



Fisheries and Oceans
Canada

Pêches et Océans
Canada

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

Secteur de l'Arctique de l'est
Boîte postale 358
Iqaluit, NU X0A 0H0

September 8, 2004

Your file Votre référence
NWB2RAI

Our file Notre référence
NU-04-0119

Nic Fenner
Falconbridge Ltd.
3296 Francis Hughes Ave.
Laval, Quebec H7L 5A7

Via electronic mail:
nic.fenner@falconbridge.com

Dear Mr. Fenner:

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 on June 28, 2004, concerning exploration and drilling for the Rainbow Project by Falconbridge Ltd. in the Kivalliq Region. To expedite future correspondence or inquiries, please refer to the referral title and file numbers when you contact us.

Referral File No.: **04-HCAA-CA7-000-000119**
Habitat File No.: **NU-04-0119**
Referral Title: **Rainbow Project**

It is our understanding that your proposal consists of:

- *Exploration between July 1, 2004 to September 30, 2005*
- *A temporary camp will be established to accommodate 15 people,*
- *Drill cuttings will be deposited in shallow sumps and re-covered with soil,*

as outlined in the following plans:

- *Nunavut Water Board Water license Application form and Exploration/Remote Camp Supplementary Questionnaire*

We have reviewed the proposal under the habitat protection provisions of the *Fisheries Act*. The measures described in the plans are not adequate to protect fish and fish habitat. Therefore, please ensure that the following additional measures are incorporated into the plans.

- If artesian flow is encountered, drill holes should be plugged and permanently sealed upon completion of the project.
- If 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 for review. DFO 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. DFO recommends a maximum screen opening of 2mm.

- 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).

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, and maintained during the work to prevent sediment entry into the water during a spring thaw.
- 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 wastes, drill cuttings, sewage containments and fuel caches must 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.
- If any fuel is to be brought to the campsite, 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.

- All spills of oil, fuel, or other deleterious material should be reported immediately to the 24-Hour Spill Line at (867) 920-8130.

By implementing these additional measures, 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.

The proponent 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 a deleterious substance 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 or municipal approvals.

If these plans have changed since the time of submission, the advice in this letter may no longer apply and we should be consulted to determine if further review is required.

We request that the proponent 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 there are 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 me directly by telephone at 867-979-8011, or by fax at 867-979-8039.

Yours sincerely,

Original signed by:

Derrick Moggy
Habitat Management Biologist
Fisheries and Oceans Canada

c.c.: Phyllis Beaulieu - Nunavut Water Board (licensing@nwb.nunavut.ca)
Beth Guptill – DFO Conservation and Protection (guptillb@dfo-mpo.gc.ca)