

Eastern Arctic Area

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October 19, 2007

Our file Notre référence NU-02-0117

Terri Maloof Manager, Permitting and Compliance Miramar Hope Bay Limited 300-889 Habourside Drive North Vancouver, B.C. V7P 3S1

Dear Ms. Maloof:

Subject: DFO comments on the Doris North "No Net Loss" Plan, Revision 6

Fisheries and Oceans Canada (DFO) received the "No Net Loss" Plan on September 18, 2007, concerning the fish habitat compensation for the Doris North Underground Gold Mine Project in West Kitikmeot Region of Nunavut. DFO has reviewed the report entitled *Doris North "No Net Loss" Plan, Revision 6* and provides the following comments.

Rearing Shoals in Doris Lake

- 1. Under section 27.1 (4) of the Metal Mining Effluent Regulations (MMER), there is a requirement for DFO to obtain financial securities, in the form of an irrevocable letter of credit, from the proponent for fish habitat features that will compensate for the use of Tail Lake as a Tailings Impoundment Area. It is noted that the cost estimates have been provided for all compensation measures. As the approval for the harmful alteration, disruption or destruction (HADD) of fish habitat associated with the construction of the North Tailings dam and dewatering of Tail Lake Outflow falls under section 35(2) of the *Fisheries Act* and not under the MMER, the cost estimates should be calculated separately from the other four shoals. Please provide cost estimates for each of the following:
 - a) Two rearing shoals (Sites 1 and 2)
 - b) Four rearing shoals (Sites 3, 4, 5 and 6)

Roberts Lake Outflow - Boulder Removal

2. In Figure D2, the Instructions for Removal indicate that the rocks removed will be stockpiled on each streambank. However, on page 42 of the NNLP, the rocks



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removed will be placed in suitable channel areas downstream and construction is proposed to occur in the summer 2008 before early August. In discussions with Gary Ash (Golder Associates Ltd.) on October 17, 2007, it was mentioned that a helicopter may be used to relocate the broken boulders to suitable areas downstream of the work area. Please revise Figure D2 to reflect the construction changes noted within the NNLP.

3. On page 44, a request to issue a *Fisheries Act* section 32 authorization for the killing of fish by other means than fishing was made to DFO. The mitigation measures proposed for the explosive activities including using block nets around each boulder with a setback of 0.95 metres and electrofishing any fish in the area prior to using explosives will likely be sufficient in minimizing the impacts on fish. Therefore, a *Fisheries Act* section 32 authorization is not necessary.

Doris Lake Rearing Enhancement – Pool Construction

- 4. In Figure D9, silt barriers are proposed to be placed across the channel downstream of the pool excavations. It is recommended that existing stream flows be maintained downstream of the work area without interruption during all stages of the work. There should be no increase in water levels upstream of the work area. Please indicate how stream flows will be maintained during all stages of work.
- 5. In Figure D10, there is reference to Figure 3, detail A; however, Figure 3 is the aerial view of Doris Lake outlet gauging station. Please clarify.

Dam Breaching

6. In Appendix A2 – *Preliminary Design Concepts of the North Dam Breach*, point number 7 indicates that the Tail Lake Outflow channel will be re-established by excavating a defined channel through the *Frozen Core* gravel contained in the key trench. Please provide channel restoration details and design drawing(s) that incorporate natural stream morphology.

Fish Out Program for Tail Lake

- 7. On page 79 of the NNLP, there appears to be a typo in the first paragraph detailing the parameters analyzed for water samples. "Total dissolved nutrients" should be revised to "total dissolved nitrogen".
- 8. Please note that the Fish Out Program for Tail Lake will be brought to the Nunavut Wildlife Management Board for review and approval.

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If you have any questions concerning the above, please contact myself directly at our Iqaluit office by telephone at (867) 979-8007, by fax at (867) 979-8039, or by e-mail at Liua@dfo-mpo.gc.ca.

Yours sincerely,

Original signed by:

Amy Liu Senior Habitat Biologist

Copy: Gary Ash, Golder Associates Ltd.
Keith Pelley, Fisheries and Oceans Canada
Julian Lim, Fisheries and Oceans Canada
Phyllis Beaulieu, Nunavut Water Board
Geoffrey Clark, Kitikmeot Inuit Association