



AUTHORIZATION FOR WORKS OR UNDERTAKINGS AFFECTING FISH HABITAT

Authorization issued to:

Agnico-Eagle Mines Ltd.
Meadowbank Division
#375 - 555 Burrard Street
Two Bentall Centre
Vancouver, British Columbia
V7X 1M8

Location of Project

The Meadowbank Gold Project is located 70 kilometres north of Baker Lake in the Kivalliq Region of Nunavut, Canada.
Latitude 65°0'0" North, Longitude 96°0'0"

Valid Authorization Period

The valid authorization period for the harmful alteration, disruption or destruction of fish habitat associated with the works or undertakings described in Table 1 and within this authorization is:

From: To:
Date of Issuance December 31, 2015

The valid periods for other conditions of the authorization are as set out below.

Description of Works or Undertakings (Type of work, schedule, etc.)

The harmful alteration, disruption or destruction hereby authorized is the infilling and dewatering of fish habitat as a result of the following works or undertakings listed in Table 1.

Table 1: Works or Undertakings resulting in a harmful alteration, disruption or destruction of fish habitat.

Location	Work or Undertaking	Habitat Units Lost
Second Portage Lake	Construction of the east dike footprint (830 metres long)	39.28
	Construction of the west (central) dike footprint	22.27
	Dewatering of Second Portage basin	111.30
	Quarrying the Portage Pit	49.75
Third Portage Lake	Construction of the Goose Island dike footprint (1720 metres long)	73.46
	Construction of South Camp dike footprint (Bay Zone dike with length of 1480 metres)	1.00
	Dewatering of Third Portage basin	301.04
	Quarrying Goose Island Pit	61.07
	Quarrying the Portage Pit	35.16

	Finger Dike Habitat Footprint	46.95
Total		741.28

Conditions of Authorization

1. The conditions of this Authorization notwithstanding, should the above works or undertakings, due to weather conditions, different soil or other natural conditions, or for any other reason, appear, in the opinion of the Department of Fisheries and Oceans ("DFO") likely to cause greater impacts than the parties previously contemplated, then DFO may direct Agnico-Eagle Mines Ltd. (hereafter referred to as the "Proponent"), and its agents, and contractors, to suspend or alter works and activities associated with the project, to avoid or mitigate adverse impacts to fisheries resources. DFO may also direct the Proponent and its agents, and contractors, to carry out at the Proponent's expense any works or activities deemed necessary by DFO to avoid or mitigate further adverse impacts to fisheries resources. In circumstances where DFO is of the view that greater impacts may occur than were contemplated by the parties DFO may also modify or rescind this authorization. If the authorization is to be changed the Proponent will be given an opportunity to discuss any proposed modifications or rescission.
2. Conditions that relate to the Proponent plan:
 - 2.1. The Proponent confirms that all plans and specifications relating to this Authorization have been duly prepared and reviewed by appropriate professionals working on behalf of the Agnico-Eagle Mines Ltd. The Proponent acknowledges that they are solely responsible for all design, safety and workmanship aspects of all the works associated with this Authorization.
 - 2.2. The works or undertakings described in Table 1 shall comply with those criteria as identified within this Authorization. Harmful alteration, disruption or destruction of fish habitat other than that specifically identified within this Authorization is prohibited.
 - 2.3. Works and undertakings shall be conducted in accordance with the practices outlined in the following reports, and as approved by DFO:
 - 2.3.1. Application for Authorization for Works or Undertakings Affecting Fish Habitat, signed by Rachel Gould (Agnico-Eagle Mines Ltd.), dated May 28, 2008.
 - 2.3.2. Meadowbank Gold Project No-Net-Loss-Plan (NNLP), prepared by Azimuth Consulting Group Inc., dated November 2006.
 - 2.3.3. Technical Memorandum, RE: Cumberland Meadowbank NNLP – Habitat Compensation Addendum, prepared by Gary Mann and Randy Baker (Azimuth Consulting Group Inc.), dated February 7, 2007.
 - 2.3.4. Aquatic Effects Management Program, prepared by Cumberland Resources Ltd., dated October 2005.
 - 2.3.5. Report Addendum Detailed Design of Dewatering Dikes Meadowbank Gold Project, Golder Associates Ltd., dated July 12, 2007.
 - 2.3.6. Meadowbank Gold Project – Type A Water License Application, prepared by Meadowbank Mining Corporation, dated August 2007.
 - 2.3.7. Technical Memorandum Fish Habitat Compensation Structures – Meadowbank Gold Project, Nunavut, Document Number 585 ver.0, signed by Paolo Chiamello, Dan Walker and Nathan Schmidt (Golder Associates), dated February 13, 2008.
 - 2.3.8. Final Report Detailed Design of Dewatering Dikes Meadowbank Gold Project, 3 Volumes, Document No. 342, Ver. 0, prepared by Golder Associates, dated March 13, 2007.
 - 2.3.9. Report Addendum Detailed Design of Dewatering Dikes Meadowbank Gold Project, 3 Volumes, Document No. 492, Ver. 0, prepared by Golder Associates, dated July 12, 2007.
 - 2.3.10. Technical Memorandum – Fish-Out Program for the Meadowbank Gold Project, prepared by Ryan Hill and Gary Mann (Azimuth Consulting Group Inc.), dated May 30, 2008.
 - 2.3.11. Meadowbank Gold Project, Aquatic Effects Management Program Targeted Monitoring – Habitat Compensation Monitoring Plan, version 4, Project No. AEM-07-01, prepared by Azimuth Consulting Group Inc., dated May 2008.
 - 2.3.12. Proposed Water Quality Monitoring and Management Plan for Dike Construction and Dewatering at the Meadowbank Mine, Version 6, prepared Agnico-Eagle Mines Ltd., dated April 2008.
 - 2.3.13. No Net Loss Plan Implementation Cost Estimate & Construction Schedule – Meadowbank Gold Mine Project, Revision 1,

prepared by Agnico-Eagle Mines Ltd. – Meadowbank Division, dated July 08, 2008.

- 2.3.14. Meadowbank Type A Water License – Response to Pre-Hearing Commitments, signed by Rachel Gould (Agnico-Eagle Mines Ltd.), dated March 7, 2008.
- 2.3.15. The above document(s) and/or drawing(s) are hereafter referred to as the “proponent plan”.
3. Conditions that relate to the mitigation of potential harmful alteration, disruption or destruction (“HADD”) of fish habitat. The following measures shall be implemented to avoid unauthorized HADD of fish habitat:
- 3.1. A qualified biologist or environmental inspector shall be on site during all in-water construction, compensation and restoration works to ensure implementation of the designs as intended in the proponent plan and conditions of this Authorization.
- 3.2. Fish salvage methods shall be implemented as per the approved Fish-Out program at the Meadowbank Property for removing fish in the diked-off portions of Second Portage Lake and Third Portage Lake.
- 3.3. All materials and equipment used for the purpose of site preparation and project completion shall be operated and stored in a manner that prevents any deleterious substance (e.g. petroleum products, debris, etc.) from entering the water.
- 3.3.1. Any stockpiled materials shall be stored and stabilized above the ordinary high water mark of any water body.
- 3.3.2. Vehicle and equipment re-fuelling and maintenance shall be conducted above the ordinary high water mark of any water body.
- 3.3.3. Any part of equipment entering the water shall be free of fluid leaks and externally cleaned/degreased to prevent any deleterious substance from entering the water.
- 3.4. Only clean material free of fine particulate matter shall be placed in the water.
- 3.5. Sediment and erosion control measures shall be implemented prior to work, and maintained during the work phases, including decommissioning and restoration phases, to mitigate impacts to fish habitat.
- 3.5.1. All disturbed areas shall be stabilized upon completion of work and restored to a pre-disturbed state or better.
- 3.5.2. Sediment and erosion control measures shall be left in place and maintained until all disturbed areas have been stabilized
- 3.6. The Proponent shall develop and enforce a policy that prohibits fishing on Second Portage Lake and Third Portage Lake and surrounding lakes and streams by individuals on the mine site in a capacity as mine employee, contractor or visitor during all phases of mining activities, unless otherwise agreed to by DFO.
- 3.6.1. This Policy shall be made available and understood by individuals on the mine site in a capacity as mine employee, contractor or visitor during all phases of mining activities.
4. Conditions that relate to the compensation for the loss of **741.28** Habitat Units (HU) of fish habitat as defined in the proponent plan.
- 4.1. The Proponent shall ensure that fish habitat compensation efforts in Second Portage Lake and Third Portage Lake will achieve a total gained HUs:lost HUs ratio of 1.68 or better for the harmful alteration, disruption, or destruction of fish habitat. This shall be achieved as described in Table 2:

Table 2: Fish Habitat Compensation Features

Location	Fish Habitat Feature	Habitat Units Gained	Construction Schedule - Year(s)
Second Portage Lake	Re-flooded basin of Second Portage Lake (includes creation of shoals, reefs, and boulder gardens within the basin)	401.0	2015-2022
	Creation of six habitat shoals (Habitat Mounts)	8.2	2009-2011
	Creation of a reef (East Dike Finger Extension)	33.0	2009
Third Portage Lake	Breaching of Goose Island Dike	26.6	2025

	Re-flooded basin of Third Portage Lake (includes creation of shoals, reefs, and boulder gardens within the basin)	701.6	2015-2022
	Creation of a reef (Goose Island Dike Finger Extension – excludes the five finger dike extensions off Goose Island Dike)	81.6	2013
Total		1252.0	

- 4.2. Final detailed design plans and drawings for the inside dike shoals, reefs and boulder gardens in Second Portage and Third Portage Lakes shall be submitted to the Iqaluit, Nunavut office of Fisheries and Oceans Canada– Fish Habitat Management, Eastern Arctic Area by December 31, 2014, for review and subject to DFO approval.
- 4.3. If at any time the Proponent becomes aware that the compensatory habitat is not completed and/or functioning as described in the habitat compensation plan listed in condition 2.3 , it shall carry out any works which are necessary to ensure the compensatory habitat is completed and/or functioning as described in the approved No Net Loss plan.
- 4.4. The Proponent shall confirm that they shall leave the compensatory habitat undisturbed. After the compensatory habitat has been created the Proponent shall not carry on any work or undertaking that will adversely disturb or impact the compensatory habitat.
- 4.5. A **Contingency Plan** addressing alternative habitat compensation measures to be implemented to meet the required ratio of gainedHUs:lostHUs in the event the primary compensation plans fail either due to inability to construct as per the proponent plan, or failure of the habitat compensation measures to meet the criteria for success established in the Habitat Compensation Monitoring Plan, version 4, dated May 2008, shall be developed by the Proponent through consultation with impacted communities and/or the local Hunters and Trappers Organizations. These plans shall be submitted within **one (1) year** of the issuance of this Authorization to the Iqaluit, Nunavut office of Fisheries and Oceans Canada– Fish Habitat Management, Eastern Arctic Area for review and subject to DFO approval.

5. Conditions that relate to the **monitoring** of the proponent plan, the mitigation and the compensation is referred to as the “Monitoring Program”.

- 5.1. The Proponent shall undertake the Monitoring Program according to the approved proponent plan. The Monitoring Program shall determine whether the works were conducted within the schedule of the approved proponent plan, whether the design intent was met, whether the habitat features are functioning as intended and whether the mitigation measures outlined in the approved proponent plan and this Authorization were followed.
- 5.2. The stability and successful utilization of all fish habitat compensation features shall be assessed according to the methodology and schedule detailed in the Habitat Compensation Monitoring Plan, version 4, dated May 2008 and the No Net Loss Plan Implementation Cost Estimate & Construction Schedule – Meadowbank Gold Mine Project, Revision 1, dated July 08, 2008.
- 5.3. Detailed monitoring plans for Tier 2 and Tier 3 criteria as per condition 5.3.1. and 5.3.2, shall be submitted to the Iqaluit, Nunavut office of Fisheries and Ocean Canada– Fish Habitat Management, Eastern Arctic Area by **March 31, 2009** for review and subject to DFO approval.
 - 5.3.1. Tier 2 – Toxicity Testing
 - 5.3.2. Tier 3 – In-situ Biological Studies such as “Trout Egg Development” and “Periphyton on Modified Natural Substrate”
- 5.4. A photographic record of before, during and after construction, during decommissioning and post-restoration, shall indicate that all works and undertakings have been completed according to the approved proponent plan and conditions of this Authorization.
 - 5.4.1. The photographic record shall include, but not be limited to, a record of the sediment and erosion control measures and the fish habitat compensation measures.
 - 5.4.2. The photographs for each pre-construction, during construction, post-construction, decommissioning and post-restoration time periods shall be taken from the same vantage point(s) and general direction.
 - 5.4.3. All photographs shall be clearly labeled as to date and vantage point(s). The photographic vantage point(s) and viewing directions shall be indicated, and clearly indexed to the photographs, on a plan view drawing of the construction site(s).

6. Conditions that relate to Reporting

- 6.1. A written report and photographic record summarizing the results of the Monitoring Program undertaken as per condition 5. shall be submitted to the Iqaluit, Nunavut office of Fisheries and Oceans Canada– Fish Habitat Management, Eastern Arctic Area by **March 31** of each year following the monitoring year detailed in the No Net Loss Plan Implementation Cost Estimate & Construction Schedule – Meadowbank Gold Mine Project, Revision 1, dated July 08, 2008.

- 6.2. **As-Built Reports including engineer drawings** shall be submitted to the Iqaluit, Nunavut office of Fisheries and Oceans Canada– Fish

Habitat Management, Eastern Arctic Area within **six (6) months** of the respective completion of each fish habitat compensation effort identified in Table 2, with the exception of the six habitat shoals in Second Portage Lake, that demonstrates the application of the **approved No Net Loss Plan** referred to in condition 2.3.

- 6.3. **As-Built Reports including engineer drawings** shall be submitted to the Iqaluit, Nunavut office of Fisheries and Oceans Canada– Fish Habitat Management, Eastern Arctic Area within **eight (8) months** of the respective completion of each of the six habitat shoals in Second Portage Lake that demonstrates the application of the **approved No Net Loss Plan** referred to in condition 2.3.

7. Conditions that relate to the Security Deposit

- 7.1. The Proponent shall provide DFO with an irrevocable Letter of Credit as security for the completion and performance by the Proponent with regard to all of its obligations under this Authorization, including the required fish habitat compensation and monitoring, reporting, and additional work determined by DFO if required, according to the following schedule:
- a) two (2) weeks after the issuance date of this Authorization an amount of six million seven hundred and fifty thousand (\$6,750,000.00) dollars.
 - b) prior to commencement of Bay Zone dike construction an additional eight million eight hundred thousand (\$8,800,000.00) dollars.
- 7.2. The Proponent shall provide DFO with the following items at the time of the Contingency Plan submission according to condition 4.5:
- 7.2.1. A cost estimate report of the amount to cover the Contingency Plan's implementation costs.
 - 7.2.2. If the cost estimate for the implementation of the Contingency Plan exceeds the amount in the irrevocable Letter of Credit according to condition 7.1, the original irrevocable Letter of Credit shall be amended to reflect the greater amount and shall be submitted to the Iqaluit, Nunavut office of Fisheries and Oceans Canada– Fish Habitat Management, Eastern Arctic Area within two (2) weeks of DFO approval of the Contingency Plan.
- 7.3. The security deposit provided by the Proponent must be in a form agreed to by DFO.
- 7.4. The Proponent shall maintain the deposited amounts until all of the Proponent's obligations under this Authorization are satisfied.
- 7.5. At the discretion of DFO, the amount of the security deposit may be adjusted annually to account for fish habitat compensation completed or to accomplish additional work that DFO may require to satisfy the objectives of fish habitat compensation.
- 7.6. DFO shall be able to call on the security deposit unconditionally if the Proponent does not meet any of the requirements outlined within this Authorization, as determined solely by DFO.
- 7.7. To the extent not prohibited by law, the Proponent shall have the right to audit, from time to time with reasonable notice to DFO and at the Proponent's expense, any expenditure of funds withdrawn by DFO.
- 7.8. Once the Proponent has completed to the satisfaction of DFO all studies, reports and works required by DFO, DFO shall return to the Proponent any unused portion of the security deposit.
8. Any deviation from the approved proponent plans, the construction schedule, mitigation, compensation and/or monitoring measures stated above must be discussed with, and approved in writing by the Iqaluit, NU office of the Fisheries and Oceans Canada, Fish Habitat Management, Eastern Arctic Area.
9. All mitigation, compensation and monitoring measures shall be implemented, maintained and modified, as approved by DFO, to the satisfaction of the Iqaluit, NU office of the Department of Fisheries and Oceans, Habitat Management, Eastern Arctic Area.
10. Written notification of the commencement of works or undertakings shall be provided to the Iqaluit, NU office of the Department of Fisheries and Oceans, Habitat Management, Eastern Arctic Area, by e-mail to Amy.Liu@dfo-mpo.gc.ca or fax at (867) 979-8039 prior to the initiation of said works or undertakings.

The holder of this authorization is hereby authorized under the authority of section 35(2) of the *Fisheries Act*, R.S.C., 1985, c.F. 14, to carry out the work or undertaking described herein. This authorization is valid only with respect to fish habitat and for no other purposes. It does not purport to release the applicant from any obligation to obtain permission from or to comply with the requirements of any other regulatory agencies.

Failure to comply with any condition of this authorization may result in charges being laid under the *Fisheries Act*.

This authorization form shall be held on site and work crews shall be made familiar with the conditions therein.

DFO File No.: NU-03-0191
Referral File No.: 03-HCAA-CA7-00191
Authorization No.: 1

Date of Issuance: 30 July 2008

Approved by: 

Title: Robert Lambe
Regional Director General, Central and Arctic Region
