



Fish Habitat Management  
Suite 101, 5204-50<sup>th</sup> Avenue  
Yellowknife, Northwest Territories  
X1A 1E2

Gestion de l'Habitat du Poisson  
Suite 101 5204, 50<sup>e</sup> Avenue  
Yellowknife (Territoires du Nord-Ouest)  
X1A 1E2

Your file / Votre référence  
EA0809-004

May 13, 2009

Mr. Alan Ehrlich  
Senior Environmental Assessment Officer  
Mackenzie Valley Environmental Impact Review Board  
Box 938  
5102-50<sup>th</sup> Avenue  
Yellowknife, NT  
X1A 2N7

Dear Mr. Ehrlich:

**RE: Request for Scoping Submissions  
Fortune Minerals Ltd., NICO Lake Project – Mine and Mill  
Lou Lake Area, NT**

Fisheries and Oceans Canada (DFO) attended the technical scoping session held on April 20<sup>th</sup>, 2009 in Yellowknife and a community scoping session held on May 4<sup>th</sup> in Behchoko for Fortune Minerals Ltd.'s NICO Lake Project. As a follow up to these sessions, DFO would like to provide the Mackenzie Valley Environmental Impact Review Board (Review Board) with the following written scoping submission.

DFO is responsible for the management and protection of fish and marine mammals, and their habitats. We develop and implement policies and programs in support of Canada's scientific, ecological, social and economic interests in relation to oceans and fresh waters. DFO's primary focus in reviewing proposed developments is to ensure that the works and undertakings are conducted in such a way that the proponents are in compliance with the *Fisheries Act*.

DFO has indicated in previous correspondence to the Mackenzie Valley Land and Water Board and the Developer that we are unable to determine if authorizations may be required for this project. To do so, we require more detailed information regarding the three water intake structures. This information should include, but is not limited to:

- location of intakes (names of water bodies, maps, geo-referenced coordinates)
- description of habitat in the immediate and surrounding area
- fish species potentially impacted
- description of proposed works
- methods, materials and equipment to be used in construction and operation of the water intakes
- mitigation measures, including sediment and erosion control
- expected lifespan and closure options for the structures.

DFO recommends that this information be included in the terms of reference for Environmental Assessment.

DFO has further identified the following factors that may require additional consideration and could be included in the scope of the Environmental Assessment for Fortune Minerals' NICO Project:

- Identification of the potential effects the discharge of effluent may have on dissolved oxygen and nutrient levels in Peanut Lake, especially during the winter;
- Method and location of effluent discharge and the potential increase in sedimentation and erosion along bed and banks of Peanut Lake;
- Potential impacts from water withdrawals and potential loss of littoral habitat;
- Potential for arsenic levels and sediment loading to increase in nearby water bodies, particularly Nico, Peanut and Burke Lakes, as these lakes are downstream of the project area;
- A draft framework of the Aquatics Effects Monitoring Program (AEMP) should be included in the terms of reference. Attention should be given to the monitoring, evaluation and thresholds for arsenic in the AEMP;
- Environmental effects of malfunctions and accidents that may occur in connection with the project and any measures proposed to mitigate potential adverse effects on fish and fish habitat;
- Effects of the environment on the project;
- Cumulative impacts associated with fish and fish habitat that are likely to result from the project in combination with other projects or activities that have been or will be carried out; and
- Mine closure and reclamation for components of the mine

During the scoping session in Behchoko, two of the main concerns raised by community members were regarding the potential impacts of the project on water quality and fish health, more specifically the possible uptake of contaminants by fish as well as impacts of mining activities on the watershed. DFO recommends that these concerns be included in the Terms of Reference and be addressed thoroughly by the developer.

On May 1, 2009, the Review Board requested clarification from the developer regarding the access road and location of the processing facility. Depending on the clarification received from the proponent, DFO may wish to provide further suggestions for inclusion in the Terms of Reference. For example, if the access road were to be scoped into this environmental assessment, DFO would require information on all water crossings including location and size of culverts or bridges with site specific details on the flow, fish passage, and sediment and erosion control measures and management plans.

**Please note**, any harmful alteration, disruption or destruction of fish habitat and/or the deposition of deleterious substances into fish bearing waters occurring as a result of a change in plans or failing to implement the necessary mitigation measures may result in contravention of the *Fisheries Act*.

If you have any questions please contact myself, at 867 669-4926.

Sincerely,



Rick Walbourne  
Fish Habitat Biologist  
Fish Habitat Management  
Department of Fisheries and Oceans - Western Arctic Area

c.c: Lorraine Sawdon (DFO-Habitat Biologist)  
Rick Schryer (Fortune Minerals - Director of Reg. and Env. Affairs)