



Fisheries  
and Oceans

Pêches  
et Océans

Fish Habitat Management  
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Iqaluit, Nunavut  
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Our file *Notre référence*  
NU00496

February 27, 2002

Jeremy Howe  
BHP Billiton World Exploration  
Granville Square  
#1400-1111 West Georgia Street  
Vancouver, British Columbia  
V6E 4M3  
Tel: (604)-632-1450  
Fax: (604)-683-4125

**RE: File #NWB2NAD0101, NIRB File #01ER101 Exploratory Drilling at Nadluarjuk Lake.**

Dear Mr. Howe,

This letter is to advise that The Department of Fisheries and Oceans, Fish Habitat Management (DFO-FHM) received the water licence application submitted by BHP Billiton World Exploration for exploratory drilling at Nadluarjuk Lake submitted on your behalf by the Nunavut Water Board. As per our telephone conversation, February 15<sup>th</sup>, 2002 drilling is expected to take place from July to September 2002. The DFO-FHM's assessment takes into consideration primarily fish and fish habitat related concerns. I have reviewed the plans for the proposed work.

Operations in or near water may result in the harmful alteration, disruption or destruction of fish habitat, which is prohibited under Section 35 of the *Fisheries Act*. The following mitigation measures, along with mitigation measures indicated in the project proposal, are intended to prevent any potentially harmful impacts to fish and fish habitat:

- All disturbed areas should be stabilized as required, upon completion of work, and restored to a pre-disturbed state.
- If artesian flow is encountered, drill holes should be plugged and permanently sealed upon the completion of the project.
- If the drilling requires water in sufficient volume that the source waterbody may be drawn down please submit details (volume required, size of waterbody, etc.) to DFO-FHM for review. DFO-FHM does not recommend the use of streams as a water source.

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- All proposed work on land must take place thirty (30) metres from the normal high water mark of any water body to minimize potential impacts on fish habitat due to fuel oil spills and erosion.
- The use of material, other than clean ice or snow to construct a temporary crossing over any ice-covered watercourse is prohibited by regulations under the *Fisheries Act*.
- No material should be left on the ice when there is the potential for material to enter the water (i.e. spring break up).

Depositing deleterious substances into fish bearing waters is prohibited as stated under Subsection 36(3) of the *Fisheries Act*. The following are additional measures to mitigate habitat disturbance or loss as well as the deposition of deleterious substances.

- Sediment and erosion control measures should be implemented prior to, and maintained during the work to prevent sediment entry into the water during a spring thaw.
- All wastes, drill cuttings, sewage containments, and fuel caches should be located a minimum of thirty (30) metres from the normal high water mark of any water body, and be sufficiently bermed or otherwise contained to ensure that these substances do not enter any water body.
- Drill cuttings should be disposed of in a sump such that they do not enter any water body. The use of biodegradable, salt free drill additives is encouraged over non-biodegradable types.
- All activities, including maintenance procedures and vehicular refuelling, should be controlled to prevent the entry of petroleum products, debris, slash, rubble, or other deleterious substances into the water.
- All spills of oil, fuel, or other deleterious material should be reported immediately to the 24-Hour Spill Line at (867) 920-8130.

If the proposed work is carried out as described in the plans provided to DFO-FHM and if the additional mitigation measures specified above are implemented, the proposed work will not be considered as contravening Subsection 35(1) of the *Fisheries Act* which reads:

*"No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat."*

Therefore, an authorization under Subsection 35(2) of the *Fisheries Act* will not be necessary. If a harmful alteration, disruption or destruction of fish habitat and/or the deposition of deleterious substances into fish bearing waters occurs as a result of a change in the plans for the proposed works or failure to implement the additional mitigation measures specified above, prosecution under Subsection 35(1) and/or Subsection 36(3) of the *Fisheries Act* may be initiated.

If you have any questions concerning the mitigation measures or should there be any changes to the proposed work, please contact me at (867) 979-8011 or Jordan DeGroot (867) 979-8007 or by fax at (867) 979-8039.

Sincerely,

Stephanie Thompson  
Area Habitat Biologist  
Fish Habitat Management  
Eastern Arctic Area

c.c. Jordan DeGroot-Habitat Management Biologist  
Rita Becker-Nunavut Water Board  
Gladys Joudrey -Nunavut Impact Review Board  
Ipeelee Itorcheak- A/C&P Field Supervisor