



Water Resources Division
Nunavut Regional Office
Iqaluit, NU X0A 0H0

Your File: 2AM-DOH0713
Our File/CIDM's #:
9545-1-1DORG/259998

Sept 15, 2008

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0

**Re: 2AM-DOH0713 – Hope Bay Mining Ltd. – Doris North Infrastructure
Project, Sewage Management Plan**

Please be advised that Indian and Northern Affairs Canada (INAC) has completed a review of the Sewage Management Plan for the Doris North Infrastructure Project in the Kitikmeot Region (see attached Technical Review Memo).

Please feel free to contact me should you have any questions or comments. I can be reached at (867) 975-4568 or by email at RumboltI@inac-ainc.gc.ca.

Sincerely,

Original signed by

Ian Rumbolt
Regional Coordinator



Technical Review Memo

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

From: Ian Rumbolt – Regional Coordinator, Indian & Northern Affairs Canada

Re: 2AM-DOH0713 – Hope Bay Mining Ltd. – Doris North Infrastructure Project, Sewage Management Plan

Hope Bay Mining Ltd. has submitted the above mentioned plan to the Nunavut Water Board (NWB) for review as a requirement under their Type A Water Licence (Parts D, G, and J). This plan has been reviewed and compared with requirements specified in the water license #: 2AM-DOH0713. The Plan for the permanent sewage treatment plant appears adequate with respect to the license requirements. However, the following comments/recommendations should be incorporated into the Plan.

Comments/Recommendations:

- 1) The proponent must include in this plan a detailed map/diagram of the entire Doris North site including the proposed monitoring locations ST-8, ST-9 and receiving lake for sewage effluent, Glen Lake.
- 2) The Plan lacks detail with regard to sewage treatment/disposal at the temporary Matrix Camp. Details similar to those provided for the permanent facilities should be incorporated into the plan. This would include, but not be limited to specific details noting the type of incinerator, operational procedures implemented to meet CCME Standards, volumes of waste disposed, disposal of ash, contingency plan for upsets at the Peak Energy MBR facilities including spills, contingency measures to be implemented should effluent license criteria be exceeded as well as an Operations Manual
- 3) The use of silt curtains installed at the discharge point into Glen Lake to control total suspended solids should be included in the Plan as a permanent operational procedure. INAC is concerned with the idea of discharging effluent over a large area during the winter months. Although all effluent discharged at ST-8 will be treated there may be an accumulation of solids that could run-off to Glen Lake during spring melt.



- 4) Operator training requirements should be stated in the plan for both the temporary and permanent facilities.
- 5) Cleaning solutions and other solvents used in sewage treatment systems must be included in the Spill Contingency Plan, as well as placing spill kits in these locations.
- 6) In the event that discharged effluent does not meet the licence criteria; the Plan should state contingency measures. It is noted that the Plan refers to malfunctions or upsets and the utilization of two 8000 litre storage tanks however there is no mention of contingencies with respect to effluent criteria exceedences.
- 7) The Proponent should include a raw sewage/grey water monitoring program, in the Plan, similar to the effluent program that would assist in assessing/determining the performance of both the temporary and the permanent MBR treatment units.

Ian Rumbolt
Regional Coordinator

Cc. Kevin Buck, Manager of Water Resources – Indian & Northern Affairs
Canada, Nunavut Regional Office