



Arctic Regions
Fish and Fish Habitat Protection Program
301 – 5204 50th Ave. (Franklin)
Yellowknife, Northwest Territories
X1A 1E2

Régions de l'Arctique
Programme de protection du poisson et de son habitat
301 – 5204 50th Ave. (Franklin)
Yellowknife, Territoires du Nord-Ouest
X1A 1E2

June 27, 2024

Your file *Votre référence*
03MN107, 16MN056

Our file *Notre référence*
16-HCAA-00370, 20-HCAA-00275

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: 03MN107 & 16MN056 – Agnico Eagle – Meadowbank Gold Mine and Whale Tail Pit Projects (Meadowbank Complex) – 2023 Annual Monitoring Report

Dear Leah Klaassen,

The Fish and Fish Habitat Protection Program of Fisheries and Oceans Canada (DFO) received your request for comments on April 29, 2024. DFO has reviewed the above 2023 Annual Monitoring 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 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
 - i. 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;
 - ii. A summary of any inspections conducted during the 2023 reporting period, and the results of these inspections; and

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

Specifically, DFO has reviewed the 2023 Meadowbank Complex Annual Report (Performance on Project Certificate Terms and Conditions) and the following Appendices:

- Appendix 7 - Meadowbank and Whale Tail 2023 Geotechnical Inspection Report
- Appendix 10 - Meadowbank and Whale Tail 2023 Annual Geotechnical Recommendation Implementation Plan
- Appendix 11 - Meadowbank 2023 Geomechanical Inspection Implementation Plan
- Appendix 12 - Whale Tail 2023 Geomechanical Inspection Implementation Plan
- Appendix 13 - Meadowbank Water Management Plan Version 12
- Appendix 14 - Whale Tail Water Management Plan Version 12
- Appendix 16 - Meadowbank Predicted Water Quantity and Quality (2012-2023)
- Appendix 22 - Meadowbank and Whale Tail Spill Contingency Plan Version 21
- Appendix 23 - Meadowbank 2023 GN Spill Reports
- Appendix 24 - Whale Tail 2023 GN Spill Reports
- Appendix 25 - Meadowbank OPEP and OPMP Version 17
- Appendix 26 - Meadowbank and Whale Tail 2023 CREMP Report
- Appendix 27 - Whale Tail 2023 Mercury Monitoring Program Report
- Appendix 31 - Whale Tail 2023 Report on the Implementation of Measures to Avoid and Mitigate Serious Harm
- Appendix 32 - Meadowbank and Whale Tail 2023 Marine Mammal and Seabird Report
- Appendix 33 - Meadowbank and Whale Tail Blast Monitoring Program Version 9
- Appendix 34 - Meadowbank and Whale Tail 2023 Blast Monitoring Report
- Appendix 37 - Whale Tail 2023 Fish Habitat Offsets Monitoring Report
- Appendix 38 - Meadowbank 2023 Habitat Compensation Monitoring Report
- Appendix 39 - Meadowbank and Whale Tail 2023 Wildlife Monitoring Summary Report

DFO provides the following comments for the NIRB's consideration

1. Effects Monitoring

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

DFO is generally agreeable with Agnico Eagle'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 and concerns related to effects monitoring:

Comment Number:	DFO-1
Subject/Topic:	Fish passage at road crossings
References:	Appendix 7: Meadowbank and Whale Tail 2023 Annual Geotechnical Inspection; Appendix 10 - Meadowbank and Whale Tail 2023 Annual Geotechnical Recommendation Implementation Plan; Appendix 31: Whale Tail 2023 Report on the Implementation of Measures to Avoid and Mitigate Serious Harm
Comment:	<p>Gap/Issue: Culverts crossing fish bearing waters along the Awarua and Waihi Rivers requiring repair maintenance.</p> <p>The annual report does not identify issues with culverts affecting fish passage. The annual report does not provide a plan for repair/replacement. This was a commitment made by the proponent in response to comments on the 2022 Annual Report.</p> <p>Appendix 10 - Meadowbank and Whale Tail 2023 Annual Geotechnical Recommendation Implementation Plan; states that along the Awarua “<i>Close monitoring of the culverts will be performed by AEM at freshet...</i>” which has “<i>not started.</i>”</p>
Conclusion/Request:	Proponent to provide a list of culverts along the Waihi and Awarua which cross fish bearing waters and if these require repair or replacement. Proponent to provide a plan for repair or replacement of damaged and obstructed culverts prioritizing repairs to culverts with potential to affect fish passage and those affecting fish and fish habitat.

Comment Number:	DFO-2
Subject/Topic:	Location Data of Shipping Vessels
References:	Appendix 32: Meadowbank and Whale Tail 2023 Marine Mammal and Seabird Report, 2023
Comment:	<p>Gap/Issue : Project Certificates 004, 006, and 008 require vessels supplying the Meadowbank Complex and Meliadine 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 continue to have ongoing Automatic Identification System issues lasting 12 hours or more between fixes.</p> <p>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 any 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-3
Subject/Topic:	Marine Mammal Monitoring Program
References:	Appendix 32: Meadowbank and Whale Tail 2023 Marine Mammal and Seabird Report, 2023
Comment:	Gap/Issue: Current Marine Mammal Monitoring survey efforts (1 survey per day, lasting 1.5-2 hours) are not sufficient for effective marine mammal monitoring
Conclusion/Request:	DFO to work with the proponent to update their marine mammal monitoring protocol and include increased monitoring efforts.

Comment Number:	DFO-4
Subject/Topic:	Aquatic Invasive Species
References:	Shipping Management Plan (Version 4);
Comment:	<p>Gap/Issue: Current monitoring plans do not include a monitoring program for aquatic invasive species.</p> <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 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 required to confirm this.</p>
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 measures 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-5
Subject/Topic:	Underwater Noise
References:	Shipping Management Plan (Version 4)
Comment:	<p>Gap/Issue: 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</p>

	<p>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 was considered to be low in magnitude, however the likelihood of behavioural disturbance from Project-related vessel noise was considered likely. However there is no monitoring of noise levels to help understand and mitigate these effects.</p>
Conclusion/Request:	<p>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.</p>

2. Compliance Monitoring

- 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;

For Project Certificate No. 004 Amendment 3, Terms and Conditions 30, 31, 46, 47, 49, 50, 53, 85 were incorporated into Fisheries Act Authorizations

For Project Certificate No. 008 Amendment 1, Terms and Conditions 19, 20, 21, 22, 23, 24, 46, 47, 50, 51 and 52 were incorporated into Fisheries Act Authorizations.
 - ii. A summary of any inspections conducted during the 2023 reporting period, and the results of these inspections

No compliance monitoring or site visits/inspections were conducted by DFO in 2023.
 - iii. A summary of Agnico Eagle's compliance status with regard to authorizations that have been issued for the Project.

The proponent is largely compliant with the terms and conditions that pertain to DFO's mandate. DFO will continue to work with the proponent to ensure compliance.

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,

A handwritten signature in black ink, appearing to read 'Chris Shapka', with a stylized, flowing script.

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

CC:
Chris Shapka, Fisheries and Oceans Canada
Derek Donald, Fisheries and Oceans Canada