



Fisheries and Oceans Canada    Pêches et Océans Canada

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

March 28, 2008

Our file: NU-07-0054

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 the installation of a water intake pipe and sewage outfall pipe in Camp Lake and Sheardown Lake, respectively, in the Qikiqtani Region. To expedite future correspondence or inquiries, please refer to your referral title and file numbers when you contact us.

Referral File No.:	07-HCAA-CA7-00054
Habitat File No.:	NU-07-0054
Referral Title:	Water Intake and Sewage Outfall Pipes, Camp and Sheardown Lakes, Qikiqtani Region

It is our understanding that your proposal consists of:

- Installing a water intake pipe along the bottom of Camp Lake, approximately 36.5 metres in length from shore, of which 20.5 metres consists of a pre-insulated heat trace pipe;
- Placing fragmented rip rap (approximately 20 metres long by 2 metres wide by 0.30 metres thick) over the water intake pre-insulated heat trace pipe;
- Installing a submersible pump and pump rack on the lake bottom at a minimum water depth of 5.0 metres.
- Installing a sewage outfall pipe along the bottom of Sheardown Lake, of which 9.0 metres consists of a pre-insulated discharge heat trace pipe; and,
- Placing fragmented rip rap (approximately 9.0 metres long by 2 metres wide by 0.30 metres thick) over the sewage discharge pipe

as outlined in the following plans:

- Letter regarding Potential Winter Drinking Water Sources for Milne Camp – revised, prepared by Beth Staben (Knight Piesold Consulting), dated September 26, 2007.
  - Winter Drinking Water for Milne Camp – km 26, Figure 1, Ref. NB07-00799, prepared by Knight Piesold Consulting, dated September 19, 2007.
  - Winter Drinking Water Lake for Milne Camp – km 32, Figure 2, Ref. NB07-00799, prepared by Knight Piesold Consulting, dated September 19, 2007.

- Mary River Project – Mary River Camp Water Supply Pipe Plan/Profile and Details, Job Number 06-090, Drawing Number C104-R4, prepared and designed by B.H. Martin Consultants Ltd., dated May 2007.
- Mary River Project – Mary River Camp Sewage Discharge Plan/Profile and Details, Job Number 06-090, Drawing Number C103-R4, prepared and designed by B.H. Martin Consultants Ltd., dated June 2007.
- Email regarding Sewage Outfall and Water Intake Pipe in Sheardown and Camp Lakes, prepared by Derek Chubb (Baffinland Iron Mines Corporation), dated December 31, 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:

- 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, debris, etc.) from entering the water.
  - Any stockpiled materials should be stored and stabilized above the ordinary high water mark of any water body.
  - Vehicle and equipment re-fuelling and maintenance should be conducted above the ordinary high water mark of any water body.
  - 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, non-acid generating, and non-metal leaching 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 phases, including decommissioning and restoration phases, to prevent entry of sediment into the water or the movement of re-suspended sediment.
  - All sediment and control measures should be inspected regularly to ensure that they are functioning properly and are maintained and/or upgraded as required to prevent entry of sediment into the water.
  - All disturbed areas should be stabilized upon completion of work and restored to a pre-disturbed state or better.
  - Sediment and erosion control measures should be left in place and maintained until all disturbed areas have been stabilized.
- The *Freshwater Intake End-of-Pipe Fish Screen Guideline* (DFO 1995) is to be applied to the water intakes. To prevent the entrainment of fish, the mesh size should not exceed 2.54 mm. To prevent impingement of fish onto the screen, the screen should be designed as per the guideline. The intake should not disturb the sediment and the screen should be cleaned regularly. The proponent should contact DFO if they do not have access to these guidelines.

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, 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 Amy.Liu@dfp-mpo.gc.ca.

Yours sincerely,



Amy Liu  
Habitat Management Biologist  
Fisheries and Oceans Canada

Copy: Keith Pelley, Fisheries and Oceans Canada  
Phyllis Beaulieu, Nunavut Water Board