

Fisheries and Oceans Canada

Eastern Arctic Area

P.O. Box 358 Iqaluit, NU X0A 0H0 Phone: (867) 979-8000 Fax: (867) 979-8039

May 29, 2008

Pêches et Océans Canada

Secteur de l'Arctique de l'est

Boîte postale 358 Iqaluit, NU X0A 0H0 Tél: (867) 979-8000 Télécopieur: (867) 979-8039

> NWB file :8BC-TEH0708 DFO file : NU-08-0013

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

Dear Ms. Gould:

SUBJECT: Authorization for the harmful alteration, disruption or destruction of fish habitat pursuant to subsection 35(2) of the *Fisheries Act*

The harmful alteration, disruption or destruction of fish habitat arising from the infilling of fish habitat, as a result of culvert installation in the western channel connecting Second Portage Lake with Third Portage Lake, along Meadowbank Mine Access Road to accommodate pre-development activities, is hereby authorized pursuant to subsection 35(2) of the *Fisheries Act*. This Authorization shall be conditional upon implementation of mitigation and compensation measures specified on the attached document.

The environmental impacts of this undertaking have been reviewed by Fisheries and Oceans Canada in accordance with the *Canadian Environmental Assessment Act*. This review concluded that the project is not likely to cause significant adverse environmental effects if the mitigation and compensation measures specified are implemented. Furthermore, we have confirmed with the Nunavut Impact Review Board (NIRB) that the culvert installation in the westernmost channel will not require a re-screening by the NIRB as it is subject to the terms and conditions of NIRB's Project Certificate No. 004.

Failure to comply with any of the conditions specified on the attached Authorization may result in a contravention of section 35 of the *Fisheries Act*.

NOTE: None of the foregoing should be taken to imply Authorization of this undertaking in accordance with any section of the *Fisheries Act* other than section 35. Also note that Authorization under the *Fisheries Act* does not release the proponent from the requirements of any other federal, provincial or municipal legislation.

Please contact Amy Liu at (867) 979-8007 or by fax at (867) 979-8039 should you have any questions or require additional information.



DFO file: NU-08-0013

Sincerely,

Keith Pelley

Acting Area Director Eastern Arctic Area

Fisheries and Oceans Canada

Copy: Leslie Payette - Nunavut Impact Review Board

Julie Dahl – Fisheries and Oceans Canada Julian Lim – Fisheries and Oceans Canada Larry Connell – Agnico-Eagle Mines Ltd.

Jim Rogers – Indian and Northern Affairs Canada

Phyllis Beaulieu – Nunavut Water Board

DFO File No.:

NU-08-0013

Referral File No.:

08-HCAA-CA7-00013

Authorization No.:

AUTHORIZATION FOR WORKS OR UNDERTAKINGS AFFECTING FISH HABITAT

Authorization issued to:

Agnico Eagle Mines Ltd. #375 - 555 Burrard Street Two Bentall Centre Vancouver, BC V7X 1M8

Location of Project

The work or undertaking is located in the westernmost of the three channels connecting Second Portage and Third Portage Lakes on the Meadowbank property, located approximately 70 km north of the Hamlet of Baker Lake, Kivalliq Region, Nunavut.

Easting 638879.73; Northing 7213685.46

Valid Authorization Period

The valid authorization period for the harmful alteration, disruption or destruction of fish habitat associated with the work or undertaking is:

From

Τo

Date of Issuance

June 13, 2008

The valid authorization periods for the 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 of fish habitat hereby authorized is the *infilling* of fish habitat as a result of a temporary culvert installation along the Meadowbank mine access road, affecting 2700 square metres (1.01 Habitat Units) of fish habitat, on the westernmost channel connecting Second Portage and Third Portage Lakes.

Conditions of Authorization

- 1. The conditions of this Authorization notwithstanding, should the above works or undertaking, 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. (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 Agnico-Eagle Mines Ltd. Agnico-Eagle Mines Ltd. acknowledges that (s)he is solely responsible for all design, safety and workmanship aspects of all the works associated with this Authorization.
- 2.2. The construction must 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 not permitted.
- 2.3. Works will be conducted following the practices outlined in the following reports:
 - 2.3.1. Pre-Development Camp and Sewage Treatment Plant Description for the Meadowbank Project Site, Revision A, prepared by Larry Connell (Agnico-Eagle Mines Ltd.), dated March 5, 2008.
 - 2.3.2. Pre-development Closure and Reclamation Plan for the Meadowbank Project Site, Revision A, prepared by Larry Connell (Agnico-Eagle Mines Ltd.), dated March 5, 2008.
 - 2.3.3. Letter from Agnico-Eagle Mines Ltd. regarding the Meadowbank Gold Project Temporary Crossing at Western Channel, signed by Rachel Lee Gould (Agnico-Eagle Mines Ltd.), dated April 10, 2008.
 - 2.3.4. Letter from Agnico-Eagle Mines Ltd. regarding the Meadowbank Gold Project Temporary Crossing at Western Channel, signed by Martin Bergeron and Louise Grondin (Agnico-Eagle Mines Ltd.), dated April 16, 2008.
 - 2.3.5. Technical Memorandum Westernmost Channel Crossing Temporary Culvert, Meadowbank Gold Project, Nunavut, Document 607 Revision 2, prepared by Dan Walker and John Hull (Golder Associates), dated April 29, 2008.
 - 2.3.6. Application for Authorization for Works or Undertakings Affecting Fish Habitat, signed by Rachel Gould (Agnico-Eagle Mines Ltd.), dated April 30, 2008.
 - 2.3.7. Technical Memorandum Western Channel Crossing Habitat Compensation Feature Meadowbank Gold Project, Nunavut, Document No. 674 Ver. 0, prepared by and sign by Dan Walker and Nathan Schmidt (Golder Associates), dated May 6, 2008.
 - 2.3.8. Letter from Agnico-Eagle Mines Ltd. regarding the Meadowbank Gold Project Temporary Crossing at Western Channel, signed by Rachel Lee Gould (Agnico-Eagle Mines Ltd.), dated May 6, 2008.
 - 2.3.9. Fisheries and Oceans Canada Comments on the Western Channel Crossing Habitat Compensation Meadowbank Gold Project, Nunavut, Document 685 Ver. 0, prepared by Dan Walker and Nathan Schmidt (Golder Associates), dated May 13, 2008.
 - 2.3.10. Technical Memorandum No-Net-Loss Plan for Western Channel Crossing Meadowbank Gold Project, prepared by Gary Mann (Azimuth Consulting Group, Inc.), dated May 14, 2008.
 - 2.3.11. Technical Memorandum Construction Monitoring Plan for Western Channel Crossing Meadowbank Gold Project, prepared by Gary Mann (Azimuth Consulting Group, Inc.), dated May 14, 2008.
 - 2.3.12. Meadowbank Gold Project Western Channel Crossing Habitat Compensation Monitoring Plan, prepared by Azimuth Consulting Group, Inc., dated May, 2008.
 - 2.3.13. Letter from Agnico-Eagle Mines Ltd. regarding the Meadowbank Gold Project Temporary Crossing at Western Channel, signed by Rachel Lee Gould (Agnico-Eagle Mines Ltd.), dated May 15, 2008.

- 3. Conditions that relate to the **mitigation** of potential harmful alteration, disruption or destruction of fish habitat. The following measures shall be implemented:
 - 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 Plan and conditions of this Authorization.
 - 3.2. 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, silt, debris, etc.) from entering the water.
 - 3.2.1. Any stockpiled materials shall be stored and stabilized above the ordinary high water mark of any water body.
 - 3.2.2. Vehicle and equipment re-fuelling and maintenance shall be conducted above the ordinary high water mark of any water body.
 - 3.2.3. 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.
 - 3.3. Only clean material free of fine particulate matter shall be placed in the water.
 - 3.4. Material used for habitat compensation features shall not be taken from below the ordinary high water mark or shoreline of any water body.
 - 3.5. Sediment and erosion control measures shall be implemented prior to work, and maintained during the work phases, including decommissioning and restoration phase, to prevent entry of sediment into the water or the movement of re-suspended sediment.
 - 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.
- 4. Conditions that relate to the **compensation** for the loss of **2700** square meters (1.01 Habitat Units) of fish habitat.
 - 4.1. A habitat shoal (50 metres in diameter and 7 metres in height) shall be created in Second Portage Lake to offset the loss of fish habitat at a compensation ratio of 2:1.
 - 4.1.1. The top of the habitat shoal shall be 3 metres below the water surface.
 - 4.1.2. The habitat shoal shall be constructed with rock with diameter ranges between 0.2 to 0.8 metres.
- 5. Conditions that relate to the **monitoring** of the proponent plan, the mitigation and the compensation, 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 feature is functioning as intended and whether the mitigation measures outlined in the approved proponent plan and this Authorization were followed.
 - 5.2. The monitoring program shall be implemented according to the schedules indicated in Tables 1, 2 and 3 for the respective works.

Table 1: Schedule for Physical Monitoring of Western Channel Crossing					
		Structure			
Culvert I	nstallation	Year 2008, Year 2009			

Table 2: Schedule for Physical Monitoring of Western Channel Crossing Habitat Compensation Feature

Habitat Compensation Feature Type	Material Sizing	Rock Segregation	Structure	Depth Characteristics	Habitat Compensation Feature Size
Habitat Shoal	Year 2010	Year 2010	Years 2010, 2011, 2013, 2015, 2020	Year 2010	Year 2010

Table 3: Schedule for Ecological Monitoring of Western Channel Crossing Habitat Compensation Feature

Habitat Compensation Feature Type	Interstitial Water Quality (Tier 1)	Toxicity Testing (Tier 2)	In situ Biological Studies (Tier 3)	Periphyton Community (Tier 1)	Fish Use (Tier 1)
Habitat Shoal	Years 2010, 2011, 2013, 2015, 2020	Conducted when warranted, as per Monitoring Plan	Conducted when warranted, as per Monitoring Plan	Years 2010, 2011, 2013, 2015, 2020	Years 2010, 2011, 2013, 2015, 2020

- 5.3. A photographic record of before, during and after construction, during decommissioning and after restoration, shall indicate that all works and undertakings have been completed according to the approved proponent plan and conditions of this Authorization.
 - 5.3.1. The photographic record shall include, but not be limited to, a record of the sediment and erosion control measures, compensation measure and upstream and downstream views of the crossing.
 - 5.3.2. 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.
 - 5.3.3. 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. A written report and photographic record summarizing the above monitoring results 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 indicated in condition 5.2.
- 7. 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.
- 8. "As built" drawings, certified by a licensed engineer, showing that structures and works have been completed according to the approved fish habitat compensation Plan shall be submitted to the Iqaluit, Nunavut office of the Department of Fisheries and Oceans, Habitat Management, Eastern Arctic Area., on or before December 31 of the first year after construction.
- 9. All mitigation, compensation and monitoring measures shall be implemented 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, Nunavut office of Fisheries and Oceans Canada, 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 <u>Fisheries Act</u>. 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

Referral File No.:

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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 should be held on site and work crews should be made familiar with the conditions attached.

Date of Issuance: 28 May 2008

Approved by:

RobertLambe

Title:

Regional Director General

Fisheries and Oceans Canada - Central and Arctic Region