## Fisheries and Oceans Canada

Pêches et Océans Canada

301-5204 50th Avenue Fish and Fish Habitat Protection Program Yellowknife, NT X1A 1E2

June 24, 2024

Your file Votre référence 2AM-MEL1631

Our file Notre référence 11-HCAA-CA7-00014

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 Meliadine Gold Mine Project 2023 Annual 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 5, 2024, including updated appendices 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.

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 Reponses and Action Table
- Appendix 8 2023 Annual Geotechnical Report Agnico Eagle Reponses 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.



The Nunavut Water Board (NWB) invited parties to submit comments. 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.

Comment Number:	DFO-1
Subject/Topic:	Culverts
References:	Appendix 6: Annual Geotechnical Inspection Report, Sec
	15 & 16; Appendix 7; Appendix 8; Appendix 28-7 Roads
	Management Plan; and Appendix 28-9 Water Management
	Plan
Comment:	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.
	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.

<b>Comment Number:</b>	DFO-2
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:	Gap/Issue: This item was identified in the review of the 2022 Annual Report and remains a concern for DFO. 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.
	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

	Annual Report did not contain the vessel at a so it is uncertain if this issue persists.
Conclusion/Request:  Proponent effort bein and compl  Proponent	to provide additional details on any additional g implemented to ensure accurate vessel tracks, iance with setbacks from sensitive habitats.  to provide a summary of satellite outages and cation data for 2023 shipping.

<b>Comment Number:</b>	DFO-3
Subject/Topic:	Marine Mammal Monitoring Program
References:	Appendix 27: Meadowbank and Meliadine Mines Marine
	Mammal and Seabird Report, 2023
<b>Comment:</b>	Gap/Issue: This item was identified in the review of the
	2022 Annual Report and remains a concern for DFO.
	•
	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.

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

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	monitoring for the occurrence of aquatic invasive species is be required to confirm this.
Conclusion/Request:	Proponent to consider a non-Indigenous Species/Aquatic Invasive Species Monitoring Program around zones of higher risk.
	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.

<b>Comment Number:</b>	DFO-5
Subject/Topic:	Underwater Noise
References:	Shipping Management Plan / MMSO / Noise Monitoring;
	38 - 2022 Annual Report Comments Tracking Table
Comment:	Gap/Issue: This item was identified in the review of the
	2022 Annual Report and remains a concern for DFO.
	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.
	100d.
	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.
	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
G I I I	understand and mitigate these effects.
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.
	to the model.

<b>Comment Number:</b>	DFO-6
Subject/Topic:	Appendix on fish and fish habitat
References:	NA

Comment:	Gap/Issue: The annual reporting would benefit from the
	inclusion of an appendix specific to fish and fish habitat,
	similar to that provided by AEM for the Meadowbank
	complex. This would allow Fisheries and Oceans Canada
	to more efficiently review relevant information in the
	annual report, including compliance with the Fisheries Act.
Conclusion/Request:	DFO to work with proponent to develop an appendix to the
	annual report that will include the following:
	<ul> <li>Report on death of fish;</li> </ul>
	Report on Harmful Alteration, Disruption and
	Destruction of fish habitat;
	<ul> <li>Report on fish passage issues;</li> </ul>
	• 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 <a href="mailto:Derek.Donald@dfo-mpo.gc.ca">Derek.Donald@dfo-mpo.gc.ca</a>. 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