March 1, 2024 NWB File No.: 2AM-MEL1631

Richard Dwyer
Nunavut Water Board
PO Box 119
Gjoa Haven, NU
X0B 1J0

Re: Agnico Eagle's Response to Completeness Check on Meliadine Water Licence Amendment Application 2AM-MEL1631

Dear Mr. Dwyer

Agnico Eagle thanks the Kivalliq Inuit Association, Crown-Indigenous Relations and Northern Affairs Canada, Environment and Climate Change Canada, and Fisheries and Oceans Canada for their comments and review on the Meliadine Mine Water Licence Amendment Application. Our comments are provided in the enclosed.

Agnico Eagle agrees with Parties who provided feedback that the Technical Meeting and Pre-Hearing Conference can be held via conference call. Agnico Eagle is of the opinion this meeting could take place before May 2024 based on the status of comments and also the tight timeline for water management activities for the Meliadine site. We would like to discuss this further with the Board and the responsible parties.

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

Regards,

Jamie Quesnel
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Directory, Permitting & Regulatory Affairs

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KIVALLIQ INUIT ASSOCIATION (KivIA)

Interested Party:	**KivIA**	**Rec No.:**	**KivIA-CR-1**
Re:	**Waste Rock Storage Facilities**		

Request Made by Interested Party:
Please include a stability evaluation of waste rock storage facilities similar to item D-3 of the 2023 amendment application.

Agnico Eagle's Response to Request:
Stability analyses for constructed waste rock storage facilities (WRSF) are included in Appendix A. To clarify, stability analyses are submitted as part of the for-construction design reports (Water Licence Part D, Item 1), which incorporates findings from a site investigation to verify subsurface site conditions. Only WRSF1 and WRSF3 have been constructed, and WRSF6 is entering the site investigation phase this year. However, prefeasibility level stability analyses can be done on the proposed WRSFs and provided by March 15, 2024.

CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS CANADA (CIRNAC)

Interested Party:	**CIRNAC**	**Rec No.:**	**CIRNAC-CR-01**
Re:	**WQLBM**		

Request Made by Interested Party:

The amendment application includes an updated Water Quality and Load Balance Model (WQLBM). However, the updated WQLBM does not have figures depicting the water quality predictions, making it challenging to identify emerging water quality trends. This information will have to be provided by the applicant before a determination of the future water quality.

CIRNAC recommends that Agnico Eagle provide a revised WQLBM with appropriate figures to address this gap.

Agnico Eagle's Response to Request:

Agnico Eagle has provided the requested figures in Appendix B of this response package to supplement the water quality predictions presented in the Conclusions and Section 6 of the Water Balance Water Quality Model Technical Report (Lorax 2024) as was provided in the Water Licence Amendment Application.

References:

Lorax (Lorax Environmental Services Ltd.). 2024. Meliadine Mine Water Balance Water Quality Model Technical Report. January 25, 2024.

Interested Party:	**CIRNAC**	**Rec No.:**	**CIRNAC-CR-02**
Re:	**Financial Security**		

Request Made by Interested Party:

The amendment application includes an updated Interim Closure and Reclamation Plan (ICRP). However, while Appendix J of that document consists of a high-level summary of closure costs, no discussion or details are provided regarding how these costs were developed. As such, insufficient detail has been provided to allow a third party to conduct a detailed review of the security estimate.

CIRNAC recommends that Agnico Eagle provide additional details, complete with discussions of underlying assumptions, quantities, and unit rates, along with the RECLAIM estimate worksheet and a copy of the RECLAIM Spreadsheet.

Agnico Eagle's Response to Request:

Agnico Eagle has provided the RECLAIM spreadsheet directly to CIRNAC on February 14, 2024. An in-person meeting has been scheduled for March 7, 2024, to review security with CIRNAC and the KivIA.

Interested Party:	**CIRNAC**	**Rec No.:**	**CIRNAC-CR-03**
Re:	**Stability Evaluation of Waste Rock Storage Facilities**		

Request Made by Interested Party:

CIRNAC notes that the previously submitted Meliadine Extension Application (2023) included Appendix D-3 Stability Evaluation of Waste Rock Storage Facilities (Tetra Tech January 13, 2023). In contrast, the current Meliadine Mine Water Licence Amendment (2024) does not include a similar technical document package. It is not clear if this is an intentional omission or if it is an oversight omission.

CIRNAC recommends that Agnico Eagle provide a Stability Evaluation of Waste Rock Storage Facilities report for the completeness of the current Application.

Agnico Eagle's Response to Request:

Please see response to KivIA-CR-1.

Interested Party:	**CIRNAC**	**Rec No.:**	**CIRNAC-CR-04**
Re:	**Previously Assessed Project Components**		

Request Made by Interested Party:
Agnico Eagle's Main Amendment Application Document (Section 1.1) indicates that the following project components were included in the 2014 FEIS and already approved under Project Certificate No. 006:

- *Temporary ore stockpiles (three facilities located near Pump, F Zone, and Discovery)*
- *Use of Lake B7 as a Saline Pond (SP6)*

These two project components are not included in the Nunavut Planning Commission's conformity determination letter (dated January 25, 2024) as the previously assessed project components under the current project certificate No. 006.

CIRNAC recommends that Agnico Eagle provide evidence demonstrating that the above-noted components were assessed, approved, and included in the current project certificate No. 006.

Agnico Eagle's Response to Request:
Agnico Eagle confirms that Lake B7 was listed in the 2014 FEIS as to be overprinted and was listed as a waterbody under Schedule 2. This was referenced in the 2014 FEIS SD 2-6, Section 3.2.1, and Figure 7.

Ore stockpiling is an approved activity from the original application which received Nunavut Planning Commission approval in June 2011 under the 2014 FEIS. The temporary ore stockpiles will be within the approved footprint of the 2014 FEIS and ultimately transferred to the main ore stockpile, which is part of normal mining procedures and practices. Should temporary stockpiles be used, appropriate management plans would be adhered to.

Interested Party:	**CIRNAC**	**Rec No.:**	**CIRNAC-CR-05**
Re:	**Adaptive Management Plan**		

Request Made by Interested Party:

CIRNAC notes that the Adaptive Management Plan (AMP) for the Meliadine Mine is not listed as an approved plan and is not part of the current water license. Therefore, by extension, CIRNAC understands that any actions referred to in the AMP have not been approved by the NWB unless explicitly reviewed and approved by NWB through some other process (e.g., inclusion in an approved Management Plan).

CIRNAC recommends that Agnico Eagle remove the activities from the application documents that referenced AMP unless those activities are reviewed and approved by the NWB. Otherwise, provide evidence demonstrating that the AMP is part of the current license.

Agnico Eagle's Response to Request:

For additional context, the Adaptive Management Plan, which is a critical document for the operation, was developed at the request of CIRNAC and the KivIA during the 2020 Water Licence Amendment, which was concurrently underway with the waterline application. This plan was developed in consultation with the KivIA, CIRNAC, and ECCC.

Agnico Eagle agrees that the Adaptive Management Plan is not listed under Part B, Item 12 of the 2AM-MEL1631 Water Licence. However, an Amendment process is the opportunity to add, update, and/or review the Water Licence based on the documentation put forward through the Application and subsequent technical review process. Agnico Eagle does not agree that the Adaptive Management Plan be removed from the Application. Rather, we are requesting to the Nunavut Water Board (NWB), that the Adaptive Management Plan be approved as part of this Application as CIRNAC and KivIA recommended Agnico Eagle to have an Adaptive Management Plan, and was approved by parties in the past.

ENVIRONMENT AND CLIMATE CHANGE CANADA (ECCC)

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-01**
Re:	**Air Quality Monitoring**		

Request Made by Interested Party:

Section 2 of the Main Application Document, details the scope of the additional deposits to be mined, as considered by the water licence amendment. Section 3.2 of the Dust Management Plan alludes to the Air Quality Monitoring Plan. However, it is not evident what changes, if any, are planned for air quality monitoring, as the spatial distribution of mine-related air emissions change in this amendment. Changes in spatial distribution of air emissions will affect downwind air quality impacts.

ECCC requests that the Proponent clarify what changes, if any, are planned for air quality monitoring in conjunction with further development of the mine site.

Agnico Eagle's Response to Request:

Agnico Eagle reminds parties that air quality predictions and monitoring are outside the NWB review process. However, they were provided to Nunavut Impact Review Board (NIRB) as part of the 2014 FEIS in Section 5.2 and SD 5-1, respectively. There are no changes proposed on the air quality monitoring as the downstream air monitoring stations are in place.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-02**
Re:	**Freshwater for Dust Suppression**		

Request Made by Interested Party:

Table 2.3-1: Operations Freshwater Consumption Needs, in the Main Application Document, indicates that water needs for dust control are anticipated to remain the same with the water licence amendment (24,168 m3/yr). However, the development of further mine deposits entails an expansion of the connecting road network. Therefore, it is not evident from the information presented, whether the overall dust emissions will remain the same, and how this will be accomplished.

ECCC requests that the Proponent clarify whether total mine-related dust emissions are expected to remain the same, but be spatially reallocated, or if the numbers for water needs related to dust control are incorrect and require correction.

Agnico Eagle's Response to Request:

Agnico Eagle does not anticipate a need to change the freshwater consumption (24,168 m^3/yr) for dust suppression as we have been and will continue to maximize use of reclaim water for dust suppression before we utilize freshwater for dust suppression. The reclaim water usage is over and above the volumes we are requesting in the application (i.e., over and above the 24,168 m^3/yr).

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-03**
Re:	**Communication Plan to Respond to Accidents and Malfunctions**		

Request Made by Interested Party:

The Risk Management and Emergency Response Plan and Spill Contingency Plan fail to address how communications with impacted surrounding communities would be managed in case of an accident or malfunction. This is required to promptly disseminate information about incidents, associated dangers, impacts on subsistence resources such as hunting and fishing, planed and/or implemented response measures, as well as potential and/or actual impacts to the environment. This omission raises concerns regarding the effectiveness of communication strategies in ensuring the timely and accurate transmission of vital information to affected communities and implicated regulating agencies.

ECCC requests that the Proponent develop an Emergencies Communications Plan for surrounding communities, that would likely be impacted by the consequences, or implicated in the response, of a significant emergency incident, in order to:

a) Proactively educate area residents, about the hazardous substances stored or used at the project site, as well as the types of accidents that could potentially occur – including likely incident response actions;

b) Provide emergency instructions to area residents such as shelter-in-place and evacuation directions in the event of a significant emergency incident; and

c) Provide up-to-date information concerning potential and/or actual environmental impacts due to any actual or imminent incident, including impacts on community subsistence resources such as hunting and fishing.

The Proponent should then update both the Risk Management and Emergency Response Plan and Spill Contingency Plan, to reflect this.

Agnico Eagle's Response to Request:

Agnico Eagle does not agree with a stand-alone Emergencies Communications Plan as measures are already in place should emergencies arise. Agnico Eagle has systems in place for communicating to communities through social media, such as Facebook, radio broadcasts, etc.

As outlined in the Spill Contingency Plan (Section 5.11), communication with public bodies during a state of emergency is the responsibility of the General Mine Manager or the Communications & Public Affairs Corporate Director. The General Mine Manager will immediately contact the Mayor of the Hamlet to provide information regarding the situation. If safe to do so, a radio notification is immediately broadcasted on the Rankin Inlet Radio station.

In addition, Agnico Eagle adheres to the approved Cyanide Management Plan which provides guidance on the measures taken by Agnico Eagle, to ensure the safe handling, use, transport, and emergency response with regards to cyanide in line with the protocols outlined by the International Cyanide Management Institute, and the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (Cyanide Code).

Further, Tusaajugut, the formal Nunavut Community Communication System, addresses questions, comments and concerns from individuals and organizations in the Kivalliq region about environmental issues, tendering and hiring processes, or any other aspects of Agnico Eagle's operations.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-04**
Re:	**Mutual Aid Agreement on All-weather Access Road (AWAR)**		

Request Made by Interested Party:

Section 9 of the Roads Management Plan indicates that "Major spills require the involvement of the ERT, who use spill response equipment and supplies maintained by Agnico Eagle at the mine site or from the two emergency spill response stations on the AWAR and/or at Itivia. In urgent circumstances, where appropriate, Agnico Eagle may request assistance from other parties in Rankin Inlet." It is unclear who are the "other parties", and whether the Proponent possesses mutual aid agreements with these entities.

ECCC requests that the Proponent clarify who are the "other parties", their qualifications, response capabilities, and role that they would play in a major spill on the AWAR. ECCC encourages the Proponent to detail which actions they would undertake, and what equipment they would deploy, to respond to spills.

Agnico Eagle's Response to Request:

As part of this Water Licence Amendment Application, Agnico Eagle is not proposing any changes to the scope regarding the All-Weather Access Road. As such, Agnico Eagle is referring ECCC to the Annual Report Review process for comments regarding the existing Roads Management Plan.

However, with respect to comment on "other parties", depending on a scenario, any contractor or service may be called upon to support with an emergency situation from those listed in Table 5-1 or Table 5-3 of the Spill Contingency Plan (e.g., Rankin Inlet Fire Department), or Rankin Inlet Heath Care may need to be called upon (Risk Management and Emergency Response Plan section 4.5.2), as examples.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-05**
Re:	**Spill Modelling During Refueling Operation of Itivia Bulk Tanks**		

Request Made by Interested Party:

The Environmental Performance Monitoring Plan indicates that "Marine baseline environmental data was gathered at Itivia by Numami Stantec in 2012. This study included bathymetry, water and sediment quality, aquatic ecology and fisheries values in Itivia harbor and reference sites in Itivia Harbour, as well as a desktop study on marine mammals and birds.".

ECCC is uncertain about whether the study includes comprehensive spill modeling in Melvin Bay, where bulk transfer operations take place. Spill modeling plays a crucial role as a mitigation tool in preparedness for accidents and malfunctions that may occur during refueling operations. Such information is vital for assessing the potential risks associated with bulk transfer operations and ensuring effective preparedness and response measures are in place.

ECCC requests that the Proponent clarify whether an evaluation of a large spill on water resulting from bulk transfer operations of diesel was modeled in Melvin Bay. This evaluation should include considerations for the behavior of the spill, its impact on the environment, and the state of the spill when a response team could reasonably and realistically start mitigating its effects.

Agnico Eagle's Response to Request:

The marine environment is not part of the NWB process and is not subject to review under a Water Licence Amendment. However, Agnico Eagle clarifies that even though not part of the NWB process, there are no changes to shipping or fuel storage at Itivia as part of the Water Licence Amendment.

Although marine environment is not part of the NWB process nor the Water Licence Amendment, Agnico Eagle confirms that six different hypothetical spill locations in the marine environment were considered in the 2014 FEIS (Volume 8), including two locations with ship-to-shore fuel transfer.

Further, Agnico Eagle have approved systems in place as part of the approved operations.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-06**
Re:	**Secondary Containment and Storage Considerations for Storing Hazardous Materials**		

Request Made by Interested Party:

Section 2.1 of the Hazardous Materials Management Plan states that "Petroleum products, explosives, sodium cyanide, and miscellaneous hazardous materials will be stored in facilities that contain no open drains, and in concrete berm areas or within sea cans. Storage tanks on-site will be regularly inspected and maintained."

ECCC notes a lack of information regarding temperature control in the storage of these materials. Given that certain means of containment (MOC), when exposed to cold temperatures, may become fragile and prone to failure. As well, freezing of liquid of hazardous materials can lead to expansion/contraction, resulting in a pressure differential within the MOC that could lead to failure. Consequently, hazardous substances could leak from the doors of the sea cans into the environment.

Additionally, there is a lack of clarity on whether sea cans are equipped with berm/secondary containment or other means to mitigate the impact of spills originating from them.

ECCC requests that the Proponent clarify the storage practices for hazardous materials in sea cans. Specifically, they should address whether the sea cans are temperature-controlled and whether they are equipped with secondary containment or if other methods have been devised to limit the impact of potential spills originating from a sea can.

Agnico Eagle's Response to Request:

Agnico Eagle reminds parties that these plans are existing and reflect the continuation of current operations. As outlined in the Water Licence Amendment application, there are no changes proposed to hazardous waste, fuel, sodium cyanide. Comments raised should be part of the Annual Report process as there are no changes directly related to the Amendment.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-07**
Re:	**Response Procedure Guides**		

Request Made by Interested Party:

Various hazardous materials are necessary to carry out the Meliadine Gold Mine Project. The Spill Contingency Plan (SCP) explains with general response procedures how it would deal with various type of hazardous materials in Appendices A to G. While there are dedicated plans for some substances (e.g., ammonium nitrate-fuel oil, ammonium nitrate, sodium cyanide), others are subject to general response procedures based on their physical properties. It's important to cross-reference Table 3-1 of the SCP with the appropriate response plan in Appendices B to G in order to ensure clarity on how to handle each commodity. For example, certain hazardous materials, such as sodium hypochlorite solution, may fit into multiple response procedures, such as those outlined for oxidizing substances (Appendix E) or bases/alkali liquids (Appendix G.3). Establishing clear and concise guidelines for hazardous material spill responses minimizes confusion and facilitates timely interventions.

Moreover, the current general response procedures lack considerations for potential chemical incompatibilities that could reasonably arise during operation of the mine or in the event of a spill. Neglecting these incompatibilities could exacerbate the environmental impact of incidents. For instance, the combination of sodium hypochlorite or calcium hypochlorite in the presence of an acid can release chlorine gas. Therefore, incorporating such considerations into intervention plans is crucial for an effective response procedure.

ECCC requests that the Proponent assigns each hazardous material listed in Table 3-1 of the SCP to a specific guide rather than relying solely on physical properties to direct users to a response procedure. Furthermore, ECCC requests that the response procedures clearly identify chemical incompatibilities that could reasonably occur during operations or spill cleanup. This enhances the ability of responders to be better equipped with accurate and comprehensive information to effectively manage spills.

Agnico Eagle's Response to Request:

Agnico Eagle reminds parties that these plans are existing and reflect the continuation of current operations. As outlined in the Water Licence Amendment application, there are no changes proposed to hazardous waste, fuel, sodium cyanide. Comments raised should be part of the Annual Report process as there are no changes directly related to the Amendment.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-08**
Re:	**Use of the Risk Matrix to Evaluate Emergency Scenarios**		

Request Made by Interested Party:

While the Proponent presents a risk matrix in Table 3-3 of the Risk Management and Emergency Response Plan, and further outlines how it should be used in order to "evaluate emergency scenarios that could result from gold mining, processing, transportation, and related activities at the Project", there is a notable absence of risk evaluation for potential accidents or malfunctions resulting from these activities.

In Section 4.6, various credible malfunctions and accidents with a reasonable probability have been identified, including fire, helicopter crash, on-site pipeline breakage, toxic gas release, dike failure, emulsion plant emergency, all-weather access road and bypass road emergencies, and Rankin Inlet Itivia Emergency. The Proponent does not identify the probability, the consequence rating, or the environmental impact(s) that the scenarios present. Moreover, it is not stated whether the scenarios have been re-evaluated to consider the risks associated with the requested amendments to the water licence. It's essential to re-evaluate the emergency scenarios to incorporate consideration for any new amendments being requested. This better enables emergency preparedness and response plans to remain comprehensive and up-to-date, addressing potential risks effectively.

ECCC requests that the Proponent evaluate each scenario outlined in Section 4.6 of the Risk Management and Emergency Response Plan according to the risk matrix presented in Table 3-3 of the same document, and provide a description of the environmental impact that the scenarios present. This approach will provide a more accurate representation of the likelihood of each scenario occurring throughout the life of the mine and allow for the allocation of resources accordingly.

Additionally, ECCC requests the Proponent clarify whether the various scenarios have been updated to reflect the changes requested in the amendments to the water licence.

Agnico Eagle's Response to Request:

These plans are existing and reflect the continuation of current operations and Agnico Eagle is not proposing any changes to the scope that would change risks. Environmental impact(s) were assessed in the 2014 FEIS and approved by the NIRB in 2015 in Project Certificate No.006. Agnico Eagle is referring ECCC to the Annual Report Review process for comments regarding the Risk Management and Emergency Response Plan.

However, as part of operations there is ongoing training and exercises that enables emergency preparedness and response plans to remain comprehensive and up-to-date; thereby, addressing potential risks effectively. As examples:

- Mock spill exercises are required annually in Itivia. As reported in the 2022 Annual Report, the July 2022 mock spill included a representative from the Rankin Inlet fire department, a representative from Intlek, Agnico Eagle employees, and a third-party consultant who facilitates and provides advice on how to improve spill response capabilities.
- As per Meliadine's Cyanide Management Plan and in compliance with ICMC guidance, mock drills will be conducted yearly for mining operations and transportation-related scenarios.
- Mock drill exercises are conducted annually (table-top) and every 3 years (full exercise) to test the Emergency Response Plan and Crisis Management Plan. This practice is also in line with requirements from the Towards Sustainable Mining Crisis Management and Communications Planning Protocol.
- Meliadine as an on-site Emergency Response Team (ERT) at all times. The mine rescue certification is a 60-hour program covering a variety of topics. All members of the ERT are trained and familiar with emergency and spill response procedures. Emergency training of the ERT is conducted on a continuous basis to ensure a sufficient number of team members are available and that their training is up to date. This training includes (but not limited to) rope rescue, first aid with scenarios, underground scenarios, firefighting, hazmat/cyanide response, etc.
- As part of Agnico Eagle's Risk Management and Monitoring System (RMMS), risk assessments are conducted at Meliadine, to identify risks related to activities/job positions and related mitigation measures. For example, a risk assessment is reviewed on an annual basis on the topic of cyanide transportation from Itivia to the Mine site and forms part of the preparedness for potential emergencies.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-09**
Re:	**Toxic Gas Release Scenario**		

Request Made by Interested Party:

Section 4.6.4 of the Risk Management and Emergency Response Plan fails to specify the types of toxic gases that could be released in such an event, and does not indicate whether it has a communication plan in place to disseminate information to neighboring communities affected by such a scenario. Given the presence of numerous hazardous substances on-site, it would be beneficial to identify credible and realistic scenarios under which toxic gas substances might be released in large quantities.

While the Proponent mentions implementing air quality monitoring, it remains unclear to ECCC what exactly is meant by "air quality monitoring". Specifically, acknowledgement of air monitors used provides important information on what chemicals can be detected and sensitivity of the detection methods. Clarity on these matters is essential for more effective risk management and emergency response protocols.

ECCC requests that the Proponent indicate which toxic gas(es) is(are) at risk of being released for the presented scenario from Section 4.6.4.

Further, ECCC requests that the Proponent specify its air quality monitoring practices within the context of an emergency scenario. ECCC requests that the Proponent identify what type of air monitoring is accessible (e.g., 4-gas detectors, fixed/portable detectors, Lower Explosive Limit (LEL) detectors or Photoionization Detectors (PIDs).

Additionally, ECCC requests amending the sentence "immediately evacuate the area/building and notify the Incident Commander" to "immediately evacuate the area/building upwind and notify the Incident Commander." This modification enables a more strategic evacuation approach, considering the direction of potential hazards.

Agnico Eagle's Response to Request:

Agnico Eagle reminds parties that these plans are existing and reflect the continuation of current operations. As outlined in the Water Licence Amendment application, there are no changes proposed to hazardous substances, toxic gases, etc. Comments raised should be part of the Annual Report process as there are no changes directly related to the Amendment.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-10**
Re:	**Missing Oil Pollution Documents**		

Request Made by Interested Party:

Section 1.2 of the SCP references both the Oil Pollution Emergency Plan (OPEP) and Oil Pollution Prevention Plan (OPPP). ECCC was able to find Version 3.1 of the OPEP and Version 5 of the OPPP. To provide an adequate review, could the Proponent confirm that they have provided ECCC with the latest version of those documents.

ECCC requests the Proponent verify that ECCC was provided with the latest version of the OPEP and OPPP. If that is not the case, then provide the latest version of those documents for review.

Agnico Eagle's Response to Request:

The marine environment is not part of the NWB process and is not subject to review under a Water Licence Amendment.

However, as part of the 2022 Annual Report (Appendix 31-7), the Oil Pollution Emergency Plan / Oil Pollution Prevention Plan was provided and included updates to include Level 2 facility information, minor updates to spill response kit content, minor updates to contact information, updated to align with CSA 182(1)(a) spill reporting requirement. This document was posted to the NWB registry at the time of the Annual Report submission.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-11**
Re:	**Missing Operations and Maintenance Document**		

Request Made by Interested Party:

Section 4.6.5 of the Risk Management Emergency Plan references "Operation, Maintenance and Surveillance Manul (OMS)" that has "sections for both the ERP and EPP for dike failure". ECCC was unable to find a copy of the OMS. Without the OMS, ECCC will be unable to review the plans for responding to a dike failure.

ECCC requests that the Proponent provide a copy of the latest version of the OMS for review.

Agnico Eagle's Response to Request:

Agnico Eagle clarifies to parties that the content and compliance of the "Operation, Maintenance and Surveillance Manual (OMS)" are the responsibility of the Engineer of Record. Regulatory compliance is ensured by the Engineer of Record, who is accountable for adherence to relevant standards and guidelines. Agnico Eagle also reminds parties that activities conducted under the OMS are reported in the Annual Report as required by the Water Licence Part I, Item 14: "*The Licensee shall submit to the Board as part of the Annual Report required by Part B, Item 2, a Geotechnical Engineer's Inspection Report. The Report shall include a cover letter from the Licensee outlining an implementation plan addressing each of the Geotechnical Engineer's recommendations*", which is distributed for public review.

In addition, Agnico Eagle has an independent dike review board that review our structures on an annual basis.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-12**
Re:	**Hydrology Information**		

Request Made by Interested Party:

In the withdrawn Type A Water Licence application for the proposed Meliadine Extension project, ECCC identified deficiencies in the hydrology and water balance data presented to support the proposed withdrawal amounts. This information would be important to identify any potential concerns with changes in lake levels throughout the project, and to identify, if any, concerns to fish and fish habitat. Agnico Eagle committed, as Commitment No. 1 in their Commitment List, to meet with ECCC and our hydrology specialist to identify any missing data required to resolve this concern, and provide the necessary data to support the withdrawal amounts proposed, in that process.

Given the preliminary nature of the current review of this proposed amendment to the Type A Water Licence, ECCC reiterates the same concern as in the previous process. ECCC would be available to meet with the Proponent to confirm that all hydrology-related data is present for a timely technical review of the current water licence amendment.

ECCC requests that the Proponent consider meeting with ECCC and our hydrology specialists in order to identify a list of data and information required to support the Proponent's conclusions on water balance and withdrawal amounts presented in this amendment application.

Agnico Eagle's Response to Request:

Agnico Eagle has scheduled a meeting for March 4, 2024, to meet with ECCC's hydrology specialists to further discuss this topic.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-13**
Re:	**Terrestrial Environment Management and Monitoring Plan (TEMMP)**		

Request Made by Interested Party:

Section 10 of the Road Management Plan outlines wildlife monitoring and management plans. Management efforts to protect wildlife include giving wildlife the right of way on roads, with the primary focus being on caribou. Section 10.1 also directs readers to consult the Terrestrial Environment Management and Monitoring Plan (TEMMP) for details pertaining to wildlife monitoring (p. 30).

The TEMMP was not provided for this review.

Version 3 of the TEMMP is available on the Nunavut Impact Review Board (NIRB) registry. But it is unclear if Version 3 is the most current revision.

ECCC requests that the Proponent clarify whether Version 3 of the TEMMP is the most-current version of this plan, and if not, then provide the current version of this plan for review.

Agnico Eagle's Response to Request:

Terrestrial environment is not part of the NWB process and is not subject to review under a Water Licence Amendment.

However, the TEMMP was provided to the Nunavut Impact Review Board in the 2014 FEIS in SD 6-4, and is reviewed and updated in collaboration with the Terrestrial Advisory Group as per NIRB Project Certificate No.006.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-14**
Re:	**Missing Wildlife Information**		

Request Made by Interested Party:

The Main Application Document outlines several changes that will be made with the approval of the new water licence amendment, including temporary ore stockpiles, tailings storage facility capacity increase, waste rock storage facilities, increased fuel storage at Rankin Inlet, increased annual operational water use limits, a saline pond, contact water infrastructure, and dewatering of the lakes/ponds to support mining.

The Proponent has not indicated how these increased limits/capacities and new stockpiles/infrastructures/facilities will impact local wildlife, including migratory birds and federal Species at Risk (SAR) as listed under Schedule 1 of the Species at Risk Act (SARA). Loss of waterbodies, for example, may impact nesting species and habitat may be lost to new infrastructure and facilities.

ECCC requests that the Proponent provide details on how the water licence amendment would impact local wildlife, including migratory bird species. This should include information about what wildlife species are likely present in the area, including all migratory birds and Species at Risk that are likely to be present, their status, and details on day-to-day management.

Given that changes to the water licence amendment will impact local wildlife, ECCC requests that the Proponent review and update the TEMMP to reflect changes to wildlife that will occur.

Agnico Eagle's Response to Request:

Terrestrial environment is not part of the NWB process and is not subject to review under a Water Licence Amendment.

However, these components were addressed in the 2014 FEIS and approved by NIRB in 2015 under Project Certificate No.006. The TEMMP was provided to the NIRB in the 2014 FEIS (SD 6-4) and is reviewed and updated in collaboration with the Terrestrial Advisory Group as per NIRB Project Certificate No.006.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-15**
Re:	**Saline Effluent Treatment**		

Request Made by Interested Party:

Large quantities of saline water are generated from underground mine water and run-off from underground mine rock on the surface. The management of saline water is described in section 2.3.6.2 of the Main Application Document: "Saline water will be treated for ammonia (NH3) and TSS [total suspended solids] if required in the Saline Effluent Treatment Plant (SETP-WTC). A pre-treatment plant could be installed to complement the Saline Effluent Treatment Plant if required. Treated water will be conveyed via a waterline , and will be discharged at Itivia Harbour through a diffuser. Discharge will be done in accordance with MDMER applicable limits."

There are two generations of saline water treatment plants, one which is not in use and another which is under construction or just completed. Section 3.9.3 of the Water Management Plan describes the original Saline Water Treatment Plant as well as the difficulties encountered while operating the plant. The plant removed "total suspended solids (TSS), calcium chloride (CaCl2), sodium chloride (NaCl), metals, phosphorous (P), and nitrogen compounds" from saline water.

The new Saline Effluent Treatment Plant treatment technologies described in Section 3.9.4.2 of the Water Management Plan and the Saline Effluent Treatment Plant (SETP) Upgrade Design Report are a clarification unit for TSS removal and break-point chlorination treatment to remove ammonia, followed by excess chlorine removal and pH adjustment. The plan states "Commissioning of the new SETP within the WTC (SETP-WTC) is expected to take place in Q3 2023."

Treating saline effluent to meet discharge requirements is critical to the proposed water management strategy at Meliadine, which presently (starting in 2025) relies on discharging treated saline effluent at Itivia through the waterline. Some contingency measures are discussed in the Groundwater Management Plan, including increased storage as a short-term mitigation measure (Section 2.3.1.1) and monitoring and grouting as medium-term mitigation measures (Section 2.3.2.1). Given the difficulties related to saline effluent treatment in the past and present, as described in the Water Management Plan, further details should be provided on the effectiveness of proposed saline effluent treatment methods, as well as a discussion of contingency measures.

ECCC requests the Proponent:

a) Confirm if the new Saline Effluent Treatment Plant was commissioned in Q3 of 2023 as expected;

b) Describe possible conditions under which a pre-treatment plant would be installed to complement the Saline Effluent Treatment Plant, and what treatment technologies might be used;

c) Explain why the calcium and sodium chloride, metal and phosphorous removal that were included in the first plant design were no longer deemed necessary in the second plant design;

d) Describe the effectiveness of the proposed clarification and break-point chlorination at treating water of the quality of saline water from site to meet treatment objectives including Metal and Diamond Mining Effluent Regulations (MDMER) requirements for deleterious substances concentrations, pH and toxicity; and

e) Discuss any additional contingency measures specific to saline effluent treatment and management being considered.

Agnico Eagle's Response to Request:

Response to bullet a)

The SETP-WTC is expected to be commissioned once the waterline is available, which is anticipated in 2025. This will be updated in the Water Management Plan as part of the Annual Report process.

Response to bullet b)

The requirements of a pre-treatment plant will be determined if pre-testing indicates that specific parameters can not be treated effectively by the SETP-WTC alone. Currently, the Water Balance Water Quality Model Report (included as Appendix E of the Water Management Plan submitted with the Water Licence Amendment Application) predicts that ammonia would be the only parameter above MDMER guidelines, if discharge via waterline is untreated. It is also important to note that the SETP-WTC was designed with added redundancy to minimize the need of a pre-treatment plant.

Response to bullet c)

As noted in the Water Management Plan (Appendix F-21 of the Application, Section 3.93) the Saline Water Treatment Plan (SWTP) that was commissioned in 2018 was suspended in 2020 due to poor performance and is not currently a component of the groundwater (i.e., saline water) management strategy. The technology in the SWTP is not part of the technology for the Saline Effluent Treatment Plant (SETP) (described in Section 3.9.4.2 of Appendix F-21 of the Application).

Response to bullet d)

Agnico Eagle reminds parties that no changes to the design of the SETP-WTC have been made in this Water Licence Amendment application. The design report for the SETP-WTC (Agnico Eagle 2021) was accepted by the NWB on June 20, 2022, after distribution for public review and responses to parties' comments were confirmed satisfactory.

Response to bullet e)

Agnico Eagle will not discharge any water that does not meet MDMER requirements. An adaptive management strategy is in place (i.e., Adaptive Management Plan). Storage thresholds have been set to allow ample time to make adjustments to the mine plan and to proceed through any applicable regulatory processes, if required. The following triggers are in place regarding increasing on-site storage as adaptive management:

- Occupied saline contact water storage capacity on site reaches 80% of total available saline contact water storage capacity; or
- Available saline contact water storage volume on site is expected to reach capacity within 2 years.

When applying the collective short-, medium-, and long-term strategies together, as ECCC has reiterated in their last paragraph, it is not expected that either threshold will be reached.

References:

Agnico Eagle (Agnico Eagle Mines Limited). 2021. Design Report Saline Effluent Treatment Plant (SETP-WTC). December 2021.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-16**
Re:	**Identifying Lakes and Ponds to be Overprinted**		

Request Made by Interested Party:

Tables 2.3-2 and 2.3-3 in the Main Application Document provide a list of lakes and ponds that will be overprinted by the mine. These ponds have a distinct colour on Figure 1.2-1, however the individual lakes and ponds are not labelled in the figure. A figure identifying all lakes and ponds that will be overprinted by the proposed licence amendment is necessary for ECCC to confirm that these lakes and ponds are the same as those being discussed for inclusion in a Schedule 2 amendment under the MDMER.

ECCC requests that the Proponent provide a map clearly identifying and labelling all lakes and ponds that will be overprinted by the proposed water licence amendment.

Agnico Eagle's Response to Request:

Agnico Eagle met with ECCC on February 16, 2024 (via Microsoft Teams) and an outcome of the meeting was to provide the same requested map, clearly identifying and labelling all lakes and ponds to be included in the Schedule 2 Amendment under MDMER. This was provided on February 23, 2024 to ECCC (Angelique Petropoulos).

Further, Figures 2.2-1a-e of the Fish Offsetting Plan as provided in Appendix F-22 of the Application, provides the requested maps with labelled waterbodies that will be overprinted.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-17**
Re:	**Itivia Fuel Tank Farm Capacity**		

Request Made by Interested Party:

The water licence amendment includes increasing the fuel storage capacity at Itivia to 80 ML. Table 1.2-1 and sections 2.1 & 2.3.8 of the Main Application Document state that this volume was approved with the 2014 Final Environmental Impact Statement (FEIS). No specific section of the 2014 FEIS was cited.

The project description provided in Section 2.0 of the Nunavut Impact Review Board (NIRB) Project Certificate describes the facilities in Rankin Inlet as: "The Itivia area would consist of eight one-million litre tanks for fuel and a laydown area to temporarily store materials received during the open water barging season." This adds up to an 8 ML total capacity.

ECCC requests that the Proponent clarify why there is an order of magnitude difference in the Itivia fuel storage capacity between the NIRB project description in their certificate and the Proponent's 2014 FEIS.

Agnico Eagle's Response to Request:

The assessment and project was for 80 ML at Itivia, as was reflected in the Project Description of the 2014 FEIS. This is a typo within the project certificate as it was always assessed and presented with a total capacity of 80 ML.

Currently there are two existing tanks at Itivia fuel farm (one 13.5 ML tank and one 20 ML tank). Further, Agnico Eagle was just approved to construct two additional tanks (one 9 ML tank and one 4.5 ML) at the Itivia fuel farm for a combined total of 47 ML; therefore, it is clear there is a typo in the NIRB documents.

Specific citations within the 2014 FEIS assessment for 80 ML are as follows:

<u>Volume 2, Section 2.6.2.1 of the 2014 FEIS:</u>

> *The fuel storage tanks capacity in Rankin Inlet will be 80 ML stored in 8 x 10-million litre capacity tanks. The tanks will be field-erected steel tanks built to API-650 standards. They will be situated in a lined and bermed containment area capable of containing 110 % of the contents of the largest tank. The storage tanks and fuel-dispensing systems will be constructed in accordance with current regulatory requirements and fire regulations:*

Volume 2, Section 2.6.10.1 of the 2014 FEIS:

Table 2-58 Diesel Consumption Summary – Meliadine Project

Service	Consumption (L/y)
Mobile equipment (surface, OP and UG)	57,608,664
Power plant	64,579,198
Total	**122,187,862**
Fuel requirement - 9 months	*91,640,897*
Proposed Storage Capacity	**Litres**
Rankin Inlet (8 x 10 ML)	80,000,000
Meliadine (1 x 5.6 ML)	5,600,000

The Rankin Inlet fuel storage tanks will have the nominal capacity to store a 9-10 month fuel supply to allow the mine to continue operation between annual sealifts. The required capacity for this fuel tank farm is 80 ML (8 x 10 ML capacity tanks). The tanks will be field-erected steel tanks built to API-650 standards. They will be situated in lined and bermed containment areas capable of containing 110 % of the contents of the largest tank. Fuel loading and unloading stations will be located on an extension of the lined berm and on a concrete pad with appropriate slope toward the tank farm containment. The storage tanks and fuel-dispensing systems will be constructed in accordance with current regulatory requirements and fire regulations. The only fuel stored within this facility will be light fuel oil.

Volume 2, SD 2-3 (Hazardous Materials Management Plan), Section 5.2:

The storage tank at the Meliadine site will have a capacity of 5.6 million litres and will be refuelled via tanker trucks from the Rankin Inlet tank farm. The Rankin Inlet tank farm will consists of 8x10 million liter tanks, for a total capacity of up to 80,000,000 L of diesel. The tanks will be single-walled, constructed of welded steel and tanks and storage locations designed and constructed to meet the CCME guidelines for Aboveground Storage Tank Systems Containing Petroleum and Allied Petroleum Products. The fuel unloading facility in each area will include a sloped lined pad to prevent contamination of the receiving environment. A continuous 60 mm high-density, polyethylene liner sheet will be installed under the tanks and the internal sides of the berm. The containment area will be sized to hold 110 % of the volume of the largest tank.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-18**
Re:	**Waterline Approval**		

Request Made by Interested Party:

Contradictory information is presented on the approval stage of the proposed waterline to transmit water from site to Itivia Harbour. For 2024 water management activities, the main body of the Water Management Plan includes "Anticipated Waterline installation, pending required regulatory approval". Yet the introduction of the Groundwater Management Plan refers to "the approved Waterline". The groundwater management strategy presently relies on using the waterline to transmit water for discharge at Itivia in 2025.

ECCC requests that the Proponent clarify what regulatory approvals are pending for the waterline installation, and their contingency plans if there are delays in approval.

Agnico Eagle's Response to Request:

Agnico Eagle confirms that no regulatory approvals are pending. The waterline is not yet in operations as it is under construction, and we are maintaining a schedule to have the waterline commissioned by 2025.

Interested Party:	**ECCC**	**Rec No.:**	**ECCC-CC-19**
Re:	**Climate Change Considerations**		

Request Made by Interested Party:

In the Water Management Plan, the Proponent refers to studies provided by Okane Consulting, titled "OKC 2022a" and "OKC 2022b", when describing the use of climate change projections. ECCC was not able to find either of these references cited in the reference list or provided in the application package. Details on the rationale and methods for the selection of climate change projections for use remain unclear (e.g. why was Representative Concentration Pathway (RCP) 4.5 selected). As a general recommendation for considering the project's resilience to a changing climate, ECCC suggests that the Proponent consult the Draft technical guide related to the Strategic Assessment of Climate Change: Assessing climate change resilience for guidance on best practice.

ECCC requests that the Proponent provide, as part of their application package, a list (and copies of the documents) of the relevant studies and plans that outline their consideration of potential climate change effects on this project, for review.

Agnico Eagle's Response to Request:

References to OKC 2022a and OKC 2022b were made in Appendix E (Water Balance Water Quality Model Report) of the Water Management Plan and cited in the reference list as:

1. OKC (Okane Consultants Ltd.). (2022a). Meliadine Tailings Storage Facility Thermal Modelling. Ref No. 948-029-002 Rev 5. Prepared for Agnico Eagle Mines Ltd. By Okane Consultants Ltd. February 14, 2022.
2. OKC (Okane Consultants Ltd.). (2022b). Thermal Modelling of Meliadine WRSFs. Ref No. 948-021-005 Rev 5. Prepared for Agnico Eagle Mines Ltd. by Okane Consultants Ltd. February 14, 2022.

Agnico Eagle has provided the above reports as Appendix C of this response package and clarifies that RCP 4.5 was taken from Government of Canada's climate change scenarios from the Coupled Model Intercomparison Project Phase 5 (CMIP5). The results of the climate scenarios from the CMIP5 climate models were used in the Intergovernmental Panel on Climate Change (IPCC) Assessment Report (AR5). In the AR5, the IPCC adopted new representative concentration pathways (RCPs) to replace their previous emission scenarios of the Special Report on Emission Scenarios (SRES). The intermediate scenario, RCP 4.5, was adopted for Meliadine Mine because it consistent with current permitted conditions and represents a reasonably conservative case. The projected long-term air temperatures from the climate change scenario RCP 4.5 are warmer than the A1B scenario in the "Technical Guide; Infrastructure in permafrost: A guideline for climate change adaptation" (Canadian Standards Association, 2010), which was the approved base case in the 2014 FEIS.

In summary, the Water Balance Water Quality Model Technical Report (Lorax 2024) integrates key elements of the climate studies (OKC, 2020a and 2020b) to provide meaningful conclusions for guiding water management at Meliadine Mine.

References:

Canadian Standards Association (CSA). 2010. Technical Guide; Infrastructure in permafrost: A guideline for climate change adaptation. 2010. Government of Canada. Canadian Climate Data and Scenarios (CMIP5). http://climate-scenarios.canada.ca/?page=main

Lorax (Lorax Environmental Services Ltd.). 2024. Meliadine Mine Water Balance Water Quality Model Technical Report. January 25, 2024.

FISHERIES AND OCEANS CANADA (DFO)

Interested Party:	**DFO**	**Rec No.:**	**DFO-TRC-04**
Re:	**Mitigation for Watershed A and B**		

Request Made by Interested Party:

Mitigation measures to maintain water levels in watershed A and B are not included in the water management plan. Watershed A is a known spawning habitat for Arctic Grayling and habitat for Arctic Char. Watershed B is Arctic Char habitat. These measures should aim at maintaining water levels to allow for important biological functions of fish population present in the watershed. AEM had committed to evaluate options to maintain flows in Watersheds A and B.

Agnico Eagle's Response to Request:

Future open pit mining at the Meliadine Mine will impact the headwaters and upper reaches of the A-chain and B-chain watersheds, resulting in a reduction or loss of flow to downstream areas. The reductions in flows will reduce the available habitats for the existing fish community. Agnico Eagle has included these waterbodies and watercourses in the calculations of fish habitat losses, and they will be fully offset with the current offsetting plan.

For the A Watershed, the final plan and schedule may include a constructed channel or a pipeline; this plan will be completed prior to construction of the works, and duration of the pumping operation will be defined.

For the B watershed, a Conceptual Design for a channel to divert headwater flows is provided as Appendix F in the latest version of the Offsetting Plan. Additional refinements to the design will consider diversification of substrates, placement of larger stone for velocity breaks and cover, infrequent pools, and a low-flow channel.

Interested Party:	**DFO**	**Rec No.:**	**DFO-TRC-05**
Re:	**Fish Offsetting Plan**		

Request Made by Interested Party:
DFO FFHPP requests that AEM provide the most up to date fish offsetting plan including data collected in 2023. Including but not limited to: Fish communities in waterbodies and watercourse in the project, fishing effort, fish habitat assessed, habitat quality rankings etc.

Agnico Eagle's Response to Request:
Agnico Eagle confirms the updated Fish Offsetting Plan was submitted to DFO on February 15, 2024, as part of the Request for Review process and included data collected in 2023.

APPENDIX A: STABILITY ANALYSES OF WASTE ROCK STORAGE FACILITIES

(pdf provided as a stand-alone file)

APPENDIX B: WATER BALANCE WATER QUALITY MODEL (WBWQM) REPORT FIGURES

(pdf provided as a stand-alone file)

APPENDIX C: OKANE CLIMATE REPORTS

(pdf provided as a stand-alone file)