



**SCREENING DECISION REPORT  
NIRB FILE NO.: 07EN012**

NIRB No.: 07EN012  
INAC No.: N2007F0004  
QIA No.: LUA-2007-001

May 4, 2007

The Hon. Jim Prentice  
Minister of Indian & Northern Affairs Canada  
Ottawa, ON  
Via email: [Prentice.J@parl.gc.ca](mailto:Prentice.J@parl.gc.ca)

*and*

President Thomas Alikatuktuk  
Qikiqtani Inuit Association  
Iqaluit, NU  
Via email: [pres@qia.ca](mailto:pres@qia.ca)

**Re: Screening Decision for Baffinland Iron Mine Corporation's Mary River Bulk Sample Project Proposal**

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Dear Honorable Sirs:

The primary objectives of the Nunavut Land Claims Agreement (NLCA) are set out in section 12.2.5 of the Land Claims Agreement. This section reads:

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area.

Section 12.4.4 of the Nunavut Land Claim Agreement states:

Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

- a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;
- b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;
- c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or

- d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

#### NIRB Assessment and Decision

After a thorough assessment of all material provided to the Board (please see Appendix B) in accordance with the principles identified within section 12.4.2 of the NLCA, the decision of the Board as per section 12.4.4 of the NLCA is:

**12.4.4 (a):** the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5

#### Recommended Terms and Conditions, pursuant to 12.4.4(a) of the NLCA

The Board is recommending the following or similar project-specific terms and conditions be imposed upon the Proponent through all relevant legislation:

1. Baffinland Iron Mines Corporation (the Proponent) shall otherwise operate in accordance with all commitments stated in all documentation provided to NIRB, namely:
  - a. Correspondence dated April 20, 2007 from Derek Chubb to Carolanne Inglis-McQuay, including the table addressing Parties' concerns
  - b. Memorandum dated April 20, 2007 entitled *Establishing Significance of Residual Impacts of the Bulk Sampling Program*
  - c. Memorandum dated April 17, 2007 entitled *Calculation of Estimated Ammonia Runoff from Bulk Sample Pits*
  - d. Correspondence dated March 16, 2007 from Knight Piesold to Rod Cooper regarding Preliminary Results of Phase 1 Geochemical Characterization Program
  - e. Correspondence dated January 8, 2007 from Rod Cooper to Carolanne Inglis-McQuay
  - f. Indian and Northern Affairs Application for Land Use Permit
  - g. Indian and Northern Affairs Application for Quarrying Permit
  - h. Qikiqtani Inuit Association Application for Access to Inuit Owned Land
  - i. Baffinland Iron Mines Corporation Mary River Project, Bulk Sampling Program – Environmental Screening Document Volume I Report and Volume II Appendices (Knight Piesold Report NB102-00181/6-1, Rev. 0, dated November 20, 2007)
2. The Proponent shall maintain a copy of this Screening Decision at the site of operation at all times.
3. The Proponent shall forward copies to NIRB of all authorizations obtained and required for this project prior to the commencement of the project.
4. The Proponent shall operate the project in accordance with all applicable Federal and Territorial Acts, Regulations and Guidelines.
5. The Proponent shall submit an annual report with copies provided to the NIRB, INAC, the QIA, Environment Canada and Government of Nunavut by January 31 each year that the project is in operation commencing January 31, 2008. The report must contain, but not be limited to, the following information:

- a. A summary of activities undertaken for the year, including any progressive reclamation work undertaken, and a work plan for the following year –site photos should be provided where relevant;
  - b. A summary of how the Proponent has complied with NIRB conditions contained within this Screening Decision.
  - c. A summary of the results from the Monitoring Program and the Construction Environmental Management Plan, including:
    - i. An analysis of the impact of the project upon the bio-physical and socio-economic environments, including the cumulative impacts from other activities within the project area;
    - ii. An analysis of the effectiveness of mitigation measures;
    - iii. The identification of any unanticipated environmental impacts (if any) and any follow-up required (if relevant);
    - iv. Compliance status with applicable regulations and all authorizations associated with the project activities, including any exceedences of CCME-FWAL criteria (as reported to Environment Canada, the Nunavut Water Board, and the Department of Fisheries and Oceans Canada)
    - v. Any necessary adaptive mitigation strategies employed
    - vi. Any modifications made to the Monitoring Program;
    - vii. Results of community member involvement in the Monitoring Program; and
    - viii. Description of the progress made on the development of component-specific thresholds used to determine the necessity for adaptive mitigation and management strategies.
  - d. A summary of community consultations undertaken and the results; and
  - e. A summary of site-visits by inspectors with results and follow-up actions.
6. Monitoring Program
- a. Prior to commencement of the Bulk Sample project proposal activities, the Proponent shall develop a comprehensive monitoring program for the project. The monitoring program must be developed for all stages of the project activities, including construction, operation, closure, and post-closure. The monitoring program should be developed in accordance with the objectives outlined in Section 8 of the Proponent's Environmental Screening Document, namely:
    - i. Detection of unanticipated environmental impacts (if any)
    - ii. Assessment of the effectiveness of proposed mitigation and the need to modify the measures or implement contingency plans
    - iii. Compliance with applicable regulations and requirements of environmental permits
    - iv. Ongoing collection of baseline environmental data
  - b. The monitoring program must monitor the components outlined in Section 8 of the Environmental Screening Document, but also must be updated to include monitoring for those components included in the significance assessment provided by the Proponent (on April 20, 2007), namely:
    - i. Air quality
    - ii. Noise
    - iii. Unique or fragile landscapes
    - iv. Water quality including sewage effluent, ARD and ammonia run-off
    - v. Caribou
    - vi. Carnivores
    - vii. Marine wildlife

- c. The Proponent shall make efforts to monitor potential impacts from the project proposal on Inuit Harvesting activities, particularly along the Milne Inlet Tote Road.
  - d. The monitoring program may utilize the same monitoring activities as the Construction Environmental Management Plan, but must be a stand-alone program.
  - e. The monitoring program must incorporate data collected by the Pisikik Inuit Qaujimajatuqangit Working Group, particularly in the determination of monitoring methodology and the identification of suitable indicators.
  - f. Baffinland must make all reasonable efforts to involve the community members from the Hamlet of Pond Inlet and Qikiqtani Inuit Association representatives in the development and implementation of the monitoring program.
  - g. The marine wildlife monitoring component of the monitoring program should be developed in conjunction with Department of Fisheries and Oceans and must consider the use of local community members as marine wildlife monitors.
  - h. The monitoring program must identify component-specific thresholds that will be used to determine the necessity for adaptive mitigation and management strategies.
7. The Proponent must ensure that shipping contractors do not incinerate any wastes or deposit any sewage or bilge water in Milne Inlet.
  8. The Proponent must ensure that shipping contractors travel at a speed less than 25km/hr, or otherwise directed by the Department of Fisheries and Oceans and/or Transport Canada.
  9. The Proponent shall submit an updated Emergency and Spill Response Plan immediately to NIRB and the Nunavut Water Board. Furthermore, the Proponent **must** ensure that there is sufficient spill response equipment at Milne Inlet to adequately respond to a fuel spill of, at a minimum, 9,520L.
  10. The Proponent shall ensure that all hazardous material is managed, removed from site and disposed in accordance with the *Environmental Protection Act (EPA)*, the Nunavut Territorial Regulations and Guidelines, and the Nunavut Hazardous Waste Disposal Manual.
  11. If a formal Approval is required under the *Navigable Waters Protection Act (NWPA)* regarding works along the Milne Inlet Tote Road potentially interfering with navigation, the Proponent shall make all reasonable efforts to communicate this information to the community of Pond Inlet.
  12. The Proponent must provide the community of Pond Inlet, Parks Canada and Nunavut Tourism with advance notice regarding the timing of the project shipping activities for 2007 and 2008.
  13. In accordance with GN procedures where stated and sections 5.6.52 and 5.6.55 of the Nunavut Land Claims Agreement, the Proponent shall contact the nearest Government of Nunavut Wildlife Office in the event of a defense kill of a Polar Bear.
  14. Aircraft take-offs and landings are prohibited if caribou monitoring indicates presence within of caribou within 1km of the airstrips and/or helipads.
  15. The Proponent shall adhere to conditions stated in attached Appendix A *Archaeological and Palaeontological Resources – Terms and Conditions for Land Use Permit Holders*.
  16. In advance of any ground disturbance, the Proponent must conduct archaeological surveys in any areas which have not been previously surveyed by a qualified archaeologist (i.e. borrow-source areas, Milne Inlet). Following the surveys, the Proponent must submit an Archaeological

Assessment Report to NIRB and the Government of Nunavut Department of Culture, Language, Elders and Youth (GN-CLEY). Any subsequent direction provided by the GN-CLEY the Archaeological Plan must be forwarded to NIRB. The Proponent shall continue its efforts to involve Inuit in the planning of field work, conducting field work and the interpretation of findings.

17. If snow sampling activities indicate adverse environmental impacts resulting from dust deposition from project activities, the Proponent must employ dust suppression methods approved by the Government of Nunavut – Department of Environment.

#### Other Concerns and Recommendations

In addition to the project-specific terms and conditions, the Board is recommending the following:

1. Indian and Northern Affairs Canada (INAC) impose mitigation measures and/or conditions upon Baffinland (the Proponent) pursuant to the Federal Land Use Permit (N2007F0004) and the Quarry Permit, in regard to:
  - a. Location and Area
  - b. Time
  - c. Equipment
  - d. Methods and Techniques
  - e. Type, Location, Capacity and Operation of Facilities
  - f. Control or Prevention of Flooding, Erosion and Subsidence of Land
  - g. Use, Storage, Handling and Disposal of Chemical or Toxic Material
  - h. Wildlife and Fisheries Habitat
  - i. Objects and Places of Recreational, Scenic and Ecological Value
  - j. Petroleum Fuel Storage
  - k. Matters Not Consistent with the Regulations
2. INAC consider the importance of conducting regular Land Use Inspections, pursuant to the authority of the Federal Land Use Permit and the Quarry Permit, while the project is in operation. The Land Use Inspections should be focused on ensuring the Proponent is in compliance with the conditions imposed through the Federal Land Use Permit.
3. The Qikiqtani Inuit Association (QIA) impose mitigation measures and/or conditions upon the Proponent pursuant to the Inuit Owned Lands License (LUA-2007-001) and the Quarry Concession in regard to:
  - a. General Standards
  - b. Fuel and Chemical Storage
  - c. Drilling
  - d. Campsites
  - e. Fisheries
  - f. Ground Disturbance
  - g. Other General
  - h. Any other conditions recommended by the appropriate Community Lands and Resource Committee (CLARC)
4. The QIA require the Proponent to follow the QIA Code of Conduct for Land Users.
5. The QIA consider the importance of conducting regular Land Use Inspections of the project.

6. The Government of Nunavut – Department of Environment (GN-DOE) liaise with the Proponent and the Hamlet of Pond Inlet to assess the potential for increased caribou harvests. The assessment should consider the likelihood that increased caribou harvests could occur. The assessment should include the potential impact of any increased harvests on resident caribou herds (if identified), any agreed-upon mitigation measures (if required) and any follow-up monitoring which may be required.
7. All geochemical analysis results pertaining to the waste rock and ore body samples must be reviewed by the Nunavut Water Board prior to the issuance of a water license. The review should consider the imposition of appropriate conditions, mitigation measures and/or contingency plans to reduce the potential for adverse effects to water quality from Acid Rock Drainage (ARD) and/or Metal Leaching (ML). This review must also include the results from the additional 25 waste rock and ore samples sent for analysis on or around March 16, 2007, with results expected on or around April 27, 2007 (samples taken by Baffinland's primary consultant, Knight Piésold).
8. The Nunavut Water Board should identify appropriate sampling frequency for the water quality monitoring program, in order to determine if potential adverse effects are occurring as a result of the project.
9. Prior to the commencement of project activities, an Employment, Education and Training Plan should be developed by the Proponent for this project in conjunction with the Government of Nunavut and the Qikiqtani Inuit Association.

#### **Validity of Land Claims Agreement**

##### Section 2.12.2

Where there is any inconsistency or conflict between any Federal, Territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated \_\_\_\_\_ May 4, 2007 \_\_\_\_\_ at Cambridge Bay, NU.



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Albert Ehloak, Vice Chairperson

**Appendix A –  
Government of Nunavut – Department of Culture, Language, Elders and Youth  
Terms and Conditions**



## **BACKGROUND**

### **Archaeology**

*As stated in Article 33 of the Nunavut Land Claims Agreement:*

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [33.2.5]

### **Palaeontology**

Under the Nunavut Act<sup>1</sup>, the federal government can make regulations for the protection, care and preservation of palaeontological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*<sup>2</sup>, it is illegal to alter or disturb any palaeontological site in Nunavut unless permission is first granted through the permitting process.

### **Definitions**

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

“archaeological site” means a place where an archaeological artifact is found.

“archaeological artifact” means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

“palaeontological site” means a site where a fossil is found.

“fossil” includes:

- (a) natural casts
- (b) preserved tracks, coprolites and plant remains; and
- (c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.

### **Terms and Conditions**

1. The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
2. The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
3. The permittee shall immediately contact the Department of Culture, Language, Elders and Youth (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035 should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.
4. The permittee shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation, until permitted to proceed with the authorization of the Department of Culture, Language, Elders and Youth, Government of Nunavut.
5. The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.
6. The permittee shall provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.
7. The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.
8. The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.
9. The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth:
  - a. survey
  - b. inventory and documentation of the archaeological or palaeontological resources of the land use area
  - c. assessment of potential for damage to archaeological or palaeontological sites
  - d. mitigation
  - e. marking boundaries of archaeological or palaeontological sites
  - f. site restoration

The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.



## Appendix B

### FILE HISTORY

On January 25, 2007, the Nunavut Impact Review Board (NIRB or Board) received Baffinland Iron Mine Corporation's (Baffinland) Mary River Bulk Sample Program project proposal (Bulk Sample Project) from Indian and Northern Affairs Canada (INAC) and the Qikiqtani Inuit Association (QIA). This project proposal received a positive conformity determination from the Nunavut Planning Commission on January 22, 2007.

At the same time, NIRB received Baffinland's Geotechnical Drilling program project proposal from INAC and QIA. Baffinland requested NIRB conduct *separate* Part 4 screenings on the Drilling Program and this Bulk Sampling Program.

On January 29, 2007 NIRB commenced the Notice of Part 4 Screening for the Geotechnical Program, and offered the opportunity to Parties to provide comments regarding whether or not the Geotechnical Program and the Bulk Sampling Program were separate and discrete.

On February 6, 2007 NIRB received comments from Indian and Northern Affairs Canada (INAC) and Environment Canada (EC) regarding whether or not the Drilling Program and the Bulk Sample Program were separate and discrete project proposals. Both INAC and EC stated they agreed with NIRB's determination that the project proposals could undergo separate Part 4 Screenings.

On February 21, 2007 NIRB commenced the Part 4 Screening for the Bulk Sample Program project proposal.

The application was distributed to the Hamlet of Pond Inlet, the Hamlet of Arctic Bay and the Hamlet of Igloolik and to interested Federal and Territorial Agencies.

On March 6, 2007 the QIA requested an extension to the comment deadline, in order to consult with the Community Lands and Resources Committee in Pond Inlet about the project. NIRB subsequently granted all Parties an extension until March 30, 2007.

On or before March 30, 2007 NIRB received comments and concerns about the project proposal from the following Parties:

1. Qikiqtani Inuit Association
2. Hamlet of Pond Inlet
3. Government of Nunavut Department of Executive and Intergovernmental Affairs
4. Indian and Northern Affairs Canada
5. Environment Canada
6. Health Canada
7. Parks Canada
8. Transport Canada
9. Natural Resources Canada
10. Fisheries and Oceans Canada

The following is a *summary* of the concerns raised by Parties:

- Water quality
- Human health
- Monitoring programs

- Fish, marine mammals, caribou, other wildlife, migratory birds, seabirds, waterfowl and Species at Risk – and their habitat
- Hazardous waste storage
- Incinerator use
- Cumulative effects and cumulative effects assessment
- Archaeology
- Milne Inlet Tote Road
- Sewage management
- Socioeconomic impacts
- Traditional land use and activities, Inuit harvesting activities and country foods
- Noise levels
- Air quality
- Eskers and other unique landscapes
- Shipping activities
- Abandonment and restoration
- Education and training
- Spill contingency planning
- Greenhouse gas emissions
- Public health and safety
- Further baseline data collection
- Interference to navigation
- Community involvement and consultation
- Local development in the area
- Tourism in the area

On April 3, 2007 NIRB requested Baffinland address all comments and concerns by April 20, 2007. On April 20, 2007 NIRB received the following additional information from the Proponent:

1. Correspondence dated April 20, 2007 from Derek Chubb to Carolanne Inglis-McQuay, including a table addressing Parties' concerns.
2. Memorandum dated April 20, 2007 entitled *Establishing Significance of Residual Impacts of the Bulk Sampling Program*
3. Memorandum dated April 17, 2007 entitled *Calculation of Estimated Ammonia Runoff from Bulk Sample Pits*
4. Correspondence dated March 16, 2007 from Knight Piesold to Rod Cooper regarding Preliminary Results of Phase 1 Geochemical Characterization Program

### **PROJECT ACTIVITIES**

The Bulk Sample project activities include the following:

- Delivery of contractor mining and crushing equipment, camp materials and fuel in 2 ship voyages to Milne Inlet
- Upgrade of existing Milne Inlet tote road for all-weather use including:
  - Quarrying and placement of fill on road bed
  - Replacement and installation of culverts at watercourses
- Construction of 100-person all-weather tent camp at Mary River, adjacent to existing seasonal exploration camp
- Establishment of a temporary 30-person trailer camp at Milne Inlet
- Establishment of a temporary 12-person trailer camp part-way along the Milne Inlet tote road (Midway camp)

- Establishment of temporary fuel storage facilities at Mary River consisting of one 1.4ML diesel fuel tank farm, one 550,000L Jet-A tank farm, and one 1.25ML diesel tank farm
- Establishment of temporary fuel storage facilities at Milne Inlet for 8ML of diesel fuel and 90,000L of Jet-A fuel
- Establishment of temporary fuel storage facilities Midway Camp for 20-30 200L drums of diesel fuel
- Construction of a test rail embankment
- Drilling, blasting and storing of 169,300 dry tonnes (t) of weathered surface rock on top of Deposit No. 1 over one or two months
- Abandonment of a 169,300 t weathered iron ore stockpile
- Drilling, blasting and storing 250,000 t of iron ore bulk sample from Deposit No. 1 over three-to-five months
- Hauling of the 250,000 t iron ore bulk sample from Mary River to Milne Inlet
- Temporary stockpiling of the 250,000 t iron ore bulk sample at Milne Inlet
- Loading of the 250,000 t iron ore bulk sample on 3 ships for a total of five voyages

### **REGULATORY REQUIREMENTS**

The following acts, regulations and guidelines apply to the project proposal:

1. Territorial Lands Act
2. Territorial Lands Regulations
3. Territorial Land Use Regulations
4. Canada Mining Regulations
5. Nunavut Waters and Nunavut Surface Rights Tribunal Act
6. Northwest Territories Waters Act
7. Northwest Territories Waters Regulations
8. Environmental Protection Act
9. Spill Contingency Planning and Reporting Regulations
10. Public Health Act
11. Camp Sanitation Regulations
12. Water Supply Regulations
13. Mine Health & Safety Act
14. Mine Health & Safety Regulations
15. Nunavut Safety Act
16. Fisheries Act
17. Explosives Use Act
18. Explosives Regulations

The Proponent will require the following Authorizations:

1. Inuit Land Use License III (Qikiqtani Inuit Association)
2. Quarry Concession (Qikiqtani Inuit Association)
3. Type B Water License (Nunavut Water Board)
4. Class A Land Use Permit (INAC)
5. Quarry Permit (INAC)
6. Fisheries Authorizations (DFO)
7. Exemption/approvals under the Navigable Waters Protection Act (Transport Canada)