



Our reference
File # 9545-2-1.2BB.BOSA
CIDMS #349139

August 20, 2009

Your reference
2BB-BOS0712/TR/J

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board

Chris Hanks
Director of Environment and Social Responsibility
Hope Bay Mining Ltd.

Peter Kusugak
Manager of Field Operations
Indian and Northern Affairs Canada, Nunavut Regional Office

Sent Via Email

Dear Phyllis, Chris, and Peter,

**Subject WATER LICENSE #2BB-BOS0712, HOPE BAY MINING LTD.,
 BOSTON ADVANCED EXPLORATION PROJECT, KITIKMEOT
 REGION, JUNE 2009 MONITORING REPORT**

Please be advised that on behalf of Indian and Northern Affairs Canada, I have completed a review of the above referenced Hope Bay Mining Ltd. submission to the Nunavut Water Board.

A Technical Review Memorandum (attached) is provided to the Board for consideration.

Should you have any questions regarding this submission, feel free to contact me at 867-975-4555 or David.Abernethy@inac-ainc.gc.ca.

Regards,

David W. Abernethy
Water Resources Regional Coordinator
Operations Directorate, Nunavut Regional Office
Indian and Northern Affairs Canada
Iqaluit, Nunavut
X0A 0H0

Cc: Kevin Buck, Manager of Water Resources INAC – Iqaluit, NU
 Melissa Joy, Water Resources Officer, INAC – Kugluktuk, NU
 Bernie MacIsaac, Director of Operations, INAC – Iqaluit, NU

TECHNICAL REVIEW MEMORANDUM

Date: Aug. 20/09

To: Phyllis Beaulieu, Nunavut Water Board
Chris Hanks, Hope Bay Mining Ltd.
Peter Kusugak, INAC

From: David Abernethy, Indian and Northern Affairs Canada

Re: **WATER LICENSE #2BB-BOS0712, HOPE BAY MINING LTD.,
BOSTON ADVANCED EXPLORATION PROJECT, KITIKMEOT
REGION, JUNE 2009 MONITORING REPORT**

A. PROJECT DESCRIPTION

On July 30/09 the Nunavut Water Board (NWB or Board) distributed, to interested parties for review, Hope Bay Mining Ltd.'s (HBML) June 2009 Monitoring Report. This report is required by Part J, Item #23 of the Boston Advanced Exploration Project's Type B water license.

The following documents were reviewed to prepare this Technical Review Memorandum,

- NWB Water License #2BB-BOS0712;
- HBML June 2008 Monitoring Report, Water License #2BB-BOS0712. July 29/09;
- NWB Letter to HBML. *Hope Bay Mining Ltd.; Submission of a Landfarm Operation and Maintenance Manual for the Boston Camp; License #2BB-BOS0712.* Oct. 7/08;
- NWB Letter to HBML. *Hope Bay Mining Ltd.; Submission of a Landfill Operation and Maintenance Plan; License #2BB-BOS0712.* Sept. 29/08; and,
- HBML Letter to NWB. *Maintenance of Part E – 6 Landfill in Water License - #2BB-BOS0712.* Sept. 29/08.

B. RESULTS OF REVIEW

The following comments / recommendations are provided for your consideration,

1. The Boston Camp facilities were shutdown on May 25/09. HBML intends to reopen this camp in 2010 following the installation of an upgraded power system and new sewage treatment plant.
2. Samples collected from Monitoring Station (MS) #BOS-2, "the Containment Pond," met the effluent discharge criteria listed in Part D, Item #8 of the license. There were no discharges from the Containment Pond in June.
3. Samples collected from MS #BOS-5, "Accumulated Water at the Bulk Fuel Storage Facility," and (b) #BOS-6, "Accumulated water at the Landfarm Treatment Facility," met the effluent discharge criteria listed in Part D, Item #21 of the license, with the exception of a visible sheen of oil and grease detected at Monitoring Station #BOS-6 (Landfarm Treatment Facility). HBML states that "no discharges are planned for this facility as there is a minimal amount of accumulated water that will likely dissipate by evaporation." INAC advises that Part D, Item #21 of the license stipulates that there shall be no discharge if a visible sheen is present. It is recommended that HBML submit a contingency plan that determines what will occur should a visible sheen be present if there is an accumulation such that a release is required.
4. Effluent contained within the Bulk Fuel Storage Facility (MS #BOS-5) was pumped and allowed to drain via gravity feed to the Containment Pond.
5. Minor seepage was observed at MS #BOS-7, "Landfill Leachate." There are no effluent criteria for this monitoring station. Sample results are provided for parameters identified in Part J, Item #5 of the license which must be analyzed during periods of observed flow. INAC is requesting HBML to provide clarification on this sampling point and the landfill's current status. In the NWB's Sept. 29/08 letter to HBML (attached), the NWB discussed HBML's Part E, Item #6 license requirements, stating that they must "provide to the Board tender drawings, stamped and signed by a professional engineer registered in Nunavut at least sixty (60) days prior to the commencement of landfill construction as well as provide to the Board a Landfill Operation and Maintenance (O&M) Plan within thirty (30) days of the first landfilling of waste at the Boston Landfill." HBML's Sept. 29/08 response letter (attached) states that although they "are not constructing the landfills in the Hope Bay Belt allowed by their water licenses," they "want to maintain the authorization in their water licenses to build landfills in the future." Due to the absence of required landfill design plans and O&M Plan on the NWB on-line public registry and HBML's reference to sampling at MS #BOS-7 in their Monitoring Report, it is necessary for HBML to provide written clarification on the status of this landfill.

6. Water samples were collected from MS #BOS-8, "Waste Rock and Ore Storage Pad" in accordance with Part K, Item #s 6 and 7 of the license. Sample results are not provided in this monitoring report. HBML states that "the results will be analyzed and considered as part of the development of the Boston Ore / Waste Rock Management Plan that will be submitted in 2009 for review." INAC requests HBML to include samples for this Monitoring Station in future monthly monitoring report submissions.
7. Accumulated water from the portal on the south camp boundary was sampled using the criteria for MS #BOS-2, "the Containment Pond." All parameters met the license discharge criteria.

Attached.

Prepared by David Abernethy

Cc: Kevin Buck, Manager of Water Resources Division, INAC – Iqaluit
Melissa Joy, Water Resources Officer, INAC – Kugluktuk
Bernie MacIsaac, Director of Operations, INAC – Iqaluit, NU