



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Arctic Regions  
Fish and Fish Habitat Protection Program  
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Yellowknife, Northwest Territories  
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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 25, 2024

*Your file*      *Votre référence*  
2AM-MEA1530, 2AM-WTP1830

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

Nunavut Water Board  
Attn: Richard Dwyer  
Manager of Licensing  
PO Box 119  
Gjoa Haven, NU  
X0B 1J0

Via email to : richard.dwyer@nwb-oen.ca

**Subject: Comment Request for Agnico Eagle Mines Limited's Meadowbank Gold Mine and Whale Tail Pit Projects (Meadowbank Complex) 2023 Annual Monitoring Report**

Dear Richard Dwyer,

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your request for comments on April 9, 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.

Specifically, DFO has reviewed the following:

- 2023 Annual Report
- 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 OPPP 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 for the NWB's consideration.

DFO is generally agreeable with Agnico Eagle Mine's reporting and has the following comments or concerns to provide at this time.

<b>Comment Number:</b>	DFO-1
<b>Subject/Topic:</b>	Fish passage at road crossings
<b>References:</b>	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
<b>Comment:</b>	<p>Gap/Issue: Culverts crossing fish bearing waters along the AWAR and WTHR 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;</p>

	states that along the AWAR “ <i>Close monitoring of the culverts will be performed by AEM at freshet...</i> ” which has “ <i>not started.</i> ”
<b>Conclusion/Request:</b>	Proponent to provide a list of culverts along the WTHR and AWAR 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.

<b>Comment Number:</b>	DFO-2
<b>Subject/Topic:</b>	Location Data of Shipping Vessels
<b>References:</b>	Appendix 32: Meadowbank and Whale Tail 2023 Marine Mammal and Seabird Report, 2023
<b>Comment:</b>	<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>
<b>Conclusion/Request:</b>	<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>

<b>Comment Number:</b>	DFO-3
<b>Subject/Topic:</b>	Marine Mammal Monitoring Program
<b>References:</b>	Appendix 32: Meadowbank and Whale Tail 2023 Marine Mammal and Seabird Report, 2023
<b>Comment:</b>	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
<b>Conclusion/Request:</b>	DFO to work with the proponent to update their marine mammal monitoring protocol and include increased monitoring efforts.

<b>Comment Number:</b>	DFO-4
<b>Subject/Topic:</b>	Aquatic Invasive Species
<b>References:</b>	Shipping Management Plan (Version 4);
<b>Comment:</b>	<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 though 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 be required to confirm this.</p>
<b>Conclusion/Request:</b>	<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</p>

	for aquatic invasive species, any haul clean-up and maintenance protocols, etc.
<b>Comment Number:</b>	DFO-5
<b>Subject/Topic:</b>	Underwater Noise
<b>References:</b>	Shipping Management Plan (Version 4)
<b>Comment:</b>	<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 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>
<b>Conclusion/Request:</b>	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.

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

Sincerely,

A handwritten signature in dark 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