



Water Resources
Nunavut Regional Office
P.O. Box 100
Iqaluit, NU, X0A 0H0

NWB file - Votre référence
2AM-DOH0713 – Amendment 3

AANDC file - Notre référence
IQALUIT - #492363

November 25, 2011

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0A 1J0

Re: Water Licence No. 2AM-DOH0713, Amendment No. 3, Application to Permit Implementation of the Waste Rock and Ore Storage Management Plan – Doris North Gold Project – Hope Bay Mining Ltd. – Kitikmeot Region

Aboriginal Affairs and Northern Development Canada (AANDC) has performed a review of the 2AM-DOH0713 Doris North Gold Project amendment application to permit implementation of the waste rock and ore storage management plan. The Nunavut Water Board distributed the application for comment on October 26, 2011. The following comments are provided pursuant to AANDC's mandated responsibilities for the enforcement of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

In conducting this review, I have referred to all documents on the Nunavut Water Board's FTP site as it relates to 2AM-DOH0713. Attached is a Technical Review Memorandum for your consideration.

Should you have any questions or comments, please do not hesitate to contact either myself or Andrea Cull, AANDC Water Pollution Specialist. I can be reached by telephone at (867) 975-4555 or email at david.abernethy@aandc-aadnc.gc.ca and Andrea can be reached by telephone at (867) 975-4566 or email at andrea.cull@aandc-aadnc.gc.ca.

Sincerely,

David Abernethy
Water Resources Regional Coordinator

Cc. Andrea Cull, Pollution Policy Specialist
Ian Parsons, A/Manager of Water Resources
Kevin Robertson, A/Manager of Field Operations

Technical Review Memorandum

To: Phyllis Beaulieu – Manager of Licensing, Nunavut Water Board

From: David Abernethy – Water Resources Regional Coordinator, Aboriginal Affairs and Northern Development Canada.

Re: Water Licence No. 2AM–DOH0713, Amendment No. 3, Application to Permit Implementation of the Waste Rock and Ore Storage Management Plan – Doris North Gold Project – Hope Bay Mining Ltd. – Kitikmeot Region

Background

On October 26, 2011 the Nunavut Water Board (NWB or Board) distributed Hope Bay Mining Ltd.'s (HBML) application to amend Type A Water Licence 2AM-DOH0713 to allow for the approval of their December 2010 Waste Rock and Ore Storage Management Plan.

On February 10, 2011 the NWB distributed HBML's Waste Rock and Ore Storage Management Plan to interested parties for review. Aboriginal Affairs and Northern Development Canada (AANDC) reviewed this submission and provided a technical review memorandum on March 10, 2011. HBML has addressed AANDC comments in Appendix C3 of this application.

Hope Bay Mining Ltd. are requesting the Board's approval to segregate subsurface waste rock with low sulphide content from more mineralized waste rock within the existing Temporary Waste Rock Pad. Any subsurface waste rock with low sulphide content (non potential acid generating waste rock) that has not been used for construction purposes or backfilled underground would remain on the waste pile and be contoured and reclaimed in place.

Any subsurface waste rock used for surface construction would be subject to the monitoring plan in place for surface quarry rock used in construction. The amount of anticipated underground waste rock has increased from the original estimate of 200,000 m³ (included in the 2007 Waste Rock Management Plan prepared by Miramar Hope Bay Ltd.) to 500,000 m³. As stated in Section 2.1 of the submitted plan, "the higher waste volumes in the current design can be attributed primarily to the increased size of the decline drift and other haulage drifts in the mine area, and improved access to the working areas, which allow for a greater degree of flexibility in mining equipment and methods, and improved safety."

HBML submitted a licence amendment application based on recommendations made by the NWB dated July 21, 2011. A licence amendment is required due to the following current licence conditions:

- Part D, Item 24; The Licensee shall not use waste rock from underground for the construction of any infrastructure;
- Part G, Item 17: All Waste Rock brought to surface from the underground shall be stored on the Temporary Waste Rock Pad and returned underground as backfill and is not to be used for any purpose unless otherwise approved by the Board;
- Part J, Item 12(d): Tonnage of mineralized and un-mineralized waste rock stored on the Temporary Waste Rock Pad on a monthly basis during construction, operations and closure; and
- The definition of “Temporary Waste Rock Storage Pad” which currently reads “means the engineered facility designed for the temporary deposit of waste rock as illustrated in the Revised Water Licence Application Supporting Document S4 entitled “Engineering Drawing for Tailings Containment Area and Surface Infrastructure Components” DWGS S-07 and S-08, SRK Job Number ICM014.008.”

Hope Bay Mining Ltd.’s October 13, 2011 cover letter proposes revisions to these terms that would allow for the implementation of their Waste Rock and Ore Storage Management Plan and more specifically, the use of underground waste rock for surface construction purposes as approved by the Board.

Recommendations/Comments

On behalf of the AANDC Water Resources Division the following comments/recommendations are provided for the Board’s consideration,

- The AANDC Water Resources Division currently does not have any concerns with HBML’s re-organization of HBML’s existing Temporary Waste Rock Pad to accommodate the increased amount of underground waste rock;
- HBML should ensure that all underground waste rock be returned underground as backfill unless otherwise approved by the Board to use for construction purposes as stated in the amendment application or otherwise in writing;
- HBML must ensure that underground waste rock segregated for surface construction purposes will be analyzed to the same degree at surface aggregate (quarry) sources;

- If approved, the revisions to waste rock and ore management practices should be incorporated into the Interim Closure and Reclamation Plan and Final Mine Closure and Reclamation Plan submissions required by Part L, Items 4 and 6 of the project's water licence.

Prepared by David Abernethy and Andrea Cull

Cc. Andrea Cull, Pollution Policy Specialist
Ian Parsons, A/Manager of Water Resources
Kevin Robertson, A/Manager of Field Operations