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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: Baffinland Iron Mines Corporation **Licence No:** _____
(For NWB Use Only)

ADMINISTRATIVE INFORMATION

1. Environment Manager: _____ Tel: _____ Fax: _____ E-mail: _____
2. Project Manager: Roland Landry Office Tel: (416) 364-8820 Fax: (416) 364-0193
Camp Tel: (416) 619-0538 or 011-8816-314-66078
E-mail: roland.landry@baffinland.com
3. Does the applicant hold the necessary property rights? Yes
4. Is the applicant an 'operator' for another company (i.e., the holder of the property rights)? If so, please provide letter of authorization. No
5. Duration of the Project
☐ One year or less Start and completion dates: _____
☒ Multi Year:

If Multi-Year indicate proposed schedule of on site activities
Start: Jan 1, 2007 Completion: Dec 31, 2011

CAMP CLASSIFICATION

6. Type of Camp
☐ Mobile (self-propelled)
☐ Temporary
☒ Seasonally Occupied: March – October
☐ Permanent
☐ Other: _____

7. What is the design, maximum and expected average population of the camp?

The designed capacity of the camp will be expanded to 100 persons; typical camp population will average 80 persons with a maximum of 100 persons.

8. Provide history of the site if it has been used in the past.

Exploration was undertaken by a predecessor company (Baffinland Iron Mines Ltd. - BIML) in the 1960s. The current company (Baffinland Iron Mines Corporation - BIMC) restarted exploration in 2004, constructing a new camp. Some clean-up of materials left from the 1960s has been undertaken.

CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies.

The camp is situated on an outwash plain of sand and gravel, approximately 200 m from a nearby lake with steep cut banks along the shoreline.

10. How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.

Co-op staff from Pond Inlet, who are also hunters familiar with the area, assisted Baffinland in determining the camp location based on water quality and prevailing winds.

11. Is the camp or any aspect of the project located on:

- | | | |
|-------------------------------------|---------------------|--|
| <input checked="" type="checkbox"/> | Crown Lands | Permit Number (s)/Expiry Date: N2004C0017, 28-Jun-07 |
| <input type="checkbox"/> | Commissioners Lands | Permit Number (s)/Expiry Date: _____ |
| <input checked="" type="checkbox"/> | Inuit Owned Lands | Permit Number (s)/Expiry Date: Q05L2C14, 31-Dec-06 |

12. Closest Communities (direction and distance in km):

Pond Inlet 160 km
Igloolik 230 km
Arctic Bay 270 km

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?

Yes.

14. Will the project have impacts on traditional water use areas used by the nearby communities?
Will the project have impacts on local fish and wildlife habitats?

No

PURPOSE OF THE CAMP

15. ☒ Mining (includes exploration drilling)
☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.)
(Omit questions # 16 to 21)

☐ Other _____

16. Activities (check all applicable)

- ☐ Preliminary site visit
- ☐ Prospecting
- ☐ Geological mapping
- ☐ Geophysical survey
- ☒ Diamond drilling
- ☐ Reverse circulation drilling
- ☐ Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)
- ☐ Other: _____

17. Type of deposit (exploration focus):

- ☐ Lead Zinc
- ☐ Diamond
- ☐ Gold
- ☐ Uranium
- ☒ Other: Iron Ore

DRILLING INFORMATION

18. Drilling Activities

- ☒ Land Based drilling
- ☒ Drilling on ice

19. Describe what will be done with drill cuttings?

When drilling on land and removed from watercourses, the minimal drill cuttings generated by the rock core drills will be left on the ground next to the hole. When drilling close to watercourse (i.e., <30m) or on-ice, all drill cuttings will be placed in drums for on-land disposal away from watercourses.

20. Describe what will be done with drill water?

Return drill water is captured in a nearby sump and recycled to the extent possible. When drilling on-ice, return water will be placed into drums for on-land disposal.

21. List the brand names and constituents of the drill additives to be used? Includes MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable.

Calcium chloride
Darina rod grease
EZ-Mud

22. Will any core testing be done on site? Describe.

Only visual logging and minor testing such as point load counts will be completed on-site.

SPILL CONTINGENCY PLANNING

23. The proponent is required to have a site specific Spill Contingency Plan prepared and submitted with the application. This Plan should be prepared in accordance with the *NWT Environmental Protection Act, Spill Contingency Planning and Reporting Regulations, July 22, 1998* and *A Guide to the Spill Contingency Planning and Reporting Regulations, June 2002*. Please include for review.

The spill contingency plan for the project was previously approved by the NWB. The spill plan has been updated and is attached.

24. How many spill kits will be on site and where will they be located?

See spill contingency plan for details.

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.

| Estimated Volumes to be Stored at Each Project Location in 2007 | | | | |
|---|--------------------------|------------------------|-----------------------|-------------------------|
| Fuel Type | Mary River Camp | Deposit No. 4 Fly Camp | Milne Inlet Fly Camp | Steensby Inlet Fly Camp |
| Diesel | 180,000 L (900 drums) | 4,000 L (20 drums) | 4,000 L (20 drums) | 4,000 L (20 drums) |
| Jet-A | 180,000 L (900 drums) | 6,000 L (30 drums) | 6,000 L (30 drums) | 6,000 L (30 drums) |
| Av-gas | 30,000 L (150 drums) | None | None | None |
| Gasoline | 1,000 (5 drums) | 200 (1 drum) | 200 (1 drum) | 200 (1 drum) |

The fuel storage reported for the temporary drill camps (fly camps) at Deposit No. 4, Milne Inlet and Steensby Inlet represent a rolling stock replenished from the Mary River fuel storage. MSDS Sheets are attached.

WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

Camp lake; shown on Figure 2.3 of Supporting Document.

27. Estimated water use (in cubic metres/day):

- ✓ Domestic Use: 20 Water Source: Camp Lake
✓ Drilling: 455 Water Source: Various (see letter and figures)
☐ Other: _____ Water Source: _____

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? (see *DFO 1995, Freshwater Intake End-of-Pipe Fish Screen Guideline*) Describe:

All water intakes (camp water supply and drill rig water pumps) are equipped with fish screens.

29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?

Drinking water has been

30. Will drinking water be treated? How?

Drinking water is treated using a ultra-violet (UV) disinfection system. The UV treatment system treats water that is drawn from the holding tanks before use.

31. Will water be stored on site?

Water for camp use is stored in two plastic 300 U.S.G. (1,135 L) tanks.

WASTE TREATMENT AND DISPOSAL

32. Describe the characteristics, quantities, treatment and disposal methods for:

☒ Camp Sewage (blackwater)

Sewage is either collected in drums and disposed of in the camp incinerator, or is disposed of in an incinerating toilet.

☒ Camp Greywater

Greywater is disposed of in an excavated sump.

☒ Solid Waste

Solid waste is incinerated in a camp incinerator.

☐ Bulky Items/Scrap Metal

☒ Waste Oil/Hazardous Waste

Waste oil is used to fuel the camp incinerator. Used batteries are collected in a sealed container and are transported off-site to Montreal.

✕ Empty Barrels/Fuel Drums

Empty fuel drums are returned to Pond Inlet for storage on a property leased from the Hamlet.

☐ Other:

33. Please describe incineration system if used on site. What types of wastes will be incinerated?

A high efficiency incinerator constructed of thick plate steel weighing 1,225 kg is used. Virtually all combustible wastes are incinerated, including waste oil.

34. Where and how will non-combustible waste be disposed of? If in a municipality in Nunavut, has authorization been granted?

Non-combustible wastes are disposed of in the Pond Inlet landfill. Commercial arrangements for waste disposal are made through the Toonoonik Sagoonik Co-operative in Pond Inlet. The main non-combustible waste includes fiberglass bags, as well as steel.

35. Describe location (relative to water bodies and camp facilities) dimensions and volume, and freeboard for all sumps (if applicable).

The sumps are located adjacent the kitchen and showers/laundry, and the location of the kitchen and showers relative to Camp Lake is shown on Figure 5. The dimensions, volume and freeboard of the sumps were not recorded when constructed, but have been functioning effectively to date.

36. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?

Monitoring of Camp Lake is conducted once every four weeks in accordance with Baffinland's current water license (Amendment 1). Water samples are analyzed for BOD₅, fecal coliform and total suspended solids.

OPERATION AND MAINTENANCE

37. Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?

The water supply and waste disposal methods are proven for camps in cold climates. Potential difficulties include freezing conditions during the filling of the camp water tanks. The systems are sufficiently rudimentary and robust that various contingencies are available. Drinking water can be derived directly from the lake given its close proximity and the water boiled prior to use, should the water pumping or treatment systems fail. There is limited operation and maintenance problems encountered with the camp incinerator.

ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.

See the abandonment and restoration plan for the Mary River Project, submitted to and approved by the Nunavut Water Board.

BASELINE DATA

39. Has or will any baseline information be collected as part of this project? Provide bibliography.

- ☒ Physical Environment (Landscape and Terrain, Air, Water, etc.)
- ☒ Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic Organisms, etc.)
- ☒ Socio-Economic Environment (Archaeology, Land and Resources Use,
- ☐ Demographics, Social and Culture Patterns, etc.)
- ☐ Other: _____

Knight Piésold Ltd. Baffinland Iron Mines Corporation - Mary River Project Literature - Review of Inuit Knowledge. Ref. No. NB102-00181/2-3, Rev A., June 1, 2006

Knight Piésold Ltd. Baffinland Iron Mines Corporation - Mary River Project – 2005 Baseline Terrestrial Study Report. Ref. No. NB102-00181/2-5, Rev A., August 29, 2006

Knight Piésold Ltd. Baffinland Iron Mines Corporation - Mary River Project – 2005 Baseline Water Quality Summary Report. Ref. No. NB102-00181/2-6, Rev A., May 25, 2006

Knight Piésold Ltd. Baffinland Iron Mines Corporation - Mary River Project – 2005 Baseline Vegetation Report. Ref. No. NB102-00181/2-7, Rev A., May 29, 2006

Knight Piésold Ltd. Baffinland Iron Mines Corporation - Mary River Project – 2005 Physical Baseline Study Report. Ref. No. NB102-00181/2-11, Rev A., June 27, 2006

Knight Piésold Ltd. Baffinland Iron Mines Corporation - Mary River Project – Land Use in the North Baffin and Foxe Basin, Nunavut. Ref. No. NB102-00181/2-12, Rev A., June 2, 2006

North/South Consultants Inc. Environmental Screening for the Mary River Project – Biological Considerations Related to Seabirds and Marine Mammals. Draft 2006.

REGULATORY INFORMATION

40. At a minimum, you should ensure you have a copy of and consult the documents below for compliance with existing regulatory requirements:

- ✓ ARTICLE 13 – *NCLA -Nunavut Land Claims Agreement*
- ✓ NWSRTA – *The Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002*
- ✓ *Northwest Territories Waters Regulations, 1993*
- ✓ NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants
- ✓ NWB - Interim Rules of Practice and Procedure for Public Hearings
- ✓ RWED – *Environmental Protection Act, R-068-93- Spill Contingency Planning and Reporting Regulations, 1993*

- ✓ RWED A Guide to the Spill Contingency Planning and Reporting Regulations, 2002
- ✓ NWTWB - Guidelines for Contingency Planning
- ✓ *Canadian Environmental Protection Act, 1999 (CEPA)*
- ✓ *Fisheries Act, RS 1985 - s.34, 35, 36 and 37*
- ✓ DFO - Freshwater Intake End of Pipe Fish Screen Guideline
- ✓ NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
- ✓ Canadian Council for Ministers of the Environment (CCME); Canadian Drinking Water Quality Guidelines, 1987
- ✓ Public Health Act - Camp Sanitation Regulations
- ✓ Public Health Act - Water Supply Regulations
- ✓ *Territorial Lands Act and Territorial Land Use Regulations*; Updated 2000