

October 29, 2012

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

Dear Ms. Beaulieu / Mr. Joseph:

Re: Baffinland Iron Mines Corporation (BIM) - Submission of 2012 Annual Geotechnical Inspection, NWB File: 2BB-MRY1114

1. INTRODUCTION

Under Part D, Item 16, of Baffinland Iron Mines Corporation (Baffinland) Water Licence 2BB-MRY1114, there is a requirement to ensure the proper function of earthworks associated with waste disposal facilities at its Mary River Project. This requirement is detailed in Part D, Item 19, which states that:

"An inspection of the earthworks, geological regime, and the hydrological regime of the Project is to be carried out during the summer of 2011, by a Geotechnical Engineer. The Geotechnical Engineer's report shall be submitted to the Board within sixty (60) days of the inspection, with a covering letter from the Licensee outlining an implementation plan to respond to the Engineer's recommendations."

Since 2008 BIM retained GENIVAR Consultants (Genivar) to complete the annual water license geotechnical inspection of the on-site waste containment structures located at its two main camp sites, known as the Mary River Camp and Milne Inlet Camp. The 2012 field inspection was conducted by Genivar on August 8, 9, and 10, 2012, with follow-up review activities completed by the end of August. The 2012 report was completed and submitted to Baffinland on October 25. During the 2012 inspection. the containment structures reviewed at the respective camps included the following:

Mary River Mine Camp

- **Bulk Fuel Storage Facility Containment**
- Generator Fuel Storage Facility Containment
- Polishing/Waste Stabilization Pond No.1
- Polishing/Waste Stabilization Ponds No.2 and No.3 (Constructed as a 2 cell structure)
- Helicopter Fuel Cell Containment
- Barrel Fuel Containment (Constructed as a 2 cell structures)
- Stove Oil Storage
- Enviro-Tank Storage (Constructed contiguous with hazardous waste storage and stove oil storage).
- Hazardous Waste Storage
- Jet fuel Tank and Pump Containment
- Solid Waste Disposal Site.

Milne Inlet Site

- Bulk Fuel Storage Facility Containment
- Polishing/Waste Stabilization Pond
- Barrel Fuel Storage (Constructed as a 2 cell structure)



- Hazardous Waste Storage (Constructed as a 2 cell structure)
- Oil and Antifreeze Containment
- Jet "A" Pump Containment
- 5M Litre Steel Fuel Storage Tank

Attached, herewith, is Genivar's 2012 geotechnical report which presents the 2012 findings and recommendations for the aforementioned structures. Sections 2.0 and 3.0 of this letter summarize Baffinland's plan for implementing Genivar's recommendations. Recommendations for 2012 were similar to those provided for previous annual geotechnical inspection reports.

2. MARY RIVER MINE CAMP RECOMMENDATIONS

2.1. Bulk Fuel Storage Facility Containment

There are no recommendations made at this time other than to continue the pumping and treatment procedure currently undertaken.

2.2. Generator Fuel Storage Facility Containment

Recommendation MR1: Based on the need to contain 110 % of the bladder volume in the event of a fuel spill, the maximum volume of fuel permitted to be stored in the bladder in this facility as it is constructed, is 77,376 litres (76 cm height). Baffinland will continue to control the amount of fuel to the stated volume as per current practice. We recommend that Baffinland control the fuel in the bladder at 70,097 litres (30" high).

Baffinland Response: This recommendation has and continues to be implemented.

2.3. Polishing/Waste Stabilization Pond No. 1

<u>Recommendation MR2:</u> Continue the elevation monitoring program established on the top of the berm on an annual basis through 2013.

<u>Baffinland Response:</u> One round of elevation monitoring measurements will be completed prior to the 2013 annual inspection.

2.4. Polishing/Waste Stabilization Pond Nos. 2 and 3

<u>Recommendation MR3:</u> Continue the elevation monitoring program established on the top of the berm on an annual basis through 2013.

<u>Baffinland Response:</u> One round of elevation monitoring measurements will be completed prior to the 2013 annual inspection.

2.5. Helicopter Fuel Tank Containment, Barrel Fuel Containment, Hazardous Waste Storage, Enviro-Tank Storage, and Stove Oil Storage

There were no recommendations made at this time.

2.6. Jet Fuel Tank and Pump Containment

In consideration of the recent work completed there are no recommendations at the present time.

2.7. Solid Waste Disposal Site

There were no recommendations made at this time.



3. MILNE INLET CAMP

3.1. Bulk Fuel Storage Facility Containment

There were no recommendations made at this time.

3.2. Polishing/Waste Stabilization Pond

There were no recommendations made at this time.

3.3. Barrel Fuel Storage

In consideration of the recent work completed there are no recommendations at the present time.

3.4. Hazardous Waste Storage and Oil/Antifreeze Containment

There were no recommendations made at this time.

3.5. Jet "A" Pump Containment

There were no recommendations made at this time.

3.6. 5M litre Steel Fuel Storage Tank

There were no recommendations made at this time.

We trust that this submittal satisfies the requirements the geotechnical requirements as outlined in our water licence. Should you have any questions, please do not hesitate to contact Jim Millard, Senior Environmental Superintendent at 902-403-1337 or by e-mail at jim.millard@baffinland.com.

Best Regards,

Baffinland Iron Mines Corporation

James Millard, M.Sc., P.Geo.

Senior Environmental Superintendent

Attach: Annual Geotechnical Inspection 2012, prepared by GENIVAR Consultants for Baffinland Iron Mines Corporation, dated October 25, 2012.

cc. Stephen Bathory, Joel Fortier (QIA)

Melissa Joy (AANDC) Erik Madsen (Baffinland)