



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Fish Habitat Management  
Suite 301, 5204-50<sup>th</sup> Avenue  
Yellowknife, Northwest Territories  
X1A 1E2

Gestion de l'Habitat du Poisson  
Suite 301 5204, 50e Avenue  
Yellowknife (Territoires du Nord-Ouest)  
X1A 1E2

Your file *Votre référence*  
EA0809-004

Our file *Notre référence*  
09-HCAA-CA6-00014

October 17<sup>th</sup>, 2012

Mackenzie Valley Environmental Impact Review Board  
#200 Scotia Centre  
5102-50<sup>th</sup> Avenue  
Yellowknife, NT  
X1A 2N7

**Via e-mail to:**  
[chubert@reviewboard.ca](mailto:chubert@reviewboard.ca)

**RE: Fisheries and Oceans Canada – Final Statements for Fortune Minerals – NICO Project**

Fisheries & Oceans Canada (DFO) participated in the environmental assessment for the Fortune Minerals – NICO Project as an expert advisor to the Review Board on potential physical impacts of the project on fish and fish habitat. Please find attached DFO's final statements for your consideration which summarizes our analysis and recommendations put forward in our technical submission as well in our hearing presentations.

We trust that our comments and recommendations will be helpful to the Board in their deliberations. If you have any questions, please do not hesitate to contact Sarah Olivier at (867) 669-4919, or email at [Sarah.Olivier@dfo-mpo.gc.ca](mailto:Sarah.Olivier@dfo-mpo.gc.ca).

Sincerely,

for: Larry Dow  
A/ Area Director  
Western Arctic Area  
Fisheries and Oceans Canada

cc Bev Ross, Fisheries and Oceans Canada  
Julie Dahl, Fisheries and Oceans Canada  
Rick Walbourne, Fisheries and Oceans Canada  
Kelly Burke, Fisheries and Oceans Canada

**Fisheries and Oceans Canada  
Final Statements  
Mackenzie Valley Review Board  
Fortune Minerals Ltd. – NICO Project  
October 17<sup>th</sup>, 2012**

Fisheries and Oceans Canada (DFO) participated in the environmental assessment for Fortune Minerals Ltd's (the Proponent) NICO Project as an expert advisor to the Review Board on potential physical impacts of the project on fish and fish habitat. The following is a summary of DFO's analysis and recommendations put forward in our technical submission as well in our hearing presentations.

DFO participated in all stages of this environmental assessment beginning with a scoping submission in May 2009 and inputted in to the terms of reference on areas related to our mandate, which was provided as an outline in our Technical Submission submitted in June 2012. Additionally, DFO provided Information Requests in October 2011 which resulted in a meeting between DFO, the Proponent, and their consultants Golder Associates, in January 2012, to clarify any outstanding issues.

DFO would like to note that we have worked closely with the Proponent throughout this environmental assessment. Information and clarification requested was provided in an efficient and timely manner and greatly assisted in the quality of our review. As a result, DFO required no participation in technical sessions and the resulting recommendations have been committed to by the proponent.

DFO's review and recommendations, as presented in our technical submission and hearing presentations, remain the following:

**Grid Ponds**

Based on the Proponent's fisheries assessments, lake connectivity investigations and winter under ice dissolved oxygen data, DFO agrees that the Grid Ponds do not support fish or fish habitat and therefore would not require an Authorization under Section 35 or be subject to Section 36 of the *Fisheries Act*. DFO has no recommendations in this area.

**Watercourse Crossings**

The Marian River is the only permanent flowing stream that supports fish and fish habitat within the project boundaries. The Proponent has committed to using DFO's Clear Span Bridge operational statement and has stated that there will be no in-water works associated with the bridge construction. DFO recommends that the Proponent implement all mitigation measures outlined in the operational statement as well as develop a comprehensive Sediment and Erosion control plan for the construction, operation and decommissioning of all components of the project located near water, including the bridge, to ensure that potential impacts on the aquatic environment are avoided.

***Recommendation#1: DFO recommends that the Proponent follow DFO's Northwest Territories Clear-Span Bridges Operational Statement at the Marian River crossing. All mitigation measures contained therein should be incorporated into the construction of the Marian River crossing to avoid any negative impacts to fish habitat and to maintain fish passage.***

***Recommendation#2: DFO recommends that the Proponent develop a comprehensive Sediment and Erosion control plan for the construction, operation and decommissions of all components of the project located near water, including the bridge, to ensure that potential impacts on the aquatic environment are avoided.***

### **Water Withdrawal**

Large amounts of water withdrawn from ice covered waterbodies or watercourses can lead to oxygen depletion, loss of over-wintering habitat and/or reduction in littoral habitat. Lou Lake has been identified as the sole water source for the NICO project. Given the relatively small quantities of water required by the project, DFO concluded that the likelihood of impacts to fish and fish habitat as a result of water withdrawals in Lou Lake are negligible.

### **Fish Habitat Assessment - In-water Structures**

The Proponent provided a thorough fish habitat assessment for the water intake and diffuser structures that assisted DFO in determining that an authorization under ss. 35(2) of the *Fisheries Act* for the harmful alteration, disruption or destruction (HADD) of fish habitat was not required. DFO recommends that a mitigation and monitoring plan for the construction, operation and decommissioning of these two in-water structures be developed. The plan should include fish salvage procedures (within the silt fences), monitoring of total suspended solids as well as a discussion of contingency plans in the event of failure of these two structures.

***Recommendation #3: DFO recommends the development of a mitigation and monitoring plan for the construction, operation and decommissioning of the proposed water intake and diffuser to ensure adverse physical impacts to fish and fish habitat are avoided. This should include fish salvage procedures, monitoring details for total suspended solids and contingency planning in the event of failure of these structures.***