;
 - c. Saddle Dams;
 - d. Pit walls;
 - e. Tailings Storage Facility;
 - f. Shoreline protection at the location of the Wally Lake and Portage Lake Outfall Diffusers;
 - g. Geotechnical instrumentation;
 - h. All Weather Private Access Road and site roads, in particular water course crossings;
 - i. Quarries;
 - j. Landfills;
 - k. Landfarm;
 - l. Bulk Fuel Storage Facilities at both the Meadowbank mine site and Baker Lake Marshalling area;
 - m. Attenuation Ponds;
 - n. Reclaim Pond; and
 - o. Sumps.
11. The Licensee shall submit to the Board as part of the Annual Report, the Geotechnical Engineer's Inspection Report. The Report shall include a cover letter from the Licensee outlining an implementation plan to address the recommendations of the Geotechnical Engineer.



12. The Licensee shall submit to the Board as part of the Annual Report required under Part B, Item 2, all reports and performance evaluations prepared by the Independent Geotechnical Expert Review Panel.
13. Unless otherwise approved by the Board, the Licensee shall monitor Seepage observations pursuant to Part I, Item 6 according to the following:

Characterization of seepage including: precise location; discharge rates and volumes; respective hazard(s) and consequences and prescribed mitigative measures	Minimum Frequency of Observation
Lake water Seepage Through Dewatering Dikes	Monthly
Seepage (of any kind) Through Central Dike	Monthly
Seepage and Runoff from the Landfill(s)	Quarterly
Subsurface Seepage and Surface Runoff from Waste Rock Piles	Quarterly
Seepage at Pit Wall and Pit Wall Freeze/Thaw and Permafrost Aggradation	Quarterly

14. The Licensee shall submit the results and interpretation of the Seepage monitoring required in Part I, Item 13 in the Annual Report required under Part B, Item 2.
15. The Licensee shall obtain a digital photographic record of all the watercourse crossings before, during, and after construction has been completed.
16. The Licensee shall maintain a Quality Assurance / Quality Control Plan, accepted by the Board that includes requirements for independent third party sampling and analysis. The QA/QC Plan shall be prepared and updated as needed in accordance with and in consultation with the accredited laboratory conducting the analyses. The Plan shall include a cover letter from the accredited laboratory confirming approval of the Plan for analyses to be performed under this Licence. This Plan shall be developed in accordance with current Standard Methods and the 1996 Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class “A” (INAC).
17. The Licensee shall annually review the approved QA/QC Plan and modify the Plan as necessary. Proposed changes shall be submitted to an Accredited Laboratory for approval.
18. All analyses shall be conducted as described in the most recent edition of “*Standard Methods for the Examination of Water and Wastewater*” or by other such methods approved by an Analyst.
19. All compliance analyses shall be performed in an accredited laboratory according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.



20. The Licensee shall submit to the Board, within thirty (30) days following the month being reported, a Monthly Monitoring Report. The Report shall include:
 - a. All data and information required by this Part and generated by the Monitoring Program in the Tables of Schedule I;
 - b. An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in Parts D and F.
21. The NWB can modify the Monitoring Program as set out in Schedule I without a public hearing. Requests for changes to the Program should be forwarded to the NWB in writing, and should include the justification for the change.

PART J: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE

1. The Licensee shall complete all progressive reclamation work in accordance with the Interim Closure and Reclamation Plan referred to in this Part as approved by the Board.
2. The Licensee shall submit to the Board for approval at least twelve (12) months prior to the expected end of planned mining, a Final Closure and Reclamation Plan. The Final Plan shall incorporate revisions, which reflect the pending closed status of the mine, and include:
 - a. Soil Quality Remediation Objectives along with CCME Guidelines and the Government of Nunavut Environmental Guideline for Site Remediation;
 - b. Environmental Site Assessment plans in accordance Canadian Standards Association (CSA) criteria; and
 - c. An evaluation of the Human Health and Ecological Risk associated with closure options.
3. The Licensee shall notify the Board in writing, at least sixty (60) days prior to, or as soon as practically possible, any intent to enter into a Care and Maintenance Phase.
4. The Licensee shall provide the Board, within thirty (30) days of the Licensee providing notice of intent to enter into Care and Maintenance under Part J, Item 4, a Care and Maintenance Plan that details the Licensee's plans for maintaining compliance with the Terms and Conditions of the Licence.



5. The Licensee shall review the Plans referred to in this Part as required by changes in operation and/or technology and modify the Plans accordingly. Revisions to the Plans should incorporate design changes and Adaptive Management required and implemented during Construction and on the basis of actual site conditions and monitoring results over the life of the Project.
6. The Licensee shall implement progressive reclamation, including progressive covering of the tailings and if practicable re-vegetation.



SCHEDULES

Schedule A: Scope, Definition, and Enforcement

Schedule B: General Conditions

Schedule C: No Schedule for Security

Schedule D: Conditions Applying to Construction

Schedule E: No Schedule for Water Use and Management

Schedule F: No Schedule for Waste Disposal and Management

Schedule G: No Schedule for Modifications

Schedule H: No Schedule for Emergency Response and Contingency Planning

Schedule I: Conditions Applying to General and Aquatic Effects Monitoring

Schedule J: No Schedule for Abandonment, Reclamation and Closure



Schedule A: Scope, Definitions, and Enforcement

[Note: Agnico Eagle has suggested removing defined terms that are not included in current licence wording.]

In this Licence: **2AM-MEA1525**

“Abandonment” means the permanent dismantlement of a facility so it is permanently incapable of its intended use. This includes the removal of associated equipment and structures;

“Act” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“Acid Rock Drainage (ARD)” means the production of acidic leachate, seepage or drainage from underground workings, open pits, ore piles, waste rock, construction rock that can lead to the release of metals to groundwater or surface water during the life of the Project and after closure;

“Acutely Lethal Effluent” means ~~effluent~~ as defined ~~in~~by the ~~Metallurgical~~MDMER and ~~Diamond Mining Effluent Regulations~~ as amended from time to time. *“in respect of an Effluent means that the effluent at 100% concentration kills (a) more than 50% of the rainbow trout subjected to it for a period of 96 hours, when tested in accordance with the acute lethality test set out in section 14.1 [of the MDMER]; or (b) more than 50% of the threespine stickleback subjected to it for a period of 96 hours, when tested in accordance with the acute lethality test set out in section 14.2. [of the MDMER]”;*

“Adaptive Management” means a management plan that describes a way of managing risks associated with uncertainty and provides a flexible framework to identify specific thresholds and associated management actions to be taken when specified thresholds are exceeded. Mitigation measures may include special studies, operational changes, revised or new water and waste management systems, structures and or facilities, or implementing mitigation activities to prevent, stabilize or reverse a change in environmental conditions or to otherwise protect the receiving environment;

“Addendum” means the supplemental text that is added to a full plan or report, usually included at the end of the document and is not intended to require a full resubmission of the revised report. It may also be considered as an appendix or supplement;

“All Weather Access Road” means the all weather access road and associated water crossings between the Hamlet of Baker Lake and the Meadowbank Gold Project site as described in the *“Tehek Access Road Construction, Meadowbank Gold Project”*;

“Amendment” ; means a change to any terms and conditions of this Licence through application to the NWB, requiring a change, addition, or deletion of specific terms and conditions of the Licence not considered as a Modification and for greater clarity, proceeding with Adaptive Management and or a New Adaptive Management Action shall not require an Amendment;;



“**Analyst**” means an Analyst designated by the Minister under section 85 (1) of the *Act*;

“**Annually**” means, in the context of monitoring frequency, one sampling event occurring every 365 days with a minimum of 200 days between sampling events;

“**Aquatic Effects Management Program (AEMP)**” means an overarching “umbrella” program that conceptually provides an opportunity to integrate results of individual, but related, monitoring programs in accordance with the Licence;



“Baker Lake Marshalling Facility” means the facilities associated with the Meadowbank Project, located within the Hamlet of Baker Lake, that includes the barge unloading facilities, a lay-down, storage and marshalling area, a fuel tank farm, ammonium nitrate and explosive storage areas, and associated access roads

“Batch Concrete Plant” means the plant used to mix cement, aggregate, and water to produce concrete for footings, foundations and floors during construction as described in the *“Pre-Development Batch Concrete Plant Description Agnico-Eagle Meadowbank Project”*;

“Bay-Goose Dike” means the structure designed to isolate a portion of Third Portage lake, referred to as “Goose Island Basin”, to permit dewatering and mining of the Goose Island Pit and southern portion of Portage Pit as indicated in the document entitled *“Bay-Goose Dike Construction As-Built Report Meadowbank Gold Mine, Nunavut”*, dated April 2013, and illustrated in the attached As-Built DWGs 4200-01 to 4200-06, , 4200-10, 42000-11A, 4200-11B, 4200-12 to 4200-23, 4200-30 to 4200-35, 4300-00 to 4300-32, 4300-43 to 4300-52, Golder Associates Project Number 09-1428-5007;

“Biannual” means, in the context of monitoring frequency, one sampling event occurring every six months with a minimum of one hundred eighty days between sampling events;

“Board” means the Nunavut Water Board established under Article 13 of the *Nunavut Land Claims Agreement* and under section 14 of the Act;

“Canadian Council of the Minister of Environment (CCME)” means the organizations of Canadian Ministers of Environment that sets guidelines for environmental protection across Canada such as the Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life;

“Care and Maintenance” in respect of a mine, means the status of the facility when the Licensee ceases production or commercial operation temporarily for an undefined period of time;

“Central Dike” means the structure, designed to isolate the south cell portion of the Meadowbank Tailings Storage Facility for the purpose of retaining tailings as described in the approved plans and reviewed by the Independent Geotechnical Expert Review Panel.
“

“Closure” means when an Operator ceases operations at a facility without the intent to resume mining activities in the future;



“Commercial Operation” in respect of a mine, means an average rate of production that is equal to or greater than 25% of the design capacity of the mine over a period of ninety consecutive days;

“Construction” means any activities undertaken to construct or build any component of, or associated with, the development of the Meadowbank Gold Project, as described in the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process;

“Contact Water” means any water that has interacted with mine facilities or mining activities, including all runoff and seepage from WRSF and Ore Stockpiles;;

“Contact Water Collection System” means the system of trenches, sumps and attenuation ponds designed to manage water that may interact with any mine development activities including but not limited to pre- development activities as described in the Water Licence Application document entitled *“2013 Water Management Report and Plan”* dated March 2014;

“Core Receiving Environmental Monitoring Program or CREMP” means a monitoring program designed to determine the short and long-term effects in the aquatic environment resulting from the Project, to evaluate the accuracy of impact predictions, to assess the effectiveness of planned impact mitigation measures and to identify additional impact mitigation measures to avert or reduce environmental effects or Adaptive Management and which may be consolidated and streamlined with other plans in accordance with the Licence;

“Dam Safety Guidelines” means the *Canadian Dam Association (CDA) Dam Safety Guidelines (DSG)*, (2007) or subsequent approved editions;

“Deleterious Substances” means a substance as defined in section 34(1) of the *Fisheries Act*;

“Deposit” means the placement of waste rock, tailings or other solids materials on land or in water;

“Discharge” means the release of any water or waste to the receiving environment;

“Dissolved Metals” means the suite of metals referred to in Group 2 of Table 1 – Monitoring Groups located in Schedule J of this Licence. Dissolved metals shall be analyzed on a filtered sample;

“Domestic Waste” means all solid waste generated from the accommodations, kitchen facilities and all other site facilities, excluding those hazardous wastes associated with the Meadowbank Gold Mine Project;

“East Dewatering Dike (Second Portage Dewatering Dike)” means the structure designed to isolate the a portion of the northwest arm of Second Portage Lake, for the purpose of dewatering and development of the North Portage Open Pit, as indicated in the document *“East Dike Construction As-Built Report Meadowbank Gold Mine, Nunavut”* December 15, 2009, and



illustrated in the attached As-Built DWGs 2100-00 to 2100-6, 2100-10 to 2100-12, 2100-14 to 2100-17, 2100-24 to 2100-30, Golder Associates Project Numbers 07-1413-0074 and 09-1428-5007;

“East Dike Seepage Discharge Diffuser” means the facility designed to discharge and enhance mixing of East Dike seepage to the Second Portage Lake, as indicated in the document *“East Dike Seepage As-Built Report”* dated October 7, 2014, and illustrated in the attached As-Built DWGs EDS-01 and WD, Golder Associates Project Number 12-1221-0010-3100;

“Effluent” means treated or untreated liquid waste material that is discharged into the Receiving Environment from all site water management facilities;

“Emulsion Plant (Explosives Mixing Facility)” means the facility designed for storage of Ammonium Nitrate, detonators, and explosives; and designed for the mixing and storage of Ammonium Nitrate Fuel Oil (ANFO), as illustrated in the document entitled *“2AM-MEA Meadowbank Gold Water Licence Application Supplementary Information on Explosive Storage Facilities”* dated November 26, 2007, DWG 600-C-0130 Plant-site Infrastructure Emulsion Plant Location and Finish Grading – Plan, dated March 2007, Hatch Project Number 325174;

“Engineer” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

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“Engineered Structure” means any facility, which was designed and approved by a Professional Engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;

“Environmental Assessment” means, for the purpose of this licence, the totality of the Nunavut Impact Review Board (NIRB) Public Registry as established under the authority of Article 12 of the NLCA, this includes everything that was submitted by the Licensee to the NIRB, the scope of which is consistent with the Water Licence Application;

“Final Discharge Point” in respect of an effluent, means as defined in the *Metal and Diamond Mining Effluent Regulations*;

“Fresh Water Intake Barge” means the pre-packaged floating water pump barge fabricated and supplied by Chamco Industries Ltd. of Vancouver, for the purpose of supplying freshwater to the Meadowbank Project as illustrated in Appendix A of the Water Licence Application document entitled *“Meadowbank Gold Project Type A Water Licence Application”* dated August 2007,



DWG Numbers C1011158-21, C1011158-22, and C1011158-23, dated 27.06.05, Chamco Job No. 1011160ABS;

“Geotechnical Engineer” means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization with the engineering properties of earth materials in dealing with man-made structures and earthworks that will be built on a site. These can include shallow and deep foundations, retaining walls, dams, and embankments;

“Grab Sample” means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;

“Greywater” means the component of effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), excluding sewage;

“Ground Water” means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state;

“Hazardous Waste” means materials or contaminant which are categorized as dangerous goods under the *Transportation of Dangerous Good Act* (1992) and/or that is no longer used for their original purpose and is intended for recycling, treatment, disposal or storage;

“High Water Mark” means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. *Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities*);

~~**“ICP Metals Scan”** means for the purpose of the Licence elements detected using Inductively Coupled Plasma (ICP) mass spectrometer. Metal parameters should be consistent with baseline data previously collected and include any other metals of concern or interest;~~

“Incinerator” means the dual chamber, high temperature facility designed with the capacity to service the camp as described in the Water Licence Application document entitled *“Incineration Waste Management Plan, Meadowbank Gold Project”* dated July 2014 and the Hatch Specification dated April, 2008 Inquiry MDB-S-M-268, REV.OB;

“Independent Geotechnical Expert Review Panel” means the panel of geotechnical specialists established by AEM to review the designs and performance of the dikes and dams;

“Inspector” means an Inspector designated by the Minister under section 85 (1) of the Act;

“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 the mining operations, and operational detail for components which are to be progressively reclaimed throughout the mine life and which may be consolidated and streamlined with other plans in accordance with the Licence;



“Landfill (Construction and Operations Landfill)” means the facility to be constructed and operated until the end of the mine life and designed to contain non-salvageable, non-organic, nonhazardous, solid wastes from mining activities that cannot be incinerated, as described in the in the Water Licence Application document entitled *“Landfill Design and Management Plan”* March 2013;

“Landfill #2 (Demolition Landfill)” means the facility to be developed on top of the Portage Waste Rock Storage Facility later in mine life as described in the Water Licence Application document entitled *“Landfill Design and Management Plan”* March 2013, and containing DWG 3, Golder Associate’s Project Number 06-1413-089;

“Landfarm” means the lined, engineered facility designed to treat petroleum hydrocarbon contaminated snow and soil that may be generated during mining activities using bioremediation as described in the Water Licence Application document entitled *“Landfarm Design and Management Plan Meadowbank Gold Project”* February 2013, and containing DWGs 3-1 and 3-2;

“Licence” means this Type “A” Water Licence 2AM-MEA1525, issued by the Nunavut Water Board in accordance with the *Act*, to Agnico-Eagle Mines Ltd. (AEM) for the Meadowbank Gold Mine Project;

“Licensee” means to whom the Licence 2AM-MEA1525 is issued to or assigned;

“Marshalling Area Bulk Fuel Storage Facility” means the facility consisting of six (6) 10 million L diesel fuel storage tanks and twenty (20) 100,000L fuel storage tank for Jet-A, for a total fuel capacity of sixty two (62) million litres and all associated infrastructure, as described in the Water Licence Application document entitled *“Baker Lake Bulk Fuel Storage Facility: Environmental Performance Monitoring Plan”* dated June 2014, indicated in the documents entitled *“Baker Lake Fuel Storage Installations Final Report Phase 2-B”* December 7, 2009 and illustrated in the As-Built DWGs VD2259-BKL-001 to VD2259-BKL-002, , Stavibel Engineering Project Number VD2259-2, and *“Baker Lake Fuel Storage Installations Final Report Phase 3”* January 2011, and illustrated in the attached As-Built DWGs 740-C-0123, 740-C-0124 and 740-C-0125, Stavibel Engineering Project Number MEAD-1-400;

“Maximum Average Concentration” means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe;

“Maximum Monthly Mean” means the average concentration of all samples collected over a thirty day period from the identical sampling location;

“Meadowbank Mine Site Bulk Fuel Storage Facility” means the facility consisting of one (1) above ground 5.6 million litre diesel fuel storage tank and all associated infrastructure as described in the Water Licence Application document entitled *“Meadowbank Bulk Fuel Storage Facility: Environmental Performance Monitoring Plan”* dated June 2014, as indicated in the



document entitled "*Meadowbank Fuel Storage Installations Final Report*" April 2009, and illustrated in the attached As-Built DWGs VDB2259-MDB-001, VDB2259-MDB-002, VDB2259-MDB-003, Stavibel Engineering Project Number VD2259-1;

"Metal Leaching" means the mobilization of metals into solution under neutral, acidic or alkaline conditions;

"Mine Water" means any water, including groundwater, that is pumped or flows out of any underground workings or open pit;

"Minister" means the Minister of Crown-Indigenous Relations and Northern Affairs (CIRNA, formerly the Minister of Indigenous and Northern Affairs Canada);

"Modification" means an alteration to a physical work that introduces a new structure or revises or eliminates an existing structure and does not alter the purpose or function of the work, but does not include Adaptive Management or a New Adaptive Management Action;

"Monitoring Program" means the program to collect data on surface water and Ground Water quality to assess impacts to the environment of an appurtenant undertaking;

"Monthly" means, in the context of monitoring frequency, one sampling event occurring every thirty (30) days with a minimum of twenty one (21) days between sampling events;

"New Adaptive Management Action" means an Adaptive Management action that is not included in an approved plan but is recommended by the Licensee or others to prevent, stabilize, or reverse a change in environmental conditions or to otherwise protect the receiving environment;

"Non-Contact Water" means the runoff originating from areas unaffected by mining activity that does not come into contact with developed areas;

"Nunavut Agreement" means the "*Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada*," including its preamble and schedules, and any amendments to that agreement made pursuant to it;

"Operations" means the set of activities associated with mining, ore processing and recovery of gold; excluding construction, Care and Maintenance, and decommissioning and permanent Closure activities;

"Operator" means the person who operates, has control or custody of, or is in charge of a mine or recognized closed mine;

"Portage Attenuation Pond" means the facility located in the basin at the northwest end of the northwest arm of Second Portage Lake where mine site contact water will be discharged, and where water in the pond will be reclaimed to satisfy mill process water make up requirements with any excess water being treated if required and discharged to Third Portage Lake as described in the Water Licence Application document entitled "*2013 Water Management Report*"



and Plan” dated March 2014;

“**Portage Waste Rock Storage Facility**” means the facility designed to store waste rock from the Portage open pit as described in the Water Licence Application document entitled “*Updated Mine Waste Rock and Tailings Management Plan*” dated March 2014, and illustrated in the DWGs 2-1, 3-1 to 3-7, 6-1, 9-1 and 9-2;



“Pre-development” means the phase of the Project that occurs before the start of construction to allow for the development of a stockpile of broken rock-fill material that will be required to construct the outer shells of the East Dewatering Dike;

“Progressive Reclamation” means actions that can be taken during 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 costs incurred. It enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals;

“Project” means the Meadowbank Gold Project (Meadowbank Gold Mine) as outlined in the Final Environmental Impact Statement and supplemental information submitted by Cumberland Resources Limited to the Nunavut Impact Review Board (NIRB) as well as the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted by Agnico-Eagle Mines Ltd. to the Nunavut Water Board throughout the regulatory process. It comprises an open pit mine, an all-weather private access road from Baker Lake to the mine site, and a marshalling facility in the Hamlet of Baker Lake;

“Project Footprint” means the Project as described at Part A, Item 1 “Scope”;

“Quarry” means the areas of surface excavation for extracting rock material for use as construction materials along the All Weather Private Access Road, as identified in the document entitled *“Meadowbank Gold Project 2007 Annual Report All-Weather Private Access Road”*;

“Quality Assurance / Quality Control (OA/OC)” Quality Assurance means the system of activities designed to better ensure that quality control is done effectively; Quality Control means the use of established procedures to achieve standards of measurement for the three principle components of quality: precision, accuracy and reliability;

“Quarterly” means, in the context of monitoring frequency, one sampling event occurring every three months with a minimum of ninety days between sampling events;

“Reclamation” means activities which facilitate the return of areas affected by the Project to a state as described in the Interim Closure and Reclamation Plan or Final Closure Plan;

“Receiving Environment” means both the aquatic and terrestrial environments that receive any deposit or discharge of waste including Effluent, seepage or Contact Water from the Project;

“Reclaim Pond” means the facility located within the Tailings Storage Facility, designed to contain process (tailings related) water, and where water in the pond will be used to satisfy mill process water make up requirements as described in the Water Licence Application document entitled *“2013 Water Management Report and Plan”* dated March 2014;



“Regulations” means the *Nunavut Waters Regulations SOR 2013/669 18th April, 2013*;

“Rock Storage Facility – Interim Till Plug” means the structure designed and constructed as a zoned earth fill structure intended to block seepage from the Waste Rock Storage Facility to go into NP2 Lake and facilitate seepage collection on the upstream side, as described in the Water Licence Application document entitled *“Appendix E – AANDC Inspectors Direction and AEM’s Response”* dated November 20, 2013, as indicated in the *“Construction Summary Report Rock Storage Facility – Interim Till Plug”* dated October 30, 2013, and as illustrated in As-Built DWGs 1, 2 Waste Dump Temporary Till Plug As-Built;

“Saddle Dam” means the structures located around the Tailings Storage Facility including the North Saddle Dam and the South Saddle Dam where the South Saddle Dam is designed as a permanent tailings retaining structure and the North Saddle Dam is to act as a berm, as indicated in the document *“Construction Report Tailings Storage Facility Meadowbank Gold Project Nunavut”* Agnico-Eagle Mines Ltd. with collaboration of Golder Associates Ltd. June 15, 2013, and illustrated in the attached documents Saddle Dam 1 – As Built Drawings and Saddle Dam 2 – As Built Drawings, DWGs 1/1, 1/2 and 2/2 As-Built 2010;

“Seepage” means any water that drains through or escapes from any structure designed to contain, withhold, divert or retain water or waste. Seepage also includes any flows that have emerged through open pits, runoff from waste rock storage facilities, ore stockpile areas, quarries, landfill or landfarm areas;

“Sewage” means all toilet wastes and greywater;

“Sewage Treatment Plant” means the rotary biological contactor sewage treatment plant described in the Water Licence Application document entitled *“Operation & Maintenance Manual Sewage Treatment, Meadowbank Gold Project”* April 2013, and the NORDIKeau Inc. Technical Support Section 2 N/Ref.: 50255, dated June 30, 2010;

“Short Term Maximum” means the maximum concentration of all samples collected over a 24 hour period or less taken from the identical sampling location;

“Site Specific Water Quality Objective (SSWOO) means a numerical concentration or narrative statement which has been established for specified waters;

“South Camp Dike” means the dike that encloses the Goose Island area along with the Bay Zone Dewatering Dike, Goose Island Dewatering Dike, and nearby land, such that it can be isolated from Third Portage Lake as indicated in the document entitled *“South Camp Dike Construction Summary Report Meadowbank Gold Project, Nunavut”* March 2012, and illustrated



in the attached As-Built DWGs 4300-01, 4300-02 and Figures 1-4, Golder Associate's Project Number 00-1425-0828/9800;

"Stormwater Dike" means the structure designed to isolate the Portage Attenuation Pond from tailings as indicated in the document entitled "*Construction Report Tailings Storage Facility Meadowbank Gold Project Nunavut*" dated June 15, 2013, Agnico-Eagle Mines Ltd. with collaboration of Golder Associates Ltd., and illustrated in the attached document Stormwater Dike – As-Built Drawings 2010;

"Stormwater Management Pond" means the facility that incorporates the existing Tear Drop Lake designed with impervious walls to contain treated sewage and contact water as described in the Water Licence Application document entitled "*2013 Water Management Report and Plan*" dated March 2014;

"Sump" means a structure or depression that collects, retains or transfers water or liquid waste before it is released to the Receiving Environment or Project infrastructure;

"Tailings Storage Facility" means the facility designed to permanently contain the solid fraction of the mill tailings as described in the approved Mine Waste Rock and Tailings Management Plan. The Facility includes structures and future facilities reviewed by the Independent Geotechnical Expert Review Panel and described in the approved Mine Waste Rock and Tailings Management Plan.

"Third Portage Lake Outfall Diffuser" means the effluent pipe located in low value fish habitat within Third Portage Lake, designed to discharge and enhance mixing of effluent from the Portage Attenuation Pond in the receiving environment as illustrated in As-Built Drawing, DWG 1/1, dated June 26, 2013;

"Total Metals" means the suite of metals referred to in Group 2 of Table 1 – Monitoring Groups located in Schedule I of this Licence. Total metals shall be analyzed on an un-filtered sample;

"Use" means use as defined in section 4 of the Act;

"Vault Attenuation Pond" means the facility located in the Vault mining area where contact water including pit water will be discharged and treated, if required, prior to final discharge to Wally Lake as described in the Water Licence Application document entitled "*2013 Water Management Report and Plan*" dated March 2014;



“Vault Dewatering Dike” means the structure designed to isolate Vault Lake from Wally Lake, for the purpose of dewatering and development of the Vault Open Pit and allow for storage of effluent in the Vault Attenuation Pond as indicated in the document entitled *“Vault Dike Construction Summary Report Meadowbank Gold Project”* dated July 29, 2013, and illustrated in the attached document Vault Dike As-Built Drawings, DWG 4GDD-0002-00, October 22, 2012, SNC Lavalin Project Number 610548;

“Vault Haul Road Crossing” means the crossing located at the outlet of Turn Lake to Drill Tail Lake along the road that connects the Portage mining area to the Vault mining area, as described in the document entitled: *“Haul Road from Meadowbank to the Vault Deposit”* dated December 4, 2009, and illustrated in As-Built DWG’s VD2415-01-C103 and VD2415-01-C104, November 27, 2009, Stavibel Engineering’s Project Number VD2415-001;

“Vault Waste Rock Storage Facility” means the facility designed to store waste rock from the Vault open pit as described in the Water Licence Application document entitled *“Updated Mine Waste Rock and Tailings Management Plan”* dated March 2014, and illustrated in DWGs 2-1, 3-1, 3-3 to 3-7, 9-1 and 9-3;

“Wally Lake Outfall Diffuser” means the effluent pipe located in low value fish habitat within Wally Lake, designed to discharge and enhance mixing of effluent from the Vault Attenuation Pond in the receiving environment as illustrated in As-Built Drawing, DWG 1/1, dated June 26, 2013;

“Waste” means waste as defined in section 4 of the Act;

“Waste Rock” means all rock materials that are or were produced as a result of mining operations and have no current economic value;

“Waste Water” means the water generated by site activities or originates on-site that requires treatment or any other water management activity;

“Water” means water as defined in section 4 of the Act;

“Water Supply Facilities” means the facilities designated for the supply of water including the Fresh Water Intake Barge at Third Portage Lake, the Reclaim Barge, the Wally Lake Fresh Water Intake and the Emulsion Plant fresh Water intake.

“Waste Disposal Facilities” means all facilities designated for the disposal of waste including: the mine site Sewage Treatment Plant, Landfill, Landfarm, Tailings Storage Facility, Portage Waste Rock Storage Facility, Vault Waste Rock Storage Facility, Portage Attenuation Pond and Vault Attenuation Pond;

“Water Licence Application” for the purposes of this Licence includes the totality of the NWB and NIRB Public Registries established as a result of the filing of the application dated August 2014, including Supporting Documents, and Technical Meeting Information Supplement documents;



“**Weekly**” means, in the context of monitoring frequency, one sampling event occurring every 7 days with a minimum of 5 days between sampling events.

“**West Channel Dike**” means the structure designed to be located in the western outlet channel between Third Portage Lake and Second Portage Lake to allow for dewatering of the northwest arm of Second Portage Lake as indicated in the document entitled “*West Channel Dike Construction As-Built Report - Meadowbank Gold Project, Nunavut*” dated December 16, 2009, and illustrated in the attached As-Built DWGs 2100-22 and 2100-23, Golder Associate’s Project Numbers 07-1413-00742 and 09-1428-5007;

“**West Diversion Ditch Interception Sump**” means the structure designed to provide an area of capture, retention and decantation of the freshet water flow expected in the West Diversion Ditch located around the northern area of the North Cell of the Tailings Storage Facility to keep freshet surface drainage from contacting the Waste Rock Storage Facility and the Tailings Storage Facility as described in the Water Licence Application document entitled “*2013 Water Management Report and Plan*” dated March 2014, as indicated in the “*West Diversion Ditch – Interception Sump Phase 1 Construction Summary Report*” dated April 2015, and illustrated in As-Build DWG 1 – Interception Sump Phase 1;

“**Whale Tail Haul Road**” means the 64.1 km. haul road and associated water crossings between the Whale Tail Pit Project site and the Meadowbank Mine site as described in the Type “A” 2AM-WTP---- Water Licence Application document entitled “Whale Tail Pit Haul Road Management Plan” dated June 2016;

“**Whale Tail Pit**” means the satellite deposit located on the Amaruq Exploration property approximately 150 km north of Hamlet of Baker Lake and 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut that the Licensee will mine as an open pit;

“**Whale Tail Pit Project**” means the Whale Tail Pit Project Proposal as outlined in the Final Environmental Impact Statement and supplemental information submitted by AEM to the Nunavut Impact Review Board (NIRB) as well as the associated Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted by AEM to the NWB throughout the 2016-2018 and 2018-2020 regulatory process.



Schedule B: General Conditions

The Annual Report referred to in Part B, Item 2, shall include:

CONSTRUCTION

1. For the dikes, dams and structures constructed to withhold water or waste:
 - a. An overview of methods and frequency used to monitor deformations, seepage and geothermal responses;
 - b. A comparison of measured versus predicted performance;
 - c. A discussion of any unanticipated observations including changes in risk and mitigation measures implemented to reduce risk;
 - d. As-built drawings of all mitigation works undertaken;
 - e. Any changes in the design and/or as-built condition and respective consequences of any changes to safety, water balance and water quality;
 - f. Data collected from instrumentation used to monitor earthworks and an interpretation of that data;
 - g. A summary of maintenance work undertaken as a result of settlement or deformation of dikes and dams; and
 - h. The monthly and annual quantities of seepage from dikes and dams in cubic metres.

WATER

2. Monthly and annual volume of fresh Water obtained from water sources.
3. Results of lake level monitoring conducted under the protocol developed as per Part D Item 5.
4. Summary of reporting results for the Water Balance and Water Quality model and any calibrations as required in Part E Items 7-9..
5. The bathymetric survey(s) conducted prior to each year of shipping at the Baker Lake Marshalling Facility.

WASTE

6. A summary of the geochemical monitoring results including:
 - a. Operational acid/base accounting and paste pH test work used for waste rock designation (PAG and NPAG rock);
 - b. As-built volumes of waste rock used in construction and sent to the Waste Rock Storage Facilities with estimated balance of acid generation to acid neutralization capacity in a given sample as well as metal content;
 - c. All monitoring data with respect to geochemical analyses on site and related to roads, quarries, and the All Weather Access Road;
 - d. Any geochemical outcomes or observations that could imply or lead to greater than predicted impacts to the Receiving Environment;



- e. Geochemical data associated with tailings solids, tailings supernatant, cyanide leach residue, and bleed from the cyanide destruction process including an interpretation of the data; and
 - f. Results related to the road quarries and the All Weather Private Access Road.
- 7. Volumes of waste rock used in construction and placed in the Rock Storage Facilities.
 - 8. An update on the remaining capacity of the Tailings Storage Facility.
 - 9. Summary of quantities and analysis of seepage and runoff monitoring from the Landfills, Waste Rock Storage Facilities and Central Dike.
 - 10. A summary report of all general waste disposal activities including monthly and annual quantities in cubic metres of waste generated and location of disposal.
 - 11. Report of Incinerator test results including the materials burned and the efficiency of the Incinerator.

SPILLS

- 12. A list and description of all unauthorized discharges in excess of the thresholds set out in the Nunavut Spill Planning and Reporting Regulations including volumes, spill report line identification number and summaries of follow-up action taken.

MODIFICATIONS

- 13. A summary of modifications and/or major maintenance work carried out on all water and waste related structures and facilities.

MONITORING

- 14. The results and interpretation of the Monitoring Program in accordance with Part I and Schedule I.
- 15. A summary of the results of monitoring related to the Aquatic Effects Monitoring Program (AEMP) including:
 - a. Core Receiving Environment Monitoring Program (CREMP);
 - b. Metal and Diamond Mining Effluent Regulation (MMER) Monitoring;
 - c. Mine site Water Quality and Flow Monitoring (and evaluation of NP-2);
 - d. Visual AWAR water quality monitoring;
 - e. Blast Monitoring; and
 - f. Groundwater Monitoring.

CLOSURE

A summary of any Progressive Reclamation undertaken including photographic records of site conditions before and after completion of operations, and an outline of any Progressive Reclamation planned for the next year



16. An updated estimate of the current restoration liability.

PLANS/REPORTS/STUDIES

17. A summary of any studies requested by the Board that relate to Water use, Waste disposal or Reclamation, and a brief description of any future studies planned.
18. Where applicable, a summary of any Plans that were revised over the past year

GENERAL

19. A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector.

OTHER

20. A summary of public consultation and participation with local organizations and the residents of the nearby communities on water and waste related matters, including a schedule of upcoming community events and information sessions.
21. Any other details on Water use or Waste Disposal requested by the Board by November 1st of the year being reported.



Schedule D: Conditions Applying to Construction

1. The Construction Summary Report referred to in Part D Item 14 shall include:
 - a All final design and construction drawings shall be stamped and signed by a Professional Engineer.
 - b A summary of construction activities including photographic records before, during and after construction;
 - c As-built drawings (or piping and instrumentation diagrams where applicable) for Waste Disposal Facilities and Water Supply Facilities;
 - d Documentation of field decisions that deviate from original plans and any data used to support these decisions;
 - e Discussion of mitigation measures implemented during construction and effectiveness;
 - f Monitoring undertaken in accordance with Part D;
 - g Blast vibration monitoring for quarrying activities carried out in close proximity to fish bearing waters;
 - h Monitoring for sediment release from construction areas; and
 - i Monitoring and reporting on use of water to manage dust emissions from crushing and construction activity.



Schedule I: Conditions Applying to General and Aquatic Effects Monitoring

TABLE 1 – MONITORING GROUP

Group	Parameters
1	pH, turbidity, hardness, alkalinity, ammonia nitrogen, total metals (aluminum, arsenic, barium, cadmium, chloride, chromium, copper, fluoride, iron, lead, manganese, mercury, molybdenum, nickel, nitrite, nitrate, selenium, silver, thallium, zinc) sulphate, total dissolved solids (TDS), TSS, total cyanide. If CN total is detected in an analysis result; further analysis of CN Free and CN WAD will be triggered.
2	<p>Total and Dissolved metals: aluminum, antimony, arsenic, boron, barium, beryllium, cadmium, copper, chromium, iron, lithium, manganese, mercury, molybdenum, nickel, lead, selenium, tin, strontium, titanium, thallium, uranium, vanadium and zinc.</p> <p>Nutrients: Ammonia-nitrogen, total kjeldahl nitrogen, nitrate nitrogen, nitrite-nitrogen, ortho-phosphate, total phosphorous, total organic carbon, total dissolved organic carbon and reactive silica.</p> <p>Conventional Parameters: bicarbonate alkalinity, chloride, carbonate alkalinity, conductivity, hardness, calcium, potassium, magnesium, sodium, sulphate, pH, total alkalinity, TDS, and TSS, turbidity.</p> <p>Total cyanide and free cyanide.</p> <p>If CN total is detected above 0.05 mg/L in an analysis result for monitoring station in receiving environment; further analysis of CN WAD will be triggered.</p>
3	MMER parameters (total cyanide, arsenic, copper, lead, nickel, zinc, radium 226, total suspended solids, pH), sulphate, turbidity and total aluminum.
4	Total Arsenic, Total Copper, Total Lead, Total Nickel, TSS, Benzene, Toluene, Ethylbenzene, Xylene, TPH, pH.
MMER	Total cyanide, arsenic, copper, lead, nickel, zinc, radium 226, total suspended solids, pH, effluent volumes and flow rate of discharge, acute toxicity (Rainbow Trout and Daphnia magna) and environmental effects monitoring (EEM).
Full Suite	Group 2, Total Petroleum Hydrocarbons, Turbidity. Acutely Lethality tests (Rainbow Trout and Daphnia magna) for discharge only.



TABLE 2 – MONITORING PROGRAM

Station	Description	Phase	Monitoring Parameters	Frequency
<i>Mine Site</i>				
ST-DC-1 to TBD	Monitoring stations during DiKE Construction as defined in Final Water Quality Monitoring and Management Plan for DiKE Construction and Dewatering referred to in Part D Item 5	Construction	As defined in Final Water Quality Monitoring and Management Plan for DiKE Construction and Dewatering referred to in Part D, Item 5	As defined in Final Water Quality Monitoring and Management Plan for DiKE Construction and Dewatering referred to in Part D Item 5
ST-DD-1 to TBD	Monitoring Stations during DiKE Dewatering as defined in Water Quality Monitoring and Management Plan for DiKE Construction and Dewatering referred to in Part D, Item 5	Construction	As defined in Final water Quality Monitoring and management Plan for DiKE Construction and Dewatering referred to in Part D, tem 5	As defined in Final Water Quality Monitoring and Management Plan for DiKE Construction and Dewatering as referred to in part D, Item 5
ST-1	Water Intake for camp, mill and re-flooding	Water Intake for camp, mill and re-flooding	Volume (m ³)	Monthly
ST-1W	Water Intake for re-flooding	Water Intake for re-flooding	Volume (m ³)	Monthly
ST-3	Water Intake for Emulsion Plant	Late operations, closure	Volume (m ³)	Monthly
ST-4	Water Reclaimed from Tailings Storage Facility	Late operations, closure	Volume (m ³)	Monthly
ST-5	Portage Area (east) diversion ditch	Late operations, closure	Group 3	Monthly during open water



ST-6	Portage Area (west) diversion ditch	Late operations, closure	Group 3	Monthly during open water
ST-8	East Dike Seepage Discharge	Late operations, closure	Group 3	Monthly
ST-9	Portage Attenuation Pond prior to discharge through Third Portage Lake Outfall Diffuser	Early operations	Full Suite	Prior to discharge and Weekly during discharge
			Volume (m ³)	Daily during periods of discharge
			Acute Lethality	Once prior to discharge and Monthly thereafter
ST-10	Vault Attenuation Pond prior to discharge through Wally Lake Outfall Diffuser	Late operations	Full Suite	Prior to discharge and Weekly during discharge
			Volume (m ³)	Daily during periods of discharge
			Acute Lethality	Once prior to discharge and Monthly thereafter
ST-11	Tailings Storage Facility	Post closure	Group 1	Annually during open water
ST-12	Portage / Goose Pit Lake	Post closure	Full Suite	Annually during open water
ST-13	Vault Pit Lake	Post closure	Full Suite	Annually during open water
ST-14 (THE-11)	Discharge to the TSF from Landfarm sump at mine site	Late operations, closure	Group 4	Prior to discharge
			Volume (m ³)	Daily during periods of discharge
ST-16	Portage Rock Storage Facility	Late operations	Group 1	Monthly during open water
		Closure	Group 1	Bi-annually during open water
ST-17**	North Portage Pit Sump	Operations	Group 1	Monthly during open water
			Volume (m ³)	Daily during periods of discharge



	Portage Pit Lake	Late operations	Group 2	Monthly during open water
		Closure	Group 2	Bi-annually during open water
ST-19**	South Portage Pit Sump	Early operations	Group 1	Monthly during open water
			Volume (m ³)	Daily during periods of discharge
	Portage Pit Lake	Late operations	Group 2	Monthly during open water
ST-20	Goose Island Pit Sump	Early operations	Group 1	Monthly during open water
			Volume (m ³)	Daily during periods of discharge
	Goose Island Pit Lake	Late operations	Group 2	Monthly during open water
		Closure	Group 2	Bi-annually during open water
ST-21	Tailings Reclaim Pond	Late operations	Group 1	Monthly during open water
ST-22	Tailings Storage Facility	Closure (drainage runoff)	Group 2	Bi-annually during open water
ST-23	Vault Pit Sump	Late operations	Group 2	Monthly during open water
			Volume (m ³)	Daily during periods of discharge
ST-24	Vault Rock Storage Facility	Late operations	Group 1	Monthly during open water
		Closure	Group 1	Bi-annually during open water
ST-25	Vault Attenuation Pond	Late operations	Group 1	Monthly during open water
ST-26	Vault Pit Lake	Closure	Group 2	Bi-annually during open water
ST-S-1 to TBD	Seeps (to be determined)	Late operations, Closure	Group 1	Monthly or as found
ST-GW-1 to TBD	Groundwater wells (to be determined) as required under	Early operations, Late operations, Closure	Group 2	Annually



	Groundwater Monitoring Plan referred to in Part I Item 6			
ST-AEMP-1 to TBD	Receiving AEMP and CREMP	Late operations, Closure	Group 2	<p>A minimum of 5 events per year at CREMP stations. Ideally 3 during open water and 2 during winter (through ice).</p> <p>TPL assay, NP2, NP1 and Dogleg ponds to be monitored monthly during open water (July, Aug, and Sept.).</p> <p>Monthly field limnology data collected throughout year at smaller number of locations (through ice).</p>
ST-MMER-1 to TBD	Vault, East Dike and Portage effluent outfall	Late operations	MMER	Weekly during open water
ST-37	Secondary containment sump at the Bulk Fuel Storage Facility at Meadowbank	Late operations, Closure	Group 4	Prior to discharge or transfer of Effluent
ST-38	Secondary containment sump at the Bulk fuel Storage Facility in Baker Lake – Jet-A containment	Late operations, Closure	Group 4	Prior to discharge or transfer of Effluent
ST-40 (MEA-4)	Secondary containment sump at the Bulk Fuel Diesel Storage Facility in Baker Lake	Late operations, Closure	Group 4	Prior to discharge or transfer of Effluent
<p><i>Monitoring Program Stations never constructed or associated with the Construction Phase of Project with Monitoring not required and no longer conducted at Operations and Closure phase.</i></p>				



ST-2	Reclaim Water Intake	Construction, Early operations, Late operations, Closure	Volume (m ³)	Monthly
ST-7	Vault Area diversion ditch	Early operations, Late operations, Closure	Group 5, Aluminum	Monthly during open water
ST-5	Vault non-contact diversion ditch	Early operations, Late operations, Closure	Group 5, Aluminum	Monthly during open water
ST-18	Portage Attenuation Pond	Early operations	Group 2	Monthly during open water
ST-27 and ST-28 (TEH-1 & TEH-2)	Water Intake for camp and concrete batch plant purposes	Pre-development, Construction	Volume for each purpose (m3)	Monthly
ST-29 and ST-30 (TEH-3 & TEH-4)	Water, if any, accumulated in north and south predevelopment zones	Pre-development	pH, Turbidity	Weekly
			Weekly Metals using an ICP-Metals 36 element scan, Total Ammonia, Nitrate, Sulphate	Monthly
ST-31 and ST-32 (TEH-5 & TEH-6)	Water pumped from north and south predevelopment zones to Contact Water Collection System	Pre-development	pH, Turbidity	Daily during periods of pumping
ST-33 and ST-34 (TEH-7 & TEH-8)	Contact Water Collection System Lakes #1 and #2	Pre-development, Construction	pH, Turbidity, Metals using an ICP-Metals 36 element scan, Total Ammonia, Nitrate, Sulphate	Weekly during periods of pumping from the pre-development pits
ST-35 (THE-9)	Discharge from Lake #1 of Contact Water Collection System (Stormwater Management Pond) to Second Portage Lake	Pre-development, Construction	pH, TSS, T-Al, BOD5, Fecal Coliforms, T-As, T-Cu, T-CN, T-Pb, T-Ni, T-Zn, T-Radium ₂₂₆	Once prior to discharge and Weekly during periods of discharge
			Acute Lethality	Once prior to discharge and Monthly thereafter



	<i>In addition, if discharge from Bulk Fuel Storage Facility directed to lake #1</i>		<i>Volume (m³)</i>	<i>Daily during periods of discharge</i>
			<i>Benzene, Lead, Toluene, Ethylbenzene, Oil & Grease</i>	<i>Once prior to discharge and Weekly during periods of discharge</i>
<i>ST-36 (THE-10)</i>	<i>Discharge from Lake #2 of Contact Water Collection System to Second Portage Lake</i>	<i>Pre-development, Construction</i>	<i>pH, TSS, T-As, TCu, T-CN, T-Pb, T-Ni, T-Zn, T-Radium₂₂₆</i>	<i>Once prior to discharge and Weekly during periods of discharge</i>
			<i>Acute Lethality</i>	<i>Once prior to discharge and Monthly thereafter</i>
			<i>Volume (m³)</i>	<i>Daily during periods of discharge</i>
<i>Monitoring Program Stations relics of Type “B” Water Licence 8BC-MEA0709 and not applicable, replaced by Monitoring Program Stations ST-37 and ST-38 described below.</i>				
<i>ST-37 (MEA-1)</i>	<i>Water sample location at Baker Lake in close proximity to the construction facilities</i>	<i>Pre-development, Construction, Early operation, Late operation, Closure</i>	<i>Group 6</i>	<i>Annually</i>
<i>ST-38 (MEA-2)</i>	<i>East Contact Water Pond located in the south-east corner of the lay-down area</i>	<i>Pre-development, Construction, Early operation, Late operation, Closure</i>	<i>Group 6 & 7</i>	<i>Prior to discharge or transfer of Effluent</i>
			<i>Volume (m³)</i>	<i>Monthly</i>
<i>ST-39 (MEA-3)</i>	<i>West Contact Collection Pond located in the south-west corner of the lay-down area</i>	<i>Pre-development, Construction, Early operation, Late operation, Closure</i>	<i>Group 6 & 7</i>	<i>Prior to discharge or transfer of Effluent</i>
			<i>Volume (m³)</i>	<i>Monthly</i>

**** ST-17 and ST-19 in Closure will become one sampling point**

Summary of Response to ECCC-FC15

What follows is a summary of responses to Environment and Climate Change Canada (ECCC) on the draft Whale Tail Expansion Water Licence on January 23, 2020 (note these responses are also embedded in the updated draft Whale Tail Expansion Water Licence filed with the Board on January 30, 2020).

Section	ECCC Comments/Recommendations on December 20, 2019 Version of Whale Tail Expansion Draft Water Licence	Agnico Eagle Response
Part A,1a6	<p>ECCC notes this section has two clauses.</p> <p>ECCC recommends that the section be separated into two bullets as follows:</p> <p>6. Withdrawal and use of water from Whale Tail Lake (South Basin) for camp operation and re-flooding of open pit following pit development during Closure;</p> <p>and for</p> <p>7. Withdrawal and use of water from water bodies proximal to the Haul Road for dust suppression;</p>	Revised per ECCC recommendation.
Part A.1.a.13	<p>ECCC notes errata in the last two bullets (i.e. Water).</p> <p>ECCC recommends that the section be updated to address the errata as follows:</p> <ul style="list-style-type: none"> • Operation of Operational Water Treatment Plant (O-WTP); • Operation of a Saline Water Treatment Plant (S-WTP); 	Revised per ECCC recommendation.
Part B.11	<p>ECCC notes that approval by default is not a desirable clause; there may be practical constraints that would extend response times for review and approval of plans.</p> <p>ECCC recommends the clause: “Unless the Board otherwise advises, Plans and amendments thereto submitted under this Licence shall be deemed to be approved by the Board within forty-five (45) days of submission by the Licensee.” not be</p>	Currently, Plans may be subject to multiple intervenor comment periods which leads to very extended timelines and delays in final Board approval of Plans. Respectfully, there is no certainty as to timelines for review and approval of revised Plans which means that the most up to date Plans are delayed in implementation at site. This is not consistent with best management practices and creates significant practical challenges for the License and inspectors.

	included in the amended licence.	To address this issue and to provide procedural clarity to all parties, Agnico Eagle suggests that further review by Intervenor should not be required following submission of the revised plan (where required by the Board), as in those situations Intervenor will have previously had an opportunity to provide comments to the Board and identify any potential deficiencies. Once the Board has reviewed Intervenor comments and decided what items the Licencee will be directed to address, it is for the Board alone to determine whether the Board's request has been fulfilled. The suggested timing would provide the Board with a defined period to review the changes in the revised Plan and confirm the Board-directed changes have been made, and would support planning and best management practices at site.
Part B.12	ECCC notes this addition is not a practical condition. Further review time and revisions may be needed. If timing should be defined, ECCC recommends a reasonable period be specified.	See above.
Part B.14 and 15	Section B 14 and 15 outline the timing for submission of plans, depending on whether they are already approved (B.14) or to be submitted for approval (B.15). ECCC notes the ICRP is listed under both Part B14 and 15, however it should only be in one of the lists. ECCC recommends that the ICRP is listed only under B.15, given the commitment by the proponent to update the ICRP with respect to pit water quality closure objectives.	The ICRP properly appears on both lists. Agnico Eagle is requesting approval of the current ICRP with the issuance of the amended Licence (to ensure the most recent plan is in force upon issuance of the amended Licence) and has also further committed to update the ICRP within 60 days following the issuance of the amended Licence.
Part B.17	ECCC notes this clause proposes to decouple updates to management plans from the annual reporting cycle and notes this may be a practical approach. However, it would still be useful to retain the revisions list. ECCC recommends that the proponent	Agnico Eagle agrees that a revision list would be useful and has included the suggested language.

	retain the revisions list.	
Part B.19	ECCC notes the proposed edits change the intent of the clause. In the event of a delayed renewal or unforeseen circumstance where the Licence is not in normal force, there would not be clarity in the extent of the obligations in simply stating "the Act."	<p>Agnico Eagle has proposed the following new wording to respond to ECCC's recommendation:</p> <ul style="list-style-type: none"> The expiry of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirements. <p>[Note: Per KivIA and ECCC comments on Item 19, Agnico Eagle suggests including this wording back in the Licence. For clarity, Agnico Eagle does not intend to permit the Licence to expire.]</p> <ul style="list-style-type: none"> The cancellation of this Licence relieves the Licensee from all obligations imposed by the Licence. <p>[Note: Per KivIA and ECCC comments on Part B, Item 19, Agnico Eagle suggests that this clarification would be helpful. As an example, at the end of the post-closure phase, Agnico Eagle's understanding is that the Licence would eventually be cancelled and would cease to be an obligation for the Licensee. Agnico Eagle's understanding that it is not the Board's intention to create perpetual obligations under the License for Licensees, and so is of the view this revised clause would enhance clarity on that point.</p>
Part C.12	ECCC notes that this clause is broader than closure security, and should be moved to Part B (General Conditions). The Water Monitoring Reduction Framework referenced was first proposed in September 2017, and does not appear to have been updated to address reviewer comments	<p>Agnico Eagle will update Schedule C memo and submit it to the Board 60 days after the issuance of the amended Licence. The update will take into consideration comments received from CIRNAC (October 17, 2017), ECCC (October 17, 2017, and KivIA (October 11, 2017). Per Part B, Item 21 of the Licence, the Board</p>

	<p>previously provided.</p> <p>ECCC recommends that this clause be added to Part B. and that the proposed Schedule C Water Monitoring Reduction Framework should be provided as an unlocked PDF version, rather than a photocopy, to facilitate further review.</p>	<p>could revise Schedule C to reflect the updated Schedule C memo without need for "Amendment" to the License. Per ECCC's suggestion that this clause should be moved to a different Part of the Licence, Agnico Eagle is supportive of moving this clause to a different Part in the Licence should the Board deem appropriate.</p>
Part D.1 and 3	<p>With these two clauses, ECCC notes that the proponent is proposing to shorten time frames for submission of construction plans and designs to the NWB for review. The proposed time frames may not allow sufficient review time.</p> <p>ECCC recommends that the submission periods not be shortened for any items which may require review.</p>	<p>Agnico Eagle notes that the Meliadine Type A Water Licence refers to a thirty (30) day review period, and so there is precedent for this approach. Accordingly, a 30 day period as described should be sufficient and would support construction proceeding on time within the limited windows available in the Arctic environment. That being said, given the ECCC comments while the majority of facilities should require a 30 day review, Agnico Eagle suggests that a 60 day review period could apply to Dikes and Waste Rock Storage Facility only.</p> <p>Agnico Eagle presented detailed rationale for the 20 day review period during the Technical Meeting and provided to the Board with the listed items on December 20, 2019.</p> <p>Further, Agnico Eagle is requesting approval for the Whale Tail Waste Rock Storage Facility expansion and the IVR Waste Rock Storage Facility upon issuance of the amended Licence. This timing provides notice that Agnico Eagle intends to commence construction immediately upon issuance of the Licence, and as agreed during the Technical Meeting Agnico Eagle provided these supporting materials to the intervenors and the Board in December 2019. See response to CIRNAC FC3(b) for further rationale.</p>
Part D.7	<p>ECCC notes this clause includes dewatering discharge limits, and changes are proposed such that only total suspended solids (TSS) is regulated. ECCC does not object to removing turbidity as a regulated parameter, based on work done at</p>	<p>Agnico Eagle agrees with ECCC that TSS should be retained as the regulated parameter for dewatering activities directed to the receiving environment and retaining turbidity and total aluminum as monitored parameters. Turbidity and aluminum are closely linked to TSS so there is</p>

	<p>Meadowbank; however, ECCC recommends it still be retained as a monitoring parameter with site-specific correlation to TSS determined, so turbidity can be used as a real-time surrogate. ECCC also recommends pH be retained as a regulated parameter, and aluminum be retained as a monitored rather than regulated parameter (because aluminum is closely associated with suspended solids, and would be substantially controlled by the TSS criteria, depending on pH).</p>	<p>redundancy in regulating all of these parameters. For pH, Agnico Eagle recommends it is retained as a monitored parameter because dewatering to the receiving environment represents the transfer of water that would be considered a 'like for like' water transfer; that is, pH in the dewatering water is expected to be similar to that in the Receiving Environment (any variability in pH between the two areas will be within the natural range of variability of pH reported in the receiving environment).</p>
Part D.10	<p>ECCC notes this clause refers to effluent and not dewatering discharges, so it should be moved to Section F. The limits set out in Section D refer only to dewatering. ECCC recommends that this clause be moved to Section F.</p>	<p>Agnico Eagle supports the Board identifying where this clause should be located.</p>
Part D.17	<p>The intent of the addition may be to preclude any contradiction with the authorized deposit of treated effluent to water; however, ECCC notes that the deposit of chemicals, petroleum products, fuels, or other contaminants into surface waters could not be authorized by the licence. ECCC recommends that this clause be reworded to remove wastes from the listed categories, but otherwise retain the original wording.</p>	<p>As the overall purpose of the Licence is to set the conditions by which the Licensee may use water and manage waste in a manner that is protective of Nunavut waters, Agnico Eagle is of the view that Agnico Eagle's suggested wording provides clarity.</p>
Part E.10	<p>ECCC notes that the reference to the Final Environmental Impact Statement (FEIS) and Addendum is not specific, and does not provide a clear standard as the objectives in closure sections of the FEIS were narrative. If this is to be used as a yardstick, then ECCC recommends including a reference to the data intended to be used for comparison.</p> <p>ECCC also recommends the reference to baseline concentrations be retained, as there may be parameters that merit evaluation which do not have guidelines or SSWQOs.</p>	<p>Per ECCC comment, Agnico Eagle has provided a more specific reference in the updated draft licence filed on January 30, 2020.</p>

Part F.4	<p>ECCC notes this clause includes the effluent quality criteria for discharges from the Attenuation Ponds. The proponent proposes to remove TDS as a regulated criteria. If this is to be considered, then ECCC recommends rationale be presented for the removal of TDS which demonstrates it is not a parameter of concern. Alternatively, consideration could be given to regulating constituent ions of concern individually.</p>	<p>ECCC suggested that removal of TDS could be considered if Agnico Eagle presents rationale for the removal of TDS which demonstrates it is not a parameter of concern.</p> <p>For clarity, Agnico Eagle is proposing to remove TDS as a regulated parameter but would continue to monitor for TDS. ECCC has not identified TDS as a parameter of potential concern (deleterious substance) in Schedule 4 of the MDMER.</p> <p>Further the only mining Type A Water Licences that include TDS as a regulated parameter in Nunavut are the Whale Tail, Meadowbank and Meliadine Type A Water Licences. Therefore, TDS is not considered a parameter of particular concern. Acute toxicity testing of Effluent required by the Licence and the MDMER would ensure that discharges are protective of Nunavut waters, and continuing monitoring of TDS would ensure that any trends of interest are appropriately considered.</p> <p>It is also noted that several of the parameters listed in Part F, Item 4 include more stringent discharge requirements than ECCC has included in Schedule 4 of the MDMER.</p> <p>Therefore, the Licence effluent discharge criteria at Part F, Item 4 would remain stringent overall following the removal of TDS, as compared to the applicable federal regulatory requirements for mine discharge.</p> <p>For all of these reasons, Agnico Eagle is of the view that TDS should be removed as a regulated parameter.</p>
Part F.5	<p>ECCC notes this clause includes the requirement to be "Acutely Non-Lethal". ECCC recommends the wording be revised to "non-acutely lethal" for clarity.</p> <p>ECCC also recommends the test methods referenced should be</p>	<p>Revised per ECCC's request to reflect the current MDMER wording and include reference to the test method - see references included in new definition "Acutely Lethal" which wording tracks the current definition of "Acutely Lethal" in the MDMER.</p>

	<p>retained, as they are stand-alone, rather than referencing other legislation that references these methods.</p> <p>ECCC notes that using the reference to the Metal and Diamond Mining Effluent Regulations (MDMER) methods would effectively bring in the Daphnia requirement (which is not currently included in the body of the licence) as of June 2021, as well as the Rainbow Trout test.</p>	
<p>Schedule B, Item 13 (Monitoring)</p>	<p>ECCC notes it is not clear when the full report would be submitted for the AEMP components. It is currently available in detail for review under the Annual Report, and this should be retained.</p> <p>ECCC recommends that the AEMP be retained for review in the Annual Report, or submission of the full AEMP Report for approval be specified elsewhere.</p>	<p>Revert to original language per ECCC's recommendation.</p>