



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Eastern Arctic Area
P.O. Box 358
Iqaluit, Nunavut
X0A 0H0

July 25, 2007

Your file Votre référence
NB 102-181/10-A.01

Our file Notre référence
NU-06-0084

Derek Chubb
Vice President, Sustainable Development
Baffinland Iron Mines Corporation
1016-120 Adelaide Street West
Toronto, Ontario M5H 1T1

Dear Mr. Chubb:

Subject: Proposed works or undertakings will not likely result in negative effects to fish habitat if additional protection measures are implemented.

Fisheries and Oceans Canada (DFO) received your proposal, concerning twenty-three (23) culvert installations at small sized crossings and two (2) culvert installations at extra-small sized crossings on various tributaries of Phillips Creek, to accommodate for the Milne Inlet tote road upgrade, in the Qikiqtani Region of Nunavut. To expedite future correspondence or inquiries, please refer to your referral title and file numbers when you contact us.

Referral File No.:	06-HCAA-CA7-000-000084
Habitat File No.:	NU-06-0084
Referral Title:	Mary River Bulk Sampling Program, Raven River and Phillips Creek, North Baffin Island

It is our understanding that your proposal consists of:

- *Installing culverts at twenty-three (23) small-sized crossing locations along various tributaries of Phillips Creek: specifically crossings at **BG27, BG 29, CV030, CV046, CV057, CV058, CV059, CV076, CV082, CV086, CV102, CV106, CV112, CV115, CV119, CV120, CV125, CV151, CV153, CV187, CV202, CV203, and CV226**;*
- *Installing culverts at two (2) extra-small sized crossing locations along various tributaries of Phillips Creek: specifically crossings at **CV160 and CV173**.*
- *Installing single or multiple corrugated steel pipe culverts ranging from 0.5 metres to 1.2 metres in diameter;*
- *Embedding one culvert a minimum of 10% of the culvert diameter into the stream bed; and,*
- *Using natural smooth rounded stone or large armourstone, to the extent practicable, to protect approaches to water crossings.*

as outlined in the following plans:

Canada

- *Memorandum regarding the response to DFO Engineer's 2007-05-10 Questions, approved by Steven Aiken (Knight Piesold Consulting), dated June 6, 2007.*
- *Small Crossings Typical Sections and Details, Drawing No. 411, Revision A, prepared by Knight Piesold Consulting, dated May 27, 2007.*
- *Letter regarding the Mary River Project Bulk Sampling Program Interaction with Fish and Fish Habitat, addressed to Derek Chubb (Baffinland Iron Mines Corporation), prepared by Maret Tae and Steven Aiken (Knight Piesold Consulting), dated May 25, 2007.*
- *Baffinland Iron Mines Corp. Mary River Project – Information Package for DFO Meeting – Ottawa May 2 and 3, 2007, prepared by Knight Piesold Consulting, dated May 2, 2007.*

If the above plans have changed since the time of submission, the advice in this letter may no longer apply and you should consult with us to determine if further review is needed.

We have concluded that the proposed works and undertakings are adequate to protect fish and fish habitat provided that the work is carried out as described in your plans and the following additional measures are implemented:

- Water crossings should be backfilled with substrate material that is consistent with the existing substrate size and texture found within the watercourse and will remain in/under the crossing.
- Water depth within the water crossing should be not less than 20 cm or the same depth as the natural channel especially during low flows.
- Work should be conducted during low flow conditions and should be avoided during large precipitation/runoff events.
- All materials and equipment used for the purpose of site preparation and project completion should be operated and stored in a manner that prevents any deleterious substance (e.g. petroleum products, silt, etc.) from entering the water.
 - Any stockpiled materials should be stored and stabilized away from the water.
 - Vehicle and equipment re-fuelling and maintenance should be conducted away from the water.
 - Any part of equipment entering the water should be free of fluid leaks and externally cleaned/degreased to prevent any deleterious substance from entering the water.
 - Only clean material free of fine particulate matter should be placed in the water.
- Sediment and erosion control measures should be implemented prior to work and maintained during the work phase, to prevent entry of sediment into the water.
 - All sediment and erosion control measures should be inspected regularly to ensure that they are functioning properly and are maintained and/or upgraded as required.
 - All disturbed areas of the work site should be stabilized immediately and re-vegetated as soon as conditions allow.

By implementing these additional measures and those already outlined in your plans, it is our opinion that the proposed works and undertakings will not likely result in the harmful alteration, disruption or destruction (HADD) of fish habitat, which is prohibited unless authorized by DFO.

These are recommendations to ensure that the proposed works will likely not result in a HADD of fish habitat. Therefore a subsection 35(2) Authorization is not necessary.

You could contravene subsection 35(1) of the *Fisheries Act* if a HADD of fish habitat results from any change in your proposed plan or from failure to properly implement these additional measures. Subsection 35(1) states, "*no person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.*"

This letter of advice does not permit the deposit of deleterious substance (section 36 of the *Fisheries Act*) into waters frequented by fish nor does it release you from the responsibility to obtain any other federal (for example, the *Navigable Waters Protection Act*), provincial, territorial or municipal approvals.

We request that you notify us at least 10 working days before starting the work and that a copy of this letter be kept on site while work is in progress. If you have any questions concerning the above, or if my understanding of the proposal is either incorrect, incomplete, or if there are changes to the proposed works or undertakings, please contact myself directly by telephone at (867) 979-8007, by fax at (867) 979-8039, or by e-mail at Liua@dfo-mpo.gc.ca.

Yours sincerely,



Amy Liu
Habitat Management Biologist

copy: Phyllis Beaulieu, Nunavut Water Board
Leslie Payette, Nunavut Impact Review Board
Steve Aiken, Knight Piesold
Maret Tae, Knight Piesold
Doug Soloway – Transport Canada
Colette Spangnuolo, Indian and Northern Affairs Canada