



CIRNAC Comments to NIRB Re: Agnico Eagle Mine's Doris North Gold Mine and Phase 2 Hope Bay Belt Project 2024 Annual Report



Nunavut Regional Office
918 Nunavut Drive
Iqaluit, NU, X0A 3H0

Your file - Votre référence
05MN047
Our file - Notre référence
GCDOC # 139174620

July 23, 2024

Keith Morrison
Manager, Project Monitoring
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU, X0B 0C0
Via electronic mail to: info@nirb.ca

Dear Keith Morrison,

Re: Comment Request for Agnico Eagle's Doris North Gold Mine Project and Phase 2 Hope Bay Belt Project 2024 Annual Report

On May 9, 2024, the Nunavut Impact Review Board (NIRB) requested parties to review and provide comments on Agnico Eagle Mines Limited's (Agnico Eagle) Doris North Gold Mine Project and Phase 2 Hope Bay Belt Project 2024 Annual Report for effects and compliance monitoring, pursuant to Section 12.7 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty The Queen in Right of Canada (Nunavut Agreement)* and the *Project Certificate No's 003 and 009*.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) has conducted a review of the 2024 Annual Report and related documents in areas under its mandate and jurisdiction pertaining to effects and compliance monitoring. On this basis, CIRNAC would like to provide the comments below for NIRB's consideration.

CIRNAC appreciates the opportunity to review Agnico Eagle's Doris North Gold Mine Project and Phase 2 Hope Bay Belt Project Annual Report and looks forward to working with NIRB and Agnico Eagle for future reviews of this project. Should you have any questions, please do not hesitate to contact Courtney White by email at courtney.white@rcaanc-cirnac.gc.ca or David Abernethy at david.abernethy@rcaanc-cirnac.gc.ca.

Sincerely,



Richard Bingley
Manager, Impact Assessment



1. Effects Monitoring

CIRNAC reviewed the 2024 Annual Report to assess valued components under its mandate for measurable effects against the potential impacts, predicted from the proposed development and operations of the Doris North Gold Mine Project and Phase 2 Hope Bay Belt Project. This assessment takes into account Agnico Eagle’s respective Final Environmental Impact Statements (FEIS), previous years’ monitoring reports, and the requirements included in the Project Certificates (as amended). This assessment considered the following:

- a. Whether the conclusions reached by Agnico Eagle in the 2024 Annual Report are valid; and**
- b. Any areas of significance requiring further supporting information or any changes to the monitoring program which may be required.**

CIRNAC has identified information that warrants further clarification and has provided the NIRB and Agnico Eagle with the following comments for consideration.

Comment Number:	CIRNAC #1
Subject:	Effluent Water Treatment Plant
Reference:	<ul style="list-style-type: none"> • Hope Bay Project 2024 NIRB Annual Report – Main Report
Issue/Rationale:	The 2024 Annual Report indicates that minor commissioning work of the effluent water treatment plant (EWTP) at the Tailings Impoundment Area (TIA) occurred during the reporting period. However, no details regarding the operation and performance of the plant were provided. To confirm the validity of the effect predictions in the Hope Bay Project, additional information on the performance of the EWTP is required.
Recommendation to Address Issues:	<p>CIRNAC recommends that Agnico Eagle provide:</p> <ul style="list-style-type: none"> a) An update on the operational status of the EWTP (e.g., readiness, use in 2024, anticipated use in the future, etc.); and b) If effluent was processed by the EWTP in 2024, details regarding the plant throughput, treatment efficiency and effluent water quality.

Comment Number:	CIRNAC #2
Subject:	Effluent discharges from the Madrid and Boston Mines
Reference:	<ul style="list-style-type: none"> • Hope Bay Project 2024 NIRB Annual Report – Main Report • NIRB Project Certificate No. 009, New Term and Condition #10
Issue/Rationale:	The 2024 Annual Report contains no information regarding effluent discharges from the Madrid and Boston Mines. To confirm the potential environmental effect predictions in the Madrid and Boston Mines additional information on the discharge of contact water collected at the two sites.
Recommendation to Address Issues:	<p>CIRNAC recommends that Agnico Eagle:</p> <ul style="list-style-type: none"> a) Describe the management and discharge of any contact water collected at the Madrid and Boston Mines in 2024; and b) Provide the requested information in future Annual Reports.



Comment Number:	CIRNAC #3
Subject:	Reportable Spill Detailed Reports
Reference:	<ul style="list-style-type: none"> • Hope Bay Project 2024 NIRB Annual Report – Main Report (Section 6) • NIRB Project Certificate No. 009, New Term and Condition #52
Issue/Rationale:	<p>Section 6.3 of the 2024 Annual Report indicates that fifteen spills were reported to the Nunavut Spill Line, Water Licence Inspector, and KitlA Major Projects, and Environment and Climate Change Canada in 2024. These fifteen spills met the reporting threshold as outlined in the Nunavut Spill Contingency Planning and Reporting Regulations.</p> <p>Table 6.2-1 presents cursory information regarding the spills and indicates that a more detailed follow-up report was filed within thirty days of each reported spill that included a description of the event together with the immediate cause, corrective and preventative action.</p> <p>However, the detailed reports are not included in the Annual Report. As a result, there is a lack of clarity regarding the scope of contamination, potential environmental impacts and mitigations that were implemented.</p>
Recommendation to Address Issues:	CIRNAC recommends that Agnico Eagle include detailed follow-up reports of all reportable spills in an appendix to future Annual Reports.

Comment Number:	CIRNAC #4
Subject:	North Dam Cooling System
Reference:	<ul style="list-style-type: none"> • Hope Bay Project 2024 NIRB Annual Report – Main Report (Section 3.1) • NIRB Project Certificate No. 003, Revised Term and Condition #6 and #34
Issue/Rationale:	<p>Section 3.1 of the 2024 Annual Report indicates that Agnico Eagle completed the installation and commissioning of the North Dam Cooling System to support ice core freezing.</p> <p>However, no details regarding the system and its performance are provided.</p> <p>This information is required to confirm that the system is sufficiently ensuring integrity of project infrastructure and achieving its design intent.</p>
Recommendation to Address Issues:	CIRNAC recommends that Agnico Eagle provide an overview of the North Dam Cooling System and its performance, with a focus on the reduction of potential environmental impacts.

Comment Number:	CIRNAC #5
Subject:	Community Involvement Plan
Reference:	<ul style="list-style-type: none"> • Hope Bay Project 2024 NIRB Annual Report • NIRB Project Certificate No. 009, Term and Condition #49



Comment Number:	CIRNAC #5
Issue/Rationale:	<p>Term and Condition 49 of NIRB Project Certificate No. 009 for the Hope Bay Phase 2 Belt Project states:</p> <p><i>“The Proponent shall maintain a current Community Involvement Plan which reflects relevant stakeholders with respect to the Project.</i></p> <p>a) <i>Records of communication and engagement undertaken by the Proponent with stakeholders, including potentially impacted communities, are to be maintained throughout the life of the Project with outcomes reflected in this Plan.”</i></p> <p>The reporting requirements for this Term and Condition go on to state:</p> <p><i>“The Proponent shall provide summaries of any significant community engagement undertaken and resultant updates to the Community Involvement Plan within its annual reports to the Nunavut Impact Review Board.”</i></p> <p>Beginning on page 5-101 of the submitted 2024 Annual Report submission, Agnico Eagle provides a summary of community engagement activities that were completed in 2024 as well as ongoing outreach practices with communities and stakeholders. While Agnico Eagle provides an informative summary of community and stakeholder engagement activities in support of its Doris North and Hope Bay Belt Projects, there is no reference made to a stand-alone Community Involvement Plan which is required under Term and Condition 49 of Project Certificate No. 009 for the Hope Bay Belt Project. The status of the plan is unclear.</p>
Recommendation to Address Issues:	CIRNAC recommends that Agnico Eagle provide the NIRB a copy of its stand-alone Community Involvement Plan which reflects relevant stakeholders with respect to the Project.

2. Compliance Monitoring

CIRNAC has a broad mandate for the co-management of water resources and the management of Crown land in Nunavut under the following applicable acts and regulations:

- *The Department of Crown-Indigenous Relations and Northern Affairs Act.*
- *The Nunavut Land Claims Agreement Act and the Nunavut Agreement.*
- *The Arctic Waters Pollution Prevention Act and Regulations.*
- *The Nunavut Waters and Nunavut Surface Rights Tribunal Act and Regulations;* and
- *The Territorial Lands Act and Regulations.*

CIRNAC’s monitoring responsibilities are fulfilled by reviewing and providing expert advice and comments to the NIRB and the Nunavut Water Board (NWB) on Annual Reports and conducting site inspections. CIRNAC Inspectors conduct site inspections to ensure project activities are compliant with Terms and Conditions in any water licence(s), land use authorization(s), such as land use permits and leases, and the Project Certificate. Inspectors prepare site inspection reports with observations and recommendations, and they have the authority to issue and enforce directions with a timeline for implementing corrective measures.



The NIRB requested that regulatory authorities provide comments and/or information associated with their mandates and jurisdictions with respect to the following:

a. Provide a summary of any compliance monitoring and/or site inspections undertaken in association with the Project, including specifically:

i. Identify the Terms and Conditions from the Project Certificate which have been incorporated into any permits, certificates, licenses or other approvals issued for the Project, where applicable, and report annually to the NIRB on the status of those incorporated Terms and Conditions.

CIRNAC issued the following Crown Land Leases for Agnico Eagle’s Doris North Gold Mine Project and Phase 2 Hope Bay Belt Projects, respectively:

- In 2007, CIRNAC issued lease 77A/3-1-2 for the construction and operation of the Roberts Bay Jetty and Marine Outfall Berm; expired 2017. In 2017, lease 77A/3-1-7 was renewed for a thirty-year term.
- In 2018, CIRNAC issued lease 77A/3-3-2 for the Marine Outfall pipe, for a thirty-year term.

CIRNAC has reviewed the Type A and Type B Water Licences associated with the Doris North Gold Mine Project and Phase 2 Hope Bay Belt Project with respect to Project Certificate No. 003; Amendment 002, and Project Certificate No. 009, and has included a concordance table (Appendix A) showing how the Terms and Conditions have been integrated into the Water Licences and CIRNAC land leases.

ii. A summary of any inspections conducted during the 2024 reporting period and the results of these inspections.

In 2024, the project’s activities and monitoring were conducted under the following Water Licences:

- Type A Water Licence 2AM-DOH1335
- Type A Water Licence 2AM-BOS1835
- Type B Water Licence 2BB-MAE1727
- Type B Water Licence 2BB-BOS1727
- Type B Water Licence 2BE-HOP2232

CIRNAC conducted one inspection for the 2024 reporting period to ensure that the licensee was in compliance with the Term and Conditions of the Water Licences 2AM-DOH1335, 2BB-BOS1727 and 2BE-HOP2232 and Land Lease numbers 77A/3-1-7 and 77A/3-3-2. An overview of the inspection is presented below for NIRB’s consideration.

Inspection 1	Water Licence 2AM-DOH1335
Area:	Hope Bay
Date:	April 10, 2024
Focus:	Inspection to verify compliance with water licence 2AM-DOH1335. The inspection focus was on fuel and chemical storage.
Observations:	Waste Storage: Improper storage of Jet A and Jet B as well as hazardous waste containers.
Result:	The inspector identified significant non-compliance issues during the inspection of facilities licensed under water licence 2AM-DOH1335, the licensee was directed and recommended to take corrective actions. Follow up items have been addressed and a response to the inspector was provided.



iii. A summary of Agnico Eagle's compliance status with regard to authorizations that have been issued for the Project.

Inspections since 2023 have revealed ongoing challenges that have been addressed and acknowledged by Agnico Eagle.

CIRNAC will continue to work with Agnico Eagle to ensure compliance with all water licence and land use requirements associated with the Doris North Gold Mine Project and Phase 2 Hope Bay Belt Project.



Appendix A: Project Certificate Terms and Conditions incorporated into any permits, certificates, licences or other approvals issued for the Project

NIRB Project Certificate No. 003; Amendment 002, Term & Conditions		Implemented in Licences or Permits
6	The Proponent shall report by January 1st of each calendar year to NIRB on its development plan for future phases of the Hope Bay Belt, including identifying development plans that may affect the selection of TIA as the preferred alternative for tailings management.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Items 6, and 14)
10	Should water from the TIA be discharged into Doris Creek, the Proponent shall ensure that monitoring of Tail Lake and Doris Creek water quality occurs, above and below the waterfall, and is verified by an independent, third-party laboratory. The Proponent must provide copies of the results directly to the NIRB and NIRB's Monitoring Officer.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Items 3, 8, and 9) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part K (Item 2)
13	The Proponent shall collect additional water quality data for the 2006 field season and incorporate it into a revised water quality model to be submitted to the NWB as part of the water licence application. To ensure the protection of the receiving environment at the point of discharge, the Proponent will meet discharge criteria: a. Where discharge is to the freshwater environment, on a site-specific basis set by the NWB where possible and as set by the Metal Mining Effluent Regulations (MMER); and b. Where discharge is to Roberts Bay, discharge criteria set by the MMER and the Arctic Waters Pollution Prevention Act.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part G (Items 3, 23, 24, 27, 28, 29, 30, 32) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Item 8)
15	The Proponent shall not permit the water discharged into Doris Creek to exceed the criteria set by the NWB.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part G (Items 28, 29 and 30) ▪ Land Lease 77A/3-1-7, 77A/3-2-2, Part 32
16	The Proponent shall take all reasonable steps to prevent any discharge that is not in compliance with applicable regulatory approvals or requirements. If such a situation is encountered, the Proponent shall take immediate action to address the noncompliant discharge.	<ul style="list-style-type: none"> ▪ Water Licence 2AM- Water Licence Amendment 002, Part G (Items 28, 29, 30, 32) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Item 8) ▪ Land Lease 77A/3-1-7, 77A/3-2-2, Part 32
18	The Proponent shall submit to the NWB, as part of the water licence application, a program detailing the methodology for testing quarried rock for acid generation and metal leaching potential. The sampling, testing, and analysis must be done by a professional geologist registered in Nunavut.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part D (Items 9 and 10) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part G (Items 14 and 15)



NIRB Project Certificate No. 003; Amendment 002, Term & Conditions		Implemented in Licences or Permits
19	The Proponent shall install thermostor cables and temperature loggers in the jetty foundation as well as the new jetty foundation. The Proponent shall monitor the effects of the jetty on shallow water permafrost through operations, until such time as the NIRB determines that such monitoring is no longer necessary and report the results of the monitoring collection to NIRB's Monitoring Officer.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Items 14, 18, and 19) ▪ Land Lease 77A/3-1-7, 77A/3-2-2, Part 41.1
31	The Proponent shall maintain a complete Closure and Reclamation Plan on file with the NWB prepared in accordance with requirements of the NWB and other regulators.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part L (Items 5, 6, and 7)
32	Prior to the commencement of operation the Proponent shall have a complete Environment, Health and Safety Management System in place which includes the following: <ul style="list-style-type: none"> ▪ Wildlife Mitigation and Monitoring Plan; ▪ Environmental Protection Plan; ▪ Emergency Response and Spill Contingency Plan; ▪ Occupational Health and Safety Plan; ▪ Human Resources Plan; ▪ Community Relations Plan; ▪ Monitoring and Follow-up Plan; and ▪ Auditing and Continuous Improvement Plan. When complete, these Plans shall be forwarded to the NIRB's Monitoring Officer. 	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part I ▪ Land Lease 77A/3-1-7, 77A/3-2-2, Part 25-31 ▪ Land Lease 77A/3-1-7, 77A/3-2-2, Part 35
33	The Proponent shall ensure spill kits are at hand at the Roberts Bay oil handling facility at all times, and that appropriate containment measures are used to prevent, contain and respond to a spill in accordance with the Most recent version of the Oil Pollution Emergency Plan and Oil Pollution Prevention Plan reviewed by Transport Canada.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part G (Items 10, 11, and 12) ▪ Land Lease 77A/3-1-7, 77A/3-2-2, Part 37
36	The Proponent shall continue year-round monitoring and recording of Doris Lake water levels during construction and operations. This will allow for detection of actual Doris Lake draw down below the sill level; computation of the amount of drawdown, quantification of the project impact, and implementation of adaptive mitigation and management measures as appropriate.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part G (Item 34C) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Items 3, and 11) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule B (Item 6B)
37	The Proponent shall develop and submit a detailed Groundwater Management Plan for review during the water licensing process and to the NIRB as part of the plans available on the Doris North project. The plan shall acknowledge uncertainties pertaining to predictions of groundwater quantity and quality and inform the Groundwater Management Plan. Indigenous and Northern Affairs Canada should be consulted with respect to the contents of the Plan and any required mitigation measures.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 6I) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part G (Item 3)
39	At least six (6) months prior to operation of the effluent pipeline and diffuser system, the Proponent shall conduct and submit to the Board a hazard and operability study of the pipeline and marine outfall system as part of the land authorization process	<ul style="list-style-type: none"> • Land Lease 77A/3-23-2, Clause 42



NIRB Project Certificate No. 009, Term & Conditions		Implemented in NWB Water Type 'A' Water Licence No. 2AM-DOH1335 Amendment 002
1	The Proponent shall maintain an Air Quality Management Plan that addresses the following areas/issues: a) regular stack testing of incinerators to demonstrate emissions are within levels predicted or within applicable guidelines or standards; b) continuous NO2 monitoring and demonstration that NO2 emissions do not exceed levels impact predictions nor relevant guidelines; and c) implementation of dust suppression measures and demonstration that dustfall and concentrations of suspended particulate matter are within levels predicted or committed to, and within levels or limits established by applicable guidelines and regulations.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part E (Item 12) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part F (Items 1 and 6) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule D (Item 2M)
3	<p>The Proponent shall maintain a Mine Closure and Reclamation Plan that addresses the following areas/issues:</p> <p>a) adaptive management approaches for monitoring and mitigation measures to ensure long-term containment of the Tailings Storage Facility and Waste Rock Storage Areas;</p> <p>b) measures to maintain the integrity of the groundwater quality within and adjacent to the Project; and</p> <p>c) estimates of the approximate fill time for the mine pits.</p>	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Items 1, 2, 3, and 8) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule B (Items 4, 5, and 7)



NIRB Project Certificate No. 009, Term & Conditions		Implemented in NWB Water Type 'A' Water Licence No. 2AM-DOH1335 Amendment 002
5	<p>The Proponent shall maintain a stand-alone Acid Rock Drainage and Metal Leaching Management Plan (or equivalent as may be specified under the Type "A" Water Licence) that includes the following information: a) procedures for inspection and sampling/testing of waste rock, ore, tailings storage facilities, and quarry source material; b) thermal monitoring of waste rock and tailings storage facilities, including tailings management areas; c) seepage management and monitoring; d) a schedule for reporting of results and periodic updating of predictions for seepage water quality; e) planning for optimal cover conditions above-ground mine- and quarry-related material storage facilities; f) contingency measures that may be implemented if required, including measures to address the potential for leaching of arsenic from waste rock and ore stockpiles, and tailings under neutral pH conditions; g) plans for comparing monitoring results from receiving waters to model predictions; and h) identification of thresholds that will trigger specific management actions, including active water treatment, if trends analyses indicate water quality objectives may be exceeded.</p>	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part D (Items 2, 8, 11, 18, and 19) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule B (Item 2) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule D (Items 1c and 2e) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part F (Items 1, 14, 18, 19[b, d, e, f, g, h, i, k], 20b, 21, and 22) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part I (Items 3, 7, 8, 9, 10, 11, 12, 14, 16, 17, and 19) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule I ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Items 7 and 8)



NIRB Project Certificate No. 009, Term & Conditions		Implemented in NWB Water Type 'A' Water Licence No. 2AM-DOH1335 Amendment 002
6	In consultation with applicable regulatory agencies and experts such as Natural Resources Canada, the Proponent shall undertake additional site- specific geotechnical investigations, permafrost monitoring, mapping and thermal analysis to: a) document permafrost conditions, including seasonal thaw, amount of ground ice; b) inform the detailed design of project infrastructure, including foundations, such as water management structures, mine site and haul roads, waste rock storage facilities, and tailings storage facilities, including dam structures associated with the Doris North Tailings Impoundment Area; c) inform updates/revisions to management plans related to waste rock, ore, and tailings storage facilities, including adaptive management strategies with clear thresholds for implementation to minimize the potential for impacts from these facilities; and d) ensure the integrity of project infrastructure and components, including tailings cover, is maintained post-closure.	<ul style="list-style-type: none"> • Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) • Water Licence 2AM-DOH1323 Amendment 002, Part D (Item 6) • Water Licence 2AM-DOH1323 Amendment 002, Schedule D (Items 1e and 2l) • Water Licence 2AM-DOH1323 Amendment 002, Part E (Item 10) • Water Licence 2AM-DOH1323 Amendment 002, Part F (Items 4 and 19c) • Water Licence 2AM-DOH1323 Amendment 002, Part G (Item 3g) • Water Licence 2AM-DOH1323 Amendment 002, Part I (Items 9 and 10) • Water Licence 2AM-DOH1323 Amendment 002, Part J (Items 13 and 14)



NIRB Project Certificate No. 009, Term & Conditions		Implemented in NWB Water Type 'A' Water Licence No. 2AM-DOH1335 Amendment 002
7	The Proponent shall maintain an Erosion Management Plan designed to prevent or minimize erosion and its resulting effects from project-related land disturbance. The Plan shall include the following: a) identification of specific project activities that require erosion control; b) description of associated erosion issues; and c) specific measures to prevent or minimize erosion.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part D (Item 6) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule D (Items 1e and 2l) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part E (Item 10) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part F (Items 4 and 19c) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part G (Item 3g) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part I (Items 9 and 10) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Items 13 and 14)
8	As part of the Mine Closure and Reclamation Plan (or equivalent), the Proponent shall develop and implement a program to progressively reclaim disturbed areas within the project footprint, with an emphasis on restoring the natural aesthetics of the area through re-contouring to the extent practicable. Acceptability of reclamation efforts should be confirmed through the Proponent's public engagement with local communities and discussion of local aesthetic values (e.g., acceptability of the topography and landscape of the project areas following progressive reclamation efforts). Progressive reclamation efforts should also demonstrate consideration for the feasibility of topsoil/organic matter salvage to promote revegetation.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Item 12)



NIRB Project Certificate No. 009, Term & Conditions		Implemented in NWB Water Type 'A' Water Licence No. 2AM-DOH1335 Amendment 002
9	The Proponent shall implement a Thermal Monitoring Plan to identify potential changes in talik distribution and flow paths that may result from the development of project infrastructure, including underground workings, tailings storage facilities, and water impoundment areas.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part I (Items 7, 8, 9 and 10) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule I
10	Subject to potential receipt of more detailed direction from the Nunavut Water Board, the Proponent shall: a) monitor the effects of project activities and infrastructure on surface water quality conditions; b) ensure the monitoring data is sufficient to compare the impact predictions made for the Project with actual monitoring results; c) ensure that the sampling locations and frequency of monitoring is consistent with and reflects the requirements of the Aquatic Effects Monitoring Plan, and Water Management Plan; and d) on an annual basis, compare monitoring results with the impact assessment predictions in the FEIS and will identify any significant discrepancies between impact predictions and monitoring results.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part D (Items 8 and 9) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part E (Items 2 and 11) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part F (Items 5b, 18a, b, 22, and 24) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part I (Items 1, 12, 13, 14, 15 and 19) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule B (Item 4) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule I



NIRB Project Certificate No. 009, Term & Conditions		Implemented in NWB Water Type 'A' Water Licence No. 2AM-DOH1335 Amendment 002
11	<p>The Proponent shall, reflecting any direction from responsible authorities, maintain an Aquatic Effects Monitoring Program (AEMP) designed to appropriately characterize the receiving environment and ensure that adequate data is available to assess impact predictions made for the Project and prevent adverse impacts from occurring. The AEMP should include measures to:</p> <p>a) determine the short and long-term effects in the aquatic environment resulting from the Project;</p> <p>b) evaluate the accuracy of Project effect predictions;</p> <p>c) assess the effectiveness of mitigation and management measures on Project effects;</p> <p>d) identify additional mitigation measures to avert or reduce environmental effects due to Project activities;</p> <p>e) comply with Metal and Diamond Mining Effluent Regulations requirements, should an Environmental Effects Monitoring program be triggered;</p> <p>f) reflect site-specific water quality conditions;</p> <p>g) include details comparing the watershed features from the Aimaokatalok, Windy, and Doris watersheds to the reference watersheds (Reference A, Reference B, Reference C and Reference D lakes and streams); and</p> <p>h) evaluate the mixing and non-mixing portion of the pit.</p>	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule B (Items 1, 7, 9, 17 and 18) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part I (Items 1, 3, 6, 14, 17, and 19) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule I
12	<p>Unless otherwise authorized, the Proponent shall maintain an appropriate setback distance between project quarries and borrow pits from fish-bearing or permanent water bodies as required to prevent acid rock drainage or metal leaching into such Water bodies and to mitigate the potential for impacts from runoff/sedimentation associated with project quarries and borrow pits</p>	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part D (Item 18) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part F (Item 1)
13	<p>The Proponent shall ensure that all project infrastructure in watercourses are designed and constructed in such a manner that they do not unduly prevent or limit the movement of water or fish species in fish bearing streams and rivers, unless otherwise authorized by Fisheries and Oceans Canada.</p>	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part D (Items 16 and 17)
15	<p>The Proponent shall implement all applicable Fisheries and Oceans Canada best management practices to avoid and mitigate serious harm to fish as a result of the construction, operations, and decommissioning of winter ice roads, and from under ice water withdrawals. This includes adequately screening the water intake pipes to prevent impingement and entrainment of fish.</p>	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part D (Item 16) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part E (Item 8)



NIRB Project Certificate No. 009, Term & Conditions		Implemented in NWB Water Type 'A' Water Licence No. 2AM-DOH1335 Amendment 002
16	The Proponent shall implement all applicable Fisheries and Oceans Canada best management practices to avoid and mitigate serious harm to fish as a result of water crossing construction, operations, and decommissioning for all fish bearing water crossings.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part D (Items 16 and 17) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part I (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Item 13)
18	The Proponent shall ensure that the progressive reclamation efforts outlined in its Mine Closure and Reclamation Plan, or equivalent encourage recolonization by native plant species. These efforts are expected to be informed by revegetation trials in the Project area and must include monitoring protocols over sufficient timeframes to measure success and ensure invasive plant species have not established.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Items 12 and 16)
19	The Proponent shall maintain a Road Management Plan which includes a) maintenance of traffic logs and traffic counters along the all-weather road between the Doris-Madrid mine sites and Madrid-Boston mine sites. Where traffic levels exceed levels predicted for the Project, the Proponent shall develop and implement appropriate enhancements to its wildlife protection measures; b) information regarding the road design, safety barriers, berms and features designed to ensure safe wildlife movement; c) description of safety protocols and enforcement by the Proponent, including restrictions imposed during periods of low visibility, and training provided to road users; and d) program to monitor snow bank heights along Project roads to ensure they do not pose a barrier to movement of wildlife or other land users.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part D (Items 1, 10, 11 and 21)
43	The Proponent should ensure that the development of all project monitoring plans, associated reporting and updates are undertaken with active engagement of Kitikmeot communities, land users, and harvesters. The Proponent should work with the Kitikmeot Inuit Association, the local Hunters and Trappers Organizations and the Kitikmeot Socio-Economic Monitoring Committee to report on the collection and integration of Inuit Qaujimaningit through its monitoring programs for the Project.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule B (Item 14)
44	The Proponent is strongly encouraged to consult with outfitting and guiding businesses that operate in or travel through the regional study area regarding whether project infrastructure or activities is adversely affecting their use and experience of the surrounding environment	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule B (Item 14)



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49	The Proponent shall maintain a current Community Involvement Plan which reflects relevant stakeholders with respect to the Project. a) Records of communication and engagement undertaken by the Proponent with stakeholders, including potentially impacted communities, are to be maintained throughout the life of the Project with outcomes reflected in this Plan.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule B (Item 14) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part J (Item 18)
51	The Proponent shall conduct additional studies prior to and during operations as part of its freshwater and marine aquatic effects analyses to ensure that toxic trace elements concentrations anticipated to increase in the aquatic and marine environments during operation (and potentially accumulating in fish tissue) do not exceed regulatory requirements. The results of these studies should inform the Proponent's assessment of potential risks from consumption of fish, using Health Canada's hazard quotients as a descriptive tool.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part I (Items 1, 2, 3, 4, 12, 13, 14, 15, 16, 17 and 19) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule I
52	The Proponent shall ensure that areas used to store fuel, or hazardous materials include sufficient secondary containment and that all oil handling facilities have the required Oil Pollution Emergency Plan (OPEP) in place. The OPEP or other emergency response plans applicable to fuel or hazardous material storage areas are expected to include, as a minimum, the following: a) information on the placement of spill prevention and response equipment as necessary to initiate rapid response during an emergency; b) an up to date listing of critical TMAC and government spill response contacts, and a list of authorised emergency response personnel; c) an up to date listing of emergency response training conducted by TMAC's emergency response personnel; d) easily accessible and up to date spill report forms; and e) a listing of community organizations that would be contacted to inform traditional land users of any spills or response actions implemented to ensure continued public safety. The Proponent shall also demonstrate that the provisions of the OPEP or other applicable emergency response plans associated with the fuel tank farm at Roberts Bay are coordinated with the individual shipboard OPEPs required for vessels servicing the Project, and that the Shipping Management Plan addresses how response procedures between ship and shore will be coordinated.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Items 11, 13 and 15) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part H (Items 1, 7, 8, 9 10, and 11)



NIRB Project Certificate No. 009, Term & Conditions		Implemented in NWB Water Type 'A' Water Licence No. 2AM-DOH1335 Amendment 002
53	The Proponent shall implement a monitoring and mitigation program for the tailings pipelines that includes the following: a) regular inspections to assess the stability of the tailings pipeline and land within the footprint of this infrastructure; b) early warning system(s) to identify a pipeline breach; c) measures to respond to and mitigate any accidental spills of tailings from the d) pipeline; and e) adaptive management to address unanticipated changes to land within the footprint of the tailings pipeline to ensure that the integrity of this infrastructure is maintained for the life of the Project.	<ul style="list-style-type: none"> ▪ Water Licence 2AM-DOH1323 Amendment 002, Part B (Item 13) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part D (Item 21) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part F (Items 1 and 19) ▪ Water Licence 2AM-DOH1323 Amendment 002, Part I (Item 9) ▪ Water Licence 2AM-DOH1323 Amendment 002, Schedule B (Item 5)

