



Pêches et Océans
Canada

Eastern Arctic Region
Fish Habitat Management
P.O. Box 358
Igloolik, Nunavut
X0A 0J0

Your file / Votre dossier
NIRB 04EN014
Our file / Notre dossier
NLT-04-0006

March 4, 2004

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Dear Mr. Stevenson,

RE: Mineral Exploration of the Ulu Deposit, Nunavut

This letter is to advise you that Fisheries and Oceans Canada, Fish Habitat Management Division (DFO-FHM) has received the project proposal information submitted by the Nunavut Impact Review Board for mineral exploration of the Ulu Deposit, Nunavut. DFO-FHM's assessment takes into consideration primarily fish and fish habitat related concerns. Your proposal has been assigned the following file number and name:

NL-04-0006 MINERAL EXPLORATION OF ULU DEPOSIT IN NUNAVUT

Please refer to this number on your correspondence or inquiries.

This letter is to advise that DFO-FHM has reviewed the plans/correspondence for the proposed work for impacts to fish and fish habitat. It is my understanding, from the information submitted to this office, that:

- The duration of the mineral exploration program is from February 16, 2004 to February 15, 2006.
- Operations are to include land-based diamond drilling and metallurgical testing of stockpiled ore.
- An existing camp at the Ulu site will be used.
- A winter road may be established between Ulu and High Lake.

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.

- If a temporary seasonal camp is to be established please submit details (size, site plan, proximity to any watercourse, size of water body, fish species present etc.) to DFO-FHM for review.
- If artesian flow is encountered, drill holes should be plugged and permanently sealed upon completion of the project.

- * All disturbed areas should be stabilized and re-vegetated as required, upon completion of work, and restored to a pre-disturbed state.
- * No material should be left on the ice when there is potential for that material to enter the water (i.e. spring break-up).
- * If the drilling requires water in sufficient volume that the source water body may be drawn down, please submit details (volume required, size of water body, fish species etc.) to DFO-FLIM for review. DFO-FLIM strongly discourages the use of streams as a water source.
- * Any debris or material associated with the construction, operation or maintenance of the winter road should be removed prior to spring breakup.

Extraction of water via intake from any water body is prohibited under Section 30 of the *Fisheries Act* unless the entrance of the intake is properly screened to prevent the entrainment of fish. Refer to the *Freshwater Intake End-of-Pipe Fish Screen Guideline* (DFO 1995), which is available upon request. No harm should come to fish during water removal as long as the following mitigation measures are implemented:

- * Ensure that the holes in the screen are small enough that no fish of any size can pass through the screen and into the intake.
- * The rate of water withdrawal should be such that fish do not become impinged on the screen.
- * Make certain that the fish guard or screen is properly maintained, in a good state of repair, and is not removable except for renewal or repair.
- * During the time in which a renewal or repair is being conducted, the entrance of the water intake should be closed in order to prevent the passage of fish into the intake.

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 commencement of, and maintained during, the work to prevent sediment entry 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 non-biodegradable types.
- * For any drilling activities, the proponent should ensure that the contractor undertaking the drill is prepared with a contingency plan covering the detection, control and handling of any inadvertent drilling fluid migration that may enter a waterbody.
- * Sediments from water used in the drilling process should be filtered out before the water is discharged onto the surrounding landscape.
- * 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. Impermeable spill mats or plastic sheets as well as efficient containment berms should be incorporated into these caches to ensure that contaminants do not enter water bodies.
- * All activities, including maintenance procedures and vehicular refuelling, should be controlled to prevent the entry of petroleum products, sediment, debris, rubble, or other deleterious substances into the water. Impermeable spill mats, drip pans or other measures to prevent ground or ice contamination should also be used when refuelling equipment on site. Ensure that refuelling activities are conducted at least thirty (30) metres away from the normal high water mark of any water body.
- * Have available an extra fuel storage container equal to or bigger than the size of the largest fuel container. This container can be used to replace any existing container showing signs of

leakage. Check for container leaks on a daily basis and prepare any visible leaks immediately. Ensure that spill kits are readily available at all times.

- * Ensure that enough snow and ice are present on the winter road to prevent any unnecessary erosion of the underlying ground surface and subsequent sediment entry into any nearby waterbodies during spring thaw.
- * Fuel spills should be removed from the winter road immediately to avoid ground contamination and/or water contamination during spring thaw.
- * All spills of oil, fuel, or other deleterious material should be reported immediately to the 24-Hour Spill Line at (867) 920-8130.

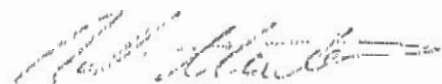
If the proposed work is carried out as described in the plans provided to DFO-FHM and if the additional mitigation measures specified above are implemented, the proposed work will not be considered as contravening Subsection 35(1) of the *Fisheries Act* which reads:

"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.

Please note that this letter of advice does not release the proponent of the responsibility for obtaining any other permits that may be required under federal, provincial, territorial or municipal legislation. DFO should be notified of any changes that have the potential to affect fish or fish habitat. With respect to the treatment and discharge of wastewater effluent, you are advised to contact Environment Canada regarding acceptable water quality standards.

Please note that this letter of advice will apply for the period of the current lease. Should the deposit prove to be economically feasible, necessitating the construction and operation of a mine, DFO should be consulted prior to any mining activities. If you have any questions concerning the mitigation measures or should there be any changes to the proposed work, please contact me at (867) 979-8016 or by fax at (867) 979-8039.



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