



Arctic / Ontario and Prairies Regions
Fish and Fish Habitat Protection Program
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Yellowknife, Northwest Territories
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Régions de l'Arctique / Ontario et Prairies
Programme de protection du poisson et de son habitat
301 – 5204 50th Ave. (Franklin)
Yellowknife, Territoires du Nord-Ouest
X1A 1E2

June 20, 2024

Your file *Votre référence*
NIRB 125515 / 11MN034

Our file *Notre référence*
11-HCAA-CA7-00014

Nunavut Impact Review Board
Attn: Leah Klaassen
Impact Assessment Officer
PO Box 1360 (29 Mitik Str.)
Cambridge Bay, NU
X0B 0C0

Via email to : info@nirb.ca

Subject: Comment Request for Agnico Eagle Mines Limited's Meliadine Gold Mine Project 2023 Annual Report

Dear Leah Klaassen,

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your request for comments on April 19, 2024. DFO has reviewed the above 2023 Annual Report in regards to its mandate, i.e. the management, protection and conservation of fish and their habitats. The Nunavut Impact Review Board (NIRB) invited parties to respond to the following topics:

1. Effects monitoring
 - a) Whether the conclusions reached by Agnico Eagle Mines in the 2023 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.
2. Compliance monitoring
 - a) Provide a summary of any compliance monitoring and/or site inspections undertaken in association with the Project, including specifically;
 - Identify the terms and conditions from the Project Certificate which have been incorporated into any permits, certificates, licences or other approvals issued for the Project, where applicable;
 - b) A summary of any inspections conducted during the 2023 reporting period, and the results of these inspections; and

- c) A summary of Agnico Eagle's compliance status with regards to authorizations that have been issued for the Project.

Specifically, DFO has reviewed the following:

- 2023 Annual Report
- Appendix 4 – Water Balance and Water Quality Model;
- Appendix 5 – CP1 Nutrient Predictions;
- Appendix 6 – Annual Geotechnical Inspection Report
- Appendix 7 – 2022 Annual Geotechnical Report Agnico Eagle Responses and Action Table
- Appendix 8 – 2023 Annual Geotechnical Report Agnico Eagle Responses and Action Table
- Appendix 14 – 2023 Reportable Spills;
- Appendix 15 – 2023 Non-Reportable Spills;
- Appendix 17 – 2023 Aquatic Ecosystem Monitoring Program (AEMP) Report;
- Appendix 21 – 2022 Blast Monitoring Memo;
- Appendix 27 – 2023 Marine Mammal and Seabird Observation Report; and
- Appendix 28 – 7 – Roads Management Plan
- Appendix 28 – 9 – Water Management Plan
- Appendix 38 – 2022 Annual Report Comments Tracking Table.

Performance on Project Certificate Terms and Conditions 30, 31, 33 and 34 (Freshwater Aquatic Environment); and 76, 77, 78, 79, and 80 (Marine Wildlife) were incorporated under DFO's review of the 2023 Annual Report.

DFO provides the following comments for the NIRB's consideration:

1. Effects Monitoring

- a. Whether the conclusions reached by Agnico Eagle Mines in the 2023 Annual Report are valid;

DFO is generally agreeable with Agnico Eagle Mine's reporting

- b. Any areas of significance requiring further supporting information or any changes to the monitoring program which may be required.

DFO has the following comments or concerns to provide at this time related to effects monitoring.

Comment Number:	DFO-1
Subject/Topic:	Erosion of CP1 Berm
References:	Appendix 6: Annual Geotechnical Inspection Report, Sec 5.2; 38 – 2022 Annual Report Comments Tracking Table

Comment:	<p>Gap/Issue: This item was identified in the review of the 2022 Annual Report but was not addressed in the 2023 Annual Report. It remains a concern for DFO.</p> <p>Erosion issues were previously identified in the CP1 Berm and a toe berm was constructed downstream of the CP1 Berm.</p>
Conclusion/Request:	AEM to provide details on if the toe berm construction interacted with Fish or Fish Habitat and whether erosion resulted in sediment being mobilized to the aquatic environment downstream of CP1.

Comment Number:	DFO-2
Subject/Topic:	Culverts
References:	Appendix 6: Annual Geotechnical Inspection Report, Sec 12 & 13; Appendix 7; Appendix 8; Appendix 27-7 Roads Management Plan; and Appendix 27-9 Water Management Plan
Comment:	<p>Gap/Issue: Some culverts on the AWAR and Rankin Inlet Bypass Road are undersized for flow and more than half of the culverts inspected show signs of erosion. The roads (AWAR and Rankin Inlet Bypass Road) are blocking flow causing ponding of water at identified locations.</p> <p>The Annual report identifies for work in 2024, Culverts 7 and 10 along the AWAR and Culvert 11 along the Rankin Inlet Bypass Road as requiring replacement to ensure fish passage and one additional location along the AWAR (near KM 15) requiring further fish habitat assessment. As work is ongoing and planned for 2024, DFO notes the importance of maintain fish passage through these watercourses and looks forward to reviewing this work when it is completed.</p>

Comment Number:	DFO-3
Subject/Topic:	Location Data of Shipping Vessels
References:	Appendix 27: Meadowbank and Meliadine Mines Marine Mammal and Seabird Report, 2023; 38 – 2022 Annual Report Comments Tracking Table
Comment:	<p>Gap/Issue : This item was identified in the review of the 2022 Annual Report but was not addressed in the 2023 Annual Report. It remains a concern for DFO.</p> <p>Project Certificates 004, 006, and 008 require vessels supplying the Meadowbank Complex and Meliadine</p>

	<p>mines to avoid sensitive marine mammal and seabird habitats such as haul-outs and breeding colonies.</p> <p>Ongoing outages for location data of ships has been an issue - AEM has previously stated that “Additional effort will be made to ensure Groupe Desgagnés provides accurate track data to Agnico Eagle”. However, vessels have had AIS issues lasting 12 hours to several days. The 2023 Annual Report did not contain the vessel tracking data so it is uncertain if this issue persists.</p>
Conclusion/Request:	<p>Proponent to provide additional details on the “Additional effort” being implemented to ensure accurate vessel tracks, and compliance with setbacks from sensitive habitats.</p> <p>Proponent to provide a summary of satellite outages and missing location data for 2023 shipping.</p>

Comment Number:	DFO-4
Subject/Topic:	Marine Mammal Monitoring Program
References:	Appendix 27: Meadowbank and Meliadine Mines Marine Mammal and Seabird Report, 2023
Comment:	<p>Gap/Issue: This item was identified in the review of the 2022 Annual Report but was not addressed in the 2023 Annual Report. It remains a concern for DFO.</p> <p>Current Marine Mammal Monitoring survey efforts (1 survey per day, lasting 1.5-2 hours) are not sufficient for effective marine mammal monitoring.</p>
Conclusion/Request:	DFO to work with the proponent to update their marine mammal monitoring protocol and include increased monitoring efforts.

Comment Number:	DFO-5
Subject/Topic:	Aquatic Invasive Species
References:	Shipping Management Plan (Version 4); 38 - 2022 Annual Report Comments Tracking Table
Comment:	<p>Gap/Issue: This item was identified in the review of the 2022 Annual Report but was not addressed in the 2023 Annual Report. It remains a concern for DFO.</p> <p>Current monitoring plans do not include a monitoring program for aquatic invasive species.</p>

	There is a risk of introducing aquatic invasive species through haul contamination from ships coming from Quebec. The Shipping Management Plan requires the shipping companies contracted to supply the Meliadine Mine through the annual sea-lift operations to comply with the Ballast Water Regulations, which reduces the risk of invasive species being introduced as a result of shipping activities, but does not eliminate this risk so that monitoring for the occurrence of aquatic invasive species is would be required to confirm this.
Conclusion/Request:	<p>Proponent to consider a non-Indigenous Species/Aquatic Invasive Species Monitoring Program around zones of higher risk.</p> <p>Proponent to provide specific monitoring and mitigation measure that are being conducted, including but not limited to any ballast water treatment, monitoring for aquatic invasive species, any haul clean-up and maintenance protocols, etc.</p>

Comment Number:	DFO-6
Subject/Topic:	Underwater Noise
References:	Shipping Management Plan / MMSO / Noise Monitoring; 38 - 2022 Annual Report Comments Tracking Table
Comment:	<p>Gap/Issue: This item was identified in the review of the 2022 Annual Report but was not addressed in the 2023 Annual Report. It remains a concern for DFO.</p> <p>Underwater noise from shipping vessels has the potential to elicit disturbance effects on marine mammals by reducing their ability to travel, communicate, and find food.</p> <p>During the 2023 shipping season, 23 vessel trips served the project. We currently do not know what noise level and characteristic is produced by those shipping vessels and the potential impact on marine mammals.</p> <p>The FEIS predicted the residual environmental effect of a change in marine mammal behaviour as a result of Project vessel noise to be low in magnitude, However there is no monitoring of noise levels to confirm this.</p>
Conclusion/Request:	DFO to work with the Proponent to monitor and model their noise footprint using expert support. This model should aim at evaluating the impact of shipping noise on marine mammals present on the shipping route. A

	Shipping Management Plan should be updated according to the model.
Comment Number:	DFO-7
Subject/Topic:	Appendix on fish and fish habitat
References:	NA
Comment:	<p>Gap/Issue: This item was identified in the review of the 2022 Annual Report but was not addressed in the 2023 Annual Report. It remains a concern for DFO.</p> <p>The Meliadine Mine Project reporting does not include an appendix specific to fish and fish habitat. Such a report is provided by AEM for the Meadowbank complex and allows Fisheries and Oceans Canada to efficiently monitor compliance with the Fisheries Act.</p>
Conclusion/Request:	<p>Proponent to provide an appendix including, but not limited to:</p> <ul style="list-style-type: none"> • Report on death of fish; • Report on Harmful Alteration, Disruption and Destruction of fish habitat; • Report on fish passage issues; • Fish-out activities; • Measures implemented to avoid and mitigate impacts to fish or fish habitat; and • Offsetting activities.

If you have any questions with the content of this letter, please contact Derek Donald by email at Derek.Donald@dfo-mpo.gc.ca. Please refer to the file number referenced above when corresponding with the Program.

Sincerely,



Chris Shapka
Senior Biologist
Fish and Fish Habitat Protection Program
Fisheries and Oceans Canada

CC:
José Audet-Lecouffe, Fisheries and Oceans Canada
Derek Donald, Fisheries and Oceans Canada