Our reference
IQALUIT-#481260

September 20, 2011

Sent by email: licensing@nunavutwaterboard.org

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
Gjoa Haven, Nunavut
X0E 1J0

Your reference
2AM-DOH0713

Re: Type 'A' Water Licence No. 2AM-DOH0713, Second Revision to Interim Water Management Plan – Doris North Gold Project – Hope Bay Mining Ltd. – Kitikmeot Region

Dear Phyllis,

Thank you for your August 25, 2011 request for written representations on the above referenced Interim Water Management Plan.

A Technical Review Memorandum is provided for the Nunavut Water Board's consideration.

Please do not hesitate to contact me by telephone at 867 975-4555 or email at David.Abernethy@aandc-aadnc.gc.ca to discuss this submission.

Regards,

David W. Abernethy
A/ Manager of Water Resources
Operations Directorate
Nunavut Regional Office
Iqaluit, Nunavut
X0A 0H0

Encl.

Technical Review Memo

TO Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board

OUR REFERENCE
File #9545-2-1.2AM.DOHA
IQALUIT-#481260

YOUR REFERENCE
2AM-DOH0713

FROM David Abernethy
A/ Manager of Water Resources
Aboriginal Affairs and Northern Development Canada

DATE
September 20, 2011

SUBJECT **Type 'A' Water Licence No. 2AM-DOH0713, Second Revision to Interim Water Management Plan – Doris North Gold Project – Hope Bay Mining Ltd. – Kitikmeot Region**

A. PROJECT DESCRIPTION

On August 25, 2011 the Nunavut Water Board (the Board) distributed Hope Bay Mining Ltd.'s (HBML) revised Interim Water Management Plan for their Doris North Gold Project to interested parties for review. Included in this distribution is a comment- response table that addresses review comments submitted by interested parties who reviewed the previous version of this plan (distributed for review on February 22, 2011).

Hope Bay Mining Ltd. submitted a revised Interim Water Management Plan to the Board pursuant to Part F, Item 1 of their water licence, which states:

The Licensee shall submit to the Board for review by May 1, 2008, a revised Water Management Plan. The revised Plan shall include the following:

a) A requirement to continuously monitor Doris Lake levels and outflow during the two years of mining and beyond to confirm water balance model predictions;
b) Requirements for ongoing monitoring and calibration of the water quality model;
c) A strategy to monitor and remove where necessary snow accumulation in the Pollution Control Pond, roads, ditches, and drainage channels; and,
d) The Plan shall consider the monitoring requirements set out in Parts J and K.

It is important to note what HBML states in section 2 of the submitted plan:

> "Due to changes in project timing, removal of fish from Tail Lake will not be complete until the end of the open water season in 2011. Until such time the use of Tail Lake is approved by the regulatory authorities, the facility must be excluded from the Water Management Plan." And, "This interim plan addresses the short term water management needs of the Doris North Mine Area. The relevant components of the overall water balance discussed in this plan are comprised of seepage and runoff as well as storm water management. This plan is intended to address these components of the overall Hope Bay Water Management Plan (April 2007) from January 1, 2011 until such time Tail Lake has been constructed and integrated into the project's overall Water Management Plan."

B. RESULTS OF REVIEW

On behalf of the Aboriginal Affairs and Northern Development Canada (AANDC) Water Resources Division I am providing the following comments/ recommendations for the Board's consideration,

- The revised plan provides adequate provisions for the management of contact and non-contact water associated with facilities in the mine area prior to the commissioning of the project's Tailings Impoundment Area (i.e., use of the Sedimentation Pond, Pollution Control Pond, and Temporary Holding Pond). However, this plan cannot be considered fully complete because it only partially addresses items a), b) and c) of Item F in the water licence. The AANDC Water Resources Division understands that this is an interim plan and as stated in section 2 of the submitted plan, "following the construction of this facility's North Dam, HBML will submit a comprehensive Water Management Plan which will detail the integration of all previously approved components and those that are currently in regulatory process for the Doris North Project involving the conservation, use, reuse, treatment, and release of water to the environment as per the Water Licence and Nunavut Impact Review Board Project Certificate." This comprehensive Water Management Plan should be approved by the Board prior to any diversion of contact water to the Tailings Impoundment Area.

- The July 29, 2011 cover letter that accompanied HBML's comment-response table states that HBML are monitoring Doris Lake water levels and outflows as part of their environmental baseline data collection program. Furthermore, the project's water balance and quality model is calibrated with this data. The AANDC Water Resources Division appreciates this information update and looks forward to reviewing details associated with this monitoring program and calibration of the water

balance and water quality model in the comprehensive Water Management Plan.

- The comprehensive Water Management Plan should address the use of water (e.g., domestic, mill requirements, dust suppression) and the management of all effluent types associated with project activities (e.g., treated domestic wastewater and effluent that collects within the landfarm sump, fuel storage sumps, cyanide and reagent storage facility sumps, landfill sump, etc.).

- Section 7.2.3 of the submitted plan states that the Pollution Control Pond has a storage capacity of 6,786 m^3 while the storage curve that was provided in a separate supporting document (dated July 29, 2011) indicates that this facility has a storage capacity of 5,097 m^3. HBML should confirm this facility's storage capacity and include this value in the log books that are used to record the daily volumes of effluent that collect in the mine area effluent retention ponds (i.e., Pollution Control Pond, Sedimentation Pond, and Temporary Holding Pond).

Prepared by David Abernethy