Pêches et Océans

Fish Habitat Management P.O. Box 358 Igaluit, Nunavut XOA 0H0

Your file Votre reference

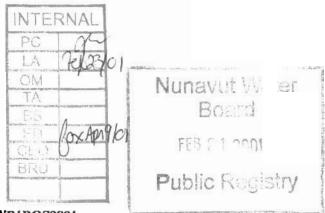
NWB1BOS9801

Our file Notice reference

February 20, 2001

Hugh Wilson
Hope Bay Joint Venture
311 West First St.
North Vancouver, B.C.
V7M 1BS

Phone: (604)-985-2572 Fax: (604)-980-0731



RE: Application for Renewal of Water Licence No: NWB1BOS9801
Advanced Exploration- Hope Bay Joint Venture

Dear Mr. Wilson:

This letter is to advise that The Department of Fisheries and Oceans, Fish Habitat Management (DFO-FHM) received the Water Licence Renewal Application and questionnaire to conduct advanced exploration at the Boston site, submitted to the Nunavut Water Board by the Hope Bay Joint Venture. I have reviewed the plans and have determined that several aspects of the project may negatively impact fish habitat, including:

- Construction of the road to Stickleback lake: Cutting or filling of approaches within 30 m of the normal high water mark will require prior review and approval by DFO-FHM.
- Migration of sediment from settling ponds and the ore storage pad to adjacent fish
 bearing waters: Evidence was found by DFO and DIAND Inspectors during summer
 2000 that the settling ponds were being used to dispose of both liquid and solid
 waste, and these areas were insufficiently bermed to retain sediment (Consult DFO
 and DIAND Inspection reports.)
- Expansion of the ore storage pad and potential for acid rock drainage from existing
 ore stockpiles: Following an investigation of the acid rock drainage potential of the
 ore stockpiles at Boston camp, Brodie Consulting Ltd. indicated "numerous rock
 fragments on essentially every ore stockpile contained sulphide mineralization" and
 that previous ARD testing was likely "heavily biased towards non-mineralized rocks"
 (Letter dated July 26th, 2000).

To address these concerns, I am advising the NWB to consider requiring the HBJV to submit a report, as a condition of the water licence, showing the settling ponds are in good repair prior to summer 2001. Furthermore, the NWB should consider requiring the

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HBJV perform ARD testing of the existing ore stockpiles before expansion of the ore storage pad is permitted. By ensuring that an adequate number of ore samples are taken in a random fashion, the HBJV would greatly assist in producing a credible ARD report.

In addition to the measures set out in the project proposal, the following mitigation measures, if incorporated into the project, are intended to prevent any potentially harmful impacts to fish and fish habitat:

- If artesian flow is encountered, drill holes should be plugged and permanently scaled.
- When using explosives, please follow the Guidelines for the Use of Explosives In or Near Water (DFO, 1998) available on request. If, for any reason these guidelines cannot be followed, please contact DFO, as an Authorization may be required.
- 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 DFOFHM for review. DFO-FHM does not recommend the use of streams as a water
 source.
- All water intakes should be properly screened to prevent the entrainment of fish.
 Refer to the Freshwater Intake End-of-Pipe Fish Screen Guideline (DFO 1995), available on request.
- Winter lake/stream crossings should be located to minimize approach grades.
 Cutting or filling of crossing approaches within 30 m of the normal high water mark will require prior review and approval by DFO-FIIM.
- The use of material other than ice or snow to construct a temporary crossing over any ice-covered watercourse is prohibited by regulations under Fisheries Act unless authorized by a Fishery Officer.
- All winter crossings should be removed prior to spring break-up.
- No material should be left on the ice when there is the potential for that 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 entry of sand or sediment into the water.
- All activities, including maintenance procedures and vehicular refuelling, should be controlled to prevent the entry of petroleum products, debris, rubble, or other deleterious substances into the water.
- 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 nonbiodegradable types.

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- 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.
- 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-FIIM 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.

Please note that this letter of advice does not release the proponent of the responsibility for obtaining any other permits that may be required and will apply for the proposed activities for the period of the Water Licence.

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

Sincerely,

Jordan DeGroot

Area Habitat Biologist

Fish Habitat Management

Department of Fisheries and Oceans- Eastern Arctic Area

c.c. Winston Fillatre - Fishery Officer

Phillippe Lavallee - DIAND

Wade Comin-Environment Canada

Gladys Joudrey- Nunavut Impact Review Board

Jack Kaniak- Kitikmeot Inuit Association

Chris Nichols-Department of Sustainable Development

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