



Water Resources Division  
Nunavut Regional Office  
Indian and Northern Affairs Canada  
Iqaluit, NU X0A 0H0

Our File: 9545-3-2MRYG / CIDMS 219315

Monday, June 23, 2008

Richard Dwyer  
Licence Administrator  
Nunavut Water Board  
Gjoa Haven, NU X0B 1J0

**Re: 2BB-MRY0710, Baffinland Iron Mines Corporation, Qikiqtani Region,  
Landfill Site Design Report**

Dear Mr. R. Dwyer,

Indian and Northern Affairs Canada (INAC) has reviewed the November 13, 2007 Mary River Project Bulk Sampling Program Landfill Site Design Report submitted by Baffinland Iron Mines Corporation. This Report was submitted to the Board for review in accordance with Part D, Item 19 of the 2BB-MRY0710 licence.

The Licensee intends to construct a 5,000 cubic metre capacity non-hazardous landfill to accommodate waste materials that have accumulated within its project area and additional waste materials that will result from its bulk sampling program. The landfill will be designed in manner that promotes drainage and precipitation runoff will be directed away from the landfill. Precipitation runoff will flow toward Sheardown Lake.

The following advice has been provided pursuant to INAC'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*. Indian and Northern Affairs Canada recommends that these comments be considered when reviewing this licence renewal application.

- INAC supports the submitted Bulk Sampling Program Landfill Site Design Report. This report describes the proposed non-hazardous landfill's design, site preparation, operation, and eventual closure.
- The Licensee should submit a stand-alone Operations and Maintenance Plan specific to the proposed Bulk Sampling Program Landfill Site. This Plan should be prepared in accordance with the *Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories, 1996*, as specified in Part D, Item 19 of the 2BB-MRY0710 licence.

- A surveillance network program (SNP) site should be established to collect runoff from the proposed non-hazardous waste landfill for water quality data analysis, should it be constructed. The INAC Inspector and the proponent should discuss the final section of the SNP location(s) and inform the Board. This site should be sampled monthly during periods of observed flow and include the following sample parameters:

|                        |                  |
|------------------------|------------------|
| BOD <sub>5</sub>       | Conductivity     |
| pH                     | Ammonia          |
| Total Suspended Solids | Total Nickel     |
| Total Nitrogen         | Oil and Grease   |
| Nitrate-Nitrite        | Total Alkalinity |
| Total Phenols          | Calcium          |
| Total Hardness         | Potassium        |
| Magnesium              | Sulphate         |
| Sodium                 | Total Cadmium    |
| Total Arsenic          | Total Chromium   |
| Total Copper           | Total Lead       |
| Total Iron             |                  |

- INAC understands that the Licensee must provide as-built plans and drawings, stamped and sealed by a professional engineer registered in Nunavut, within ninety (90) days of completion of all constructed works, such as the proposed non-hazardous waste landfill. This is in accordance with Part J, Item 4 of the 2BB-MRY0710 licence.

Indian and Northern Affairs Canada requests notification of any changes in the proposed project, as further review may be necessary. Please contact me should you have any questions or comments with regards to the foregoing. I can be reached by telephone at (867) 975-4555 or email at [AbernethyD@inac-ainc.gc.ca](mailto:AbernethyD@inac-ainc.gc.ca).

Regards,  
***Original signed by***

David W. Abernethy  
Regional Coordinator

Carbon copy:  
Jim Rogers, Manager of Water Resources – INAC, NRO  
Phyllis Beaulieu, Manager of Licensing – Nunavut Water Board  
Derek Chubb, VP Sustainable Development – Baffinland Iron Mines Corporation