



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

Pêches et Océans  
Canada  
  
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  
EA0809-001

Our file / Notre référence  
YK-05-0045

April 9, 2009

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

**Via E-mail to:**  
ttestart@reviewboard.ca

Dear Ms. Testart:

**RE: DFO Comments on the Draft Terms of Reference and Work plan for Giant Mine Remediation Plan**

Fisheries and Oceans Canada is pleased to provide the Mackenzie Valley Environmental Impact Review Board (MVEIRB) with the following comments on the draft Terms of Reference (ToR) and Work Plan for the Environmental Assessment of the Giant Mine Remediation Plan.

**Section 5.1 Determination of Significance (p. 8)**

In order to determine the significance of effects from the development on the environment, the developer will have to undertake a detailed effects assessment. DFO recommends that the developer provide a clear outline of the methodology used for determining significance. The developer should assess the significance of the residual effect, after considering the implementation of mitigation measures, when determining the overall significance of each effect on the environment. Methods used to determine residual effects should be clearly articulated.

**Section 5.2 D Development Description (p. 14)**

Under bullet 10, please add: "The project quantity of contaminated water that will be treated and discharged through the proposed water treatment process on an annual basis, broken down by both season and by year;"

Please include the following additional element as a bullet under the Development Description: "The proposed Baker Creek remediation activities, as outlined in the Remedial Action Plan, including potential re-alignments, diversion, channel and habitat enhancements, management options for contaminated sediments, as well as future improvements and contingencies for Baker Creek habitat restoration".

**Section 5.2 I Biological Environment (p. 18)**

It is not clear in the current draft Terms of References where identification of mitigation measures will take place. DFO suggests the following amendments to the paragraph in Section 5.2 (I) Biological Environment: "An environmental assessment must make a complete examination of potential impacts to biophysical components and provide

mitigative measures for potential impacts that may arise from the works or activities, including assessment of the likelihood and potential severity of any accidents or malfunctions over the lifespan of the project.

#### **Section 5.2 (I-1) Water Resources (p. 19)**

DFO recommends amending paragraph 3(b) of Section 5.2 (I-1) to read as follows: "A prediction of water quantity in local water bodies, such as Baker Creek, including a description of peak and minimum flows, seasonal variations and water balance patterns and how these may change due to water treatment activities and other activities on site that may impact surface drainage patterns to water bodies (i.e. realignment or diversion of creek, drainage channels, etc)."

#### **Section 5.2 (I-2) Fish and Aquatic Habitat (p. 19)**

DFO recommends amending the second paragraph of Section 5.2 (I-2) to the following: "The submitted impact assessment on fish, aquatic organisms and habitat for both, should include:

- an assessment of fish and fish habitat present, and the various life stages that the proposed development may affect;
- a description of potential impacts to fish and fish habitat, including the predicted habitat losses and/or gains, from the proposed development;
- the site-specific mitigation measures proposed to reduce the predicted impacts to fish or fish habitat from the construction, operation or decommissioning of any of the development components; and,
- the production of a No Net Loss plan and habitat creation (compensation), as required.

Bullets 1 and 2 of 5.2 (I-2) could thus be removed, as this information would be encompassed in the statements provided above.

#### **Section 5.2 (K) Environmental Monitoring (p. 2)**

It appears that in paragraph 1 of Section 5.2 (K), as currently written, environmental monitoring for the proposed remediation plan has been narrowed to only consider arsenic-related monitoring in water and sediments. DFO recommends broadening the environmental monitoring to include all ecological effects that may have an impact on fish and fish habitat resulting from the proposed development. DFO also recommends amending bullet 1) a. to include: "Monitoring standards, methodologies and requirements for water quality, ground temperature, ecological effects, sediment contamination, and the effectiveness of mitigation and compensation measures.

DFO appreciates the opportunity to review and provide comments on the draft Terms of Reference. If you have any questions, please feel free to contact Nicola Johnson at (867) 669-4933, by fax (867)669-4949, or email [Nicola.Johnson@dfo-mpo.gc.ca](mailto:Nicola.Johnson@dfo-mpo.gc.ca).

Sincerely,



Beverley Ross

---

Regional Manager, Environmental Assessment for Major Projects  
Central and Arctic Region  
Fisheries and Oceans Canada

cc    Ginny Flood, Fisheries and Oceans Canada  
      Julie Dahl, Fisheries and Oceans Canada  
      Julian Lim, Fisheries and Oceans Canada  
      Marc Lange, Fisheries and Oceans Canada  
      Morag McPherson, Fisheries and Oceans Canada