



Fisheries and Oceans
Canada

Pêches et Océans
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July 15, 2008

Your file Votre référence

Our file Notre référence
YK-05-0045

Ms. Tawanis Testart
Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
Box 938, 5102-50th Avenue.
Yellowknife, NT X1A 2N7

Dear Ms. Testart:

Subject: Environmental assessment scoping for the Giant Mine Remediation Project

Fisheries and Oceans Canada – Western Arctic Area (DFO) has reviewed the *Giant Mine Remediation Plan* (July, 2007) prepared for Indian and Northern Affairs Canada – Contaminates and Remediation Directorate (INAC-CARD) as well as the *Initial Workplan for the Environmental Assessment 0809-001 Giant Mine Remediation* (May, 2008).

The following items have the potential for impacts to areas within DFO's jurisdiction and should be considered within the scope of the environmental assessment for the Giant Mine Remediation Project:

1. **The potential impacts to fish and fish habitat in Baker Creek resulting from the Giant Mine remediation project, including the realignment/reconstruction of portions of the watercourse.** Specifically, the construction activities could affect surface drainage patterns and the hydrology of Baker Creek. Further, these activities could lead to the introduction of sediment (including contaminated sediments) into Baker Creek.
2. **The potential impacts to fish and fish habitat from the ongoing offshore migration of fine tailings associated with historical tailings released into north Yellowknife Bay.** The re-distribution of fine tailings deposited in the area could result in degradation to adjacent fish habitat and a reduction in benthic invertebrates.
3. **The potential impacts to fish and fish habitat associated with operation of the new water treatment plant, and proposed discharge of treated effluent into Back Bay (Great Slave Lake), including:**
 - a. **The reduction of overall discharge/flow of Baker Creek which could lead to the potential for seasonal drying of portions of the creek, thereby reducing fish habitat; and,**
 - b. **The construction of the new discharge pipe and the discharge zone within Back Bay which could lead to the potential degradation of fish habitat.**

4. **The potential impacts to fish and fish habitat in Baker Creek due to block freezing of Arsenic Trioxide dust in underground mine chambers.** The active freezing process could lead to potential ice-damming in sections of Baker Creek resulting in extensions to the time period when the creek is frozen thereby reducing habitat utilization and access to spawning habitat for fish.
5. **The potential impacts to fish and fish habitat associated with the proposed realignment, improvements and/or new construction of the existing Highway 4 (Ingraham Trail) through the Giant Mine site.** While DFO supports the conceptual Baker Creek Rehabilitation plan, the ability to implement this plan ultimately depends upon the preferred option for a new Highway 4 corridor in or around the mine site. Regardless of the option selected, the remediation at the beginning of Reach 1 (Highway 4 crossing of Baker Creek) needs further assessment for impacts to fish and fish habitat.

The above mentioned items are the major areas identified by DFO that should be considered within the scope of the environmental assessment for the Giant Mine Remediation Project. In addition, other less significant impacts to fish and fish habitat have been adequately addressed through documentation provided in the *Giant Mine Remediation Plan* and *Supporting Documents* associated with this plan. We would like to bring to the attention of the Board, that through the development of the remediation plan and as part of the Federal Contaminated Sites Action Program (FCSAP), DFO has worked extensively with INAC-CARD to largely resolve these issues.

However, DFO recommends that **Items 3(b)** and **5** should be further examined in the environmental assessment to ensure impacts to fish and fish habitat have been adequately assessed.

DFO is committed to continue working with INAC-CARD and the MVEIRB to ensure potential impacts to fish and fish habitat are addressed during the environmental assessment of the Giant Mine Remediation Project. DFO will be available during the Scoping Hearing to answer any questions related to our submission. Should you have any questions or comments prior to the hearing, please contact myself directly by telephone at (867) 669-4942, by fax at (867) 669-4940, or by e-mail at derrick.moggy@dfo-mpo.gc.ca.

Yours sincerely,



Derrick Moggy
Habitat Management Team Leader
Fisheries and Oceans Canada - Western Arctic Area