PART 1 FORM
PROJECT PROPOSAL INFORMATION REQUIREMENTS

For more information about the Nunavut Impact Review Board (NIRB) please visit our web site http://nirb.nunavut.ca/ or to access NIRB documents, project screenings, and project reviews please visit the Nunavut Impact Review Board ftp site http://ftp.nunavut.ca/nirb.

IMPORTANT

Please be advised that your application will not be processed until the following sections 1 - 6 are completed in full in English and Inuktitut (+ Inuinnaqtun, if in the Kitikmeot).

SECTION 1: APPLICANT INFORMATION

1. a) Project Number

Please indicate if applicant has submitted any previous application(s) to NIRB related to this project proposal? Yes X No

If yes, please indicate the previous NIRB project number(s): _____

1. b) Project Name **Mary River Project**

2. Applicant's full name and mailing address:

Baffinland Iron Mines Corporation
Sutie 1016, 120 Adelaide Street West
Toronto, Ontario
M5H 1T1

Fax: (416) 364-0193
Phone: (416) 364-8820
Email: rod.cooper@baffinland.com

3. Primary contact's full name and mailing address:

Rodney (Rod) Cooper
Vice President, Operations
(same address as above)

Fax:
Phone:
Email:

4. Secondary contact's full name and mailing address:

Michael Zurowski, P.Eng.
Executive Vice President
(same address as above)

Fax:
Phone:
Email:

SECTION 2: AUTHORIZATION NEEDED

1. Indicate <u>all</u> authorizations associated with the project proposal:

- [X] Regional Inuit Association (RIA)
- [X] Nunavut Water Board (NWB)
- [X] Nunavut Planning Commission (NPC)
- [X] Department of Indian And Northern Development (DIAND)
- [X] Department of Fisheries and Oceans (DFO)
- [ ] Community Government & Services (CG&S)
- [X] Nunavut Research Institute (NRI)
- [ ] Hamlet
- [ ] Canadian Launch Safety (CLS)
- [ ] Environment Canada (EC)
- [ ] Government of Nunavut (GN)
- [ ] Department of National Defense (DND)
- [ ] Department of Culture, Language, Elders, and Youths (CLEY)
- [ ] Parks Canada (PC)
- [ ] Other (please specify):

2. List the <u>active</u> permits, licences, or other rights related to the project and their expiry date:

Type of Authorization	Permit No.	Authorizing Agency	Governing Activity	Dates Valid
Water License (Type B)	NWB2MRY0406	Nunavut Water Board	Water use and waste disposal	Mar 10, 2004 to Dec 31, 2006
Inuit Land Use License	Q05L2C14	Qikiqtani Inuit Association	Exploration activities on Inuit Owned Lands	June 17, 2005 to Dec 31, 2006
Land Use Permit	N2004C0017	Department of Indian and Northern Affairs Canada	Exploration activities on Crown Land	June 29, 2004 to June 28, 2007

SECTION 3: PROJECT PROPOSAL DESCRIPTION

1. Indicate the type of project proposal:

X	Exploration (geophysical ground, geophysical air, drilling)
	Advanced Exploration/ Bulk Sampling
	Mine development
	Site remediation/ reclamation
X	Research
	Dew Line Clean up / Site Investigation
	Port
	Other: _____

2. Indicate the activities related to the project proposal:

X	Drilling other than geoscientific		Quarrying
	Offshore structure		All season road
X	Airport/ landing strip	X	Winter road
X	Camp		Access road
X	Fuel storage		Road modification
	Solid waste disposal		Cabins
	Hazardous waste storage or disposal	X	Sewage or grey water disposal
X	Research		Blasting
	Abandonment and Restoration		Harvesting
X	Burning		Burying
X	Construction		Channeling
	Cut and/or Fill		Removal of vegetation
	Dam/ Impoundment (construction/ abandonment/ removal/ modification)		Ditch construction
	Drainage Alteration		Excavation
X	Chemical Storage	X	Ecological survey
	Explosives Storage		Geoscientific sampling by trenching
X	Geoscientific sampling by diamond drilling		Geoscientific sampling by borehole core
X	Geoscientific sampling by soil sampling	X	Hydrological testing
	River/ stream/ lake crossing or work/ bridge		Site restoration (fertilization/ grubbing/ scarification/ spraying/ recontouring)
X	Soil testing		Soil disposal/ Soil storage
	Tunneling		Other (please specify):

3. Personnel

Total No. of personnel on site = (A)	80	Total No. of person days = (A) x No. days on site	20,000

4. Timing

Period of operation: **February 15, 2007** *to* **December 31, 2009**

Proposed term of permit: **January 1, 2007** *to* **December 31, 2009**

Please outline the phases of the proposed project (construction/ operation/ decommissioning) including the timing and scheduling of each phase. Seasonal advanced exploration and geotechnical drilling plus baseline environmental studies. Expected to continue for several years.

5. Region (check all that apply):

[X] Baffin [ ] Kivalliq [ ] Kitikmeot [ ] Transboundary: _____

6. Land Status (check all that apply):

[X] Crown [ ] Commissioners' [X] Inuit Owned Surface lands [X] Inuit Owned Sub-Surface Lands

7. Co-ordinates:

Min Lat (degree/minute)	69° 49'	Min Long (degree/minute)	77° 45'
Max Lat (degree/minute)	72° 5'	Max Long (degree/minute)	81° 0'

NTS Map Sheet No: 37F, 37G, 47H

Please ensure that maps of the project are attached (1:50,000 **if available**, 1:250, 000 **Mandatory**) available from Natural Resources Canada

If the project proposal includes a **camp**, please provide the coordinates of the camp location

Min Lat (degree/minute)	71° 19' 35 "	Min Long (degree/minute)	79° 33'
Max Lat (degree/minute)		Max Long (degree/minute)	

If different from above for the camp:

NTS Map Sheet No: _____

Please ensure that maps of the camp are attached (1:50,000 **if available**, 1:250, 000 **Mandatory**) available from Natural Resources Canada

8. Non-Technical Project Proposal Summary

Please include a non-technical description of the project proposal, no more than 500 words, in English and Inuktitut (+Inuinnaqtun, if in the Kitikmeot). The project description should outline the following:

- The project activities, their necessity and duration;
- Method of transportation;
- Any structures that will be erected (permanent/ temporary);
- Alternatives considered; and
- Long-term developments, the projected outcome of the development for the area and its timeline.

SECTION 4: MATERIAL USE

1. List equipment (including drills, pumps, aircrafts, etc.):

Equipment type and number	Size – dimensions	Proposed use
• 4 to 5 Helicopters (either Bell B2 A-star or Bell Long Rangers)		Move drills, field surveys
• D-4 dozer		Assist drilling, airstrip and road repairs
• 2 Steer skid loaders		Unload aircraft
• 6 All-terrain vehicles (Honda or Polaris Rangers)		Move personnel
• 5 Rock coring drills (Longyear 38 and Longyear 70) + 2 portable drills		Drill holes
• 2 Excavators		Assist drilling, airstrip and road repairs
• 2 tandem trucks		Airstrip and road repairs
• 1 compactor		Culvert maintenance
• 2 (1-tonne) Toyota flatbed pick-ups		Move personnel
• 3 to 4 snowmobiles		Move personnel

In addition, a CAT zoom boom will be positioned at Milne Inlet to unload barges.

2. Detail fuel and hazardous material use:

Fuels	Number of Containers	Capacity of containers (gal & litre)
• Diesel	960	200 L
• Gasoline	12	200 L
• Jet A	990	200 L
• Av Gas	150	200 L
• Propane	10	100 lbs + 20 lbs
• Other		
Hazardous material (please specify)		
• Calcium chloride (solid flakes)	1500	1 tonne sacks

SECTION 5: WASTE DISPOSAL AND TREATMENT FACILITIES

1. List the types of waste:

Type of waste	Projected amount generated	Method of Disposal	Additional treatment procedures
Sewage	400 L/day est.	Incineration	None
Greywater	~10-20 m^3/day	Buried sump	None
Garbage	Unknown	Incineration	None
Overburden (organic soil, waste material, tailings)	None	Not applicable	Not applicable
Hazardous waste	None	Not applicable	Not applicable
Waste oil	Unknown	Incineration (fuel)	None
Used batteries	Unknown	Off-site transport	Not applicable
Other: Empty fuel drums	Unknown	Off-site transport	Not applicable

SECTION 6: COMMUNITY INVOLVEMENT & REGIONAL BENEFITS

1. List the community representatives that have been contacted and provide the minutes of the meetings if available:

Community	Name	Organization	Date Contacted	Telephone No.	Fax No.
Pond Inlet	David Qamaniq, Malliki Arreak, Colin Sanders, Hamlet Councillors	Hamlet of Pond Inlet	Periodically every 2-3 months since 2004; annual site visits to Mary River. The last site visit was on Sept 7, 2006.	(867) 899-8934	(867) 899-8940
Pond Inlet		Community Meeting	April 22, 2006		
Pond Inlet		Community Meeting	Sept 6, 2006		
Pond Inlet	Ishmael Katsak Jacob Peterloosie Joanasie Atadjuat Elisapee Ootoova Geesoonie Killiktee Ena Mucktar Solomon Koonoo	Pisiksik Working Group	Various meetings between February and September 2006; site visit to Mary River on Sept 8, 2006.		
	Board of Directors	Mittimatilik HTO (Pond Inlet)	Dec 14, 2005 April 7-8, 2006	(867) 899-8856	(867) 899-8095
Igloolik	Paul Quassa (Mayor) and Hamlet Councillors	Municipality of Igloolik	July 24, 2006	(867) 934-8830	(867) 934-8757
Arctic Bay	Bill Harding	Hamlet of Arctic Bay	July 12, 2006	(867) 439-9917	(867) 439-8767

Applicant:

Signature **Title** **Date**

ᐃᓚᖓᓃᑦᑐᖅ PART 1-ᒥ
ᐱᓕᕆᐊᒃᓴᖅ ᑐᒃᓯᕌᖅ ᑐᓴᕐᒃᓴᖅ ᐱᙳᑎᓪᓗᒃ ᐋᑐᑕᐅᔭᕆᐊᓕᖕᓂᒃ

ᑐᓴᒃᑲᓂᕋᒃᓴᑦ ᐱᔭᐅᔪᓐᓇᖅᑐᑦ ᐱᙳᑎᓖᑦ ᓄᓇᕗᑦ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔩᖏᓐᓂᒃ ᑕᑯᓗᒋᑦ ᐅᕗᓇ ᖃᕆᑕᐅᔭᒃᑯᑦ http://nirb.nunavut.ca/ ᐅᕝᕙᓗᑭᐊᖅ ᐊᖁᑎᒋᓗᒋᑦ ᓄᓇᕗᑦ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔩᖏᑦᑕ ᐊᓪᓚᒃᓯᒪᔪᑦ, ᐱᓕᕆᐊᒃᓱᖕᖓᔪᓂᒃ ᕿᒥᕐᕈᕙᒃᑕᖏᑦ, ᐊᒻᒪᓗ ᐱᓕᕆᐊᒃᓴᐅᑉ ᑐᑭᐊ ᕿᒥᕐᕈᔭᐅᖃᑦᑕᕐᓂᖓ ᑕᑯᓗᒋᑦ ᓄᓇᕗᑦ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔩᖏᑦᑕ ᖃᕆᑕᐅᔭᒃᑯᑦ ᓴᕿᐅᒪᔪᑦ ᐅᕙᓂ http://ftpnunavut.ca/nirb.

ᐅᖄᑐᖅᑕᐅᕐᓯᐊᖅᓯᒪᒋᐊᓖᑦ

ᖃᐅᔨᒪᓂᐊᕐᑯᑎᑦ ᑐᒃᓯᖅᑑᑎᑎᑦ ᐱᕙᓪᓕᐊᔭᐅᕝᔭᓚᖓᕆᒻᒪᑕ ᐅᑯᑎᒎᓇ ᐋᑐᑎᓯᖃᑎᓐᓇᕆᑦ ᐃᓚᖓᒨᖓᔪᑎᒍᑦ sections 1 - 6 ᐱᔭᕇᖅᑕᐅᖃᕆᐊᖃᒻᒪᑕ ᖃᓪᓗᓈᑎᑐᑦ ᐊᒻᒪᓗ ᐃᓄᒃᑎᑐᑦ (ᐃᓄᐃᓐᓇᖅᑐᑦ ᕿᑎᕐᒥᐅᓃᑉᐸᑕ).

ᐃᓚᖓ 1: ᑐᒃᓯᖅᑑᑦ ᑐᓴᕐᒃᓴᖅ

1. a) ᓈᓴᐅᑖ ᐱᓕᕆᐊᒃᓴᐅᑉ

ᐅᖃᐅᓯᕆᓗᒋᑦ ᑐᒃᓯᕋᖅᑐᖅ ᑐᒃᓯᖅᑑᑎᒃᑯᑦ ᑐᓂᓯᓚᐅᖅᓯᒪᖕᒪᖔᖅ ᖃᓄᐃᑦᑐᑐᐃᓐᓇᕐᓂᒃ ᑭᖑᕐᖓᒍᑦ ᑐᒃᓯᖅᑑᑎᑎᒍᑦ ᓄᓇᕗᑦ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔩᖏᑦᑎᒍᑦ ᐅᕝᕙᖓᖓᔪᒥᒃ ᐱᓕᕆᐊᒃᓴᐅᔪᒪᓪᓗᓂ ᑐᒃᓯᕌᒥᒃ? ᐄ ____ ᐋᒡᒐ x ____

ᐄᖑᓂᖅᐸᑦ, ᑎᑎᕋᓪᓗᒋᑦ ᓇᓕᖅᑲᖏᑦᑕ ᓈᓴᐅᑎᖏᑦ ᐊᑐᖅᑕᐅᔪᔪᑦ ᓄᓇᕗᑦ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔩᖏᑦᑎᒍᑦ ᐱᓕᕆᐊᒃᓴᓕᓐᓂᐊᕐᑕᐅᔫᑉ ᓈᓴᐅᑖ: ____________________

1. b) ᐱᓕᕆᐊᒃᓴᐅᑉ ᐊᑎᖓ ᓄᓘᔾᔪᓂ ᐱᓕᕆᐊᖃᕐᓂᖅ (ᖃᓪᓗᓈᑎᑐᑦ ᒥᐊᓕ ᓕᕗ ᐱᓕᕆᐊᖓ)

2. ᑐᒃᓯᕋᖅᑐᑉ ᐊᑎᖓ ᐊᒻᒪᓗ ᑐᕌᕈᑖ:

ᐹᕝᕚᓐ ᓴᕕᕋᔭᒃᓴᓕᕆᓂᕐᒧᑦ ᐅᔭᕋᖕᓂᐊᖅᑎᑦ ᑯᐊᐳᕆᓴᓐ	Fax:	(416) 364-8820
ᐃᑉᓗᕈᓯᖅ 1016	Phone:	(416) 364-0193
120 ᐊᑎᓚᐃᑦ ᐊᖅᑯᑎᖓ ᐱᖓᖓᖅ	Email:	Rod.cooper@baffinland.com
ᑐᕋᓐᑐ, ᐋᓐᑎᐅᕆᐅ M5H 1T1		

3. ᐊᑎᐅᕙᔪᑦ ᐊᒻᒪᓗ ᑐᕌᕈᑎᐅᒋᐊᕐᖓᖅᑐᒥᓂᖅ:

ᕌᑦ ᑰᐳ, P. Eng.	Fax:	(416) 364-8820
ᐊᖓᔪᖄᑉ ᑐᑦᓕᖓ, ᐊᐅᓚᓂᕐᒧᑦ	Phone:	(416) 364-0193
	Email:	Rod.cooper@baffinland.com

4. **ᐊᐃᑉᐹ ᐊᑎᖓᑦ ᐊᒻᒪᓗ ᑐᕌᕈᑖ:**

		Fax:	(416) 364-8820
ᒪᐃᑯ ᔪᕉᔅᑭ, P. Eng		Phone:	(416) 364-0193
ᐊᖓᔪᖅᑳᐅᑎᓄᑦ ᐊᖓᔪᖄᑉ ᑐᒡᓕᖓ		Email:	Michael.zurowski@baffinland.com

ᐃᓚᖓ 2: ᑲᔪᓯᑦᓯᒍᓐᓇᖅᑐᑦ ᓴᕿᐅᒪᓯᐊᓖᑦ

1. <u>ᑕᒪᕐᒥᒃ</u> ᓇᓗᓇᐃᖅᑕᐅᓐᓇᕆᓗᒋᑦ ᑲᔪᓯᑦᓯᔾᔭᑦ ᐊᒃᑐᐊᓂᓕᖕᓅᖓᔪᓂᒃ ᐱᓕᕆᐊᒃᓴᔫᖓᔪᒥᒃ ᑐᒃᓯᕇᒍᑦ:

x	ᐊᕕᒃᑐᖅᓯᒪᔪᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᑦ
x	ᓄᓇᕗᑦ ᐃᒪᓕᕆᔾᔪᑦ ᑲᑎᒪᔨᖏᑦ
x	ᓄᓇᕗᑦ ᐸᕐᓇᐃᔾᔪᑦ ᑲᑎᒪᔨᖏᑦ
x	ᐃᓄᓕᕆᔨᑐᖃᒃᑯᑦ
x	ᐃᖃᓗᓕᕆᔨᒃᑯᑦ ᐊᒻᒪᓗ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ
	ᓄᓇᓕᖕᓂ ᒐᕙᒪᓕᕆᔨᒃᑯᑦ ᐊᒻᒪᓗ ᐱᓕᕆᔾᔪᑎᓕᕆᔨᒃᑯᑦ
	ᓄᓇᕗᑦᒥ ᖃᐅᔨᓴᖅᑏᑦ
	Hᒻᒪᓚᒃᑯᑦ
	ᑲᓇᑕᒥᐅᑦ ᑲᔪᓯᑦᓯᔨᖏᑦ ᐊᑦᑕᓇᖅᑕᐃᓕᑎᑦᓯᓂᕐᒧᑦ
	ᑲᓇᑕᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ
	ᓄᓇᕗᑦ ᒐᕙᒪᒃᑯᑦ
	ᐅᓇᓕᒃᓴᒃᑯᑦ
x	ᐃᓕᕐᑯᓯᓕᕆᔨᒃᑯᑦ ᒐᕙᒪᒃᑯᓐᓂ
	ᑲᓇᑕᒥ ᒥᕐᖑᐃᓯᖅᕿᓕᕆᔨᒃᑯᑦ
	ᐊᓯᖏᓪᓗ (ᓇᓗᓇᐃᕐᓗᒋᑦ ᕿᒃᑰᖓᒫᖓᑕ):

2. **ᑎᑎᕐᓗᒋᑦ <u>ᐊᑑᑎᔪᑦ</u> ᐱᔪᓇᕈᑏᑦ, ᓚᐃᓴᑦ, ᐊᓯᖏᓛᓐᓃᑦ ᐊᑑᑕᐅᔪᓐᓇᖅᑐᓅᖓᔪᑦ ᐱᓕᕆᐊᒃᓱᑦ, ᐃᓱᓕᕝᕕᒃᓴᖓᑕᓗ ᐅᓪᓗᖓ:**

ᑲᓇᑕᐅᑉ ᒐᕙᒪᒃᑯᖏᑎᒍᑦ ᐅᔭᕋᖕᓂᐊᕐᓂᕐᒧᑦ ᓄᓇᒥ ᐊᑦᑕᑐᕈᑎᑦ 2483, 2484 ᐊᒻᒪ 2485

ᐱᔪᓇᐅᑎᑖᖅᑎᑦᑎᓯᒪᔪᖅ ᑎᒥᐅᔪᖅ	ᐊᖏᖅᑕᐅᓯᒪᔪᖅ	ᐱᔪᓇᐅᑎᖓ/ᓚᐃᓴᓐᓯ	ᐃᓱᓕᕝᕕᖓ
ᓄᓇᕗᒥ ᐃᒪᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦ	ᐱᓕᕆᔪᓐᓇᐅᑦ ᐱ ᐃᒪᓕᕆᓂᕐᒧᑦ ᐱᔪᓐᓇᐅᑎ	NWB2MRY0406	ᑎᓯᐱᕆ 31, 2006
ᕿᑭᖅᑕᓂ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᑦ	ᐃᓄᐃᑦ ᓄᓇᖁᑎᖏᓐᓂ ᐱᓕᕆᔪᓐᓇᕐᓂᖅ	Q05L2C14	ᑎᓯᐱᕆ 31, 2006
ᐃᓄᓕᕆᔨᑐᖃᒃᑯᑦ ᑲᓇᑕᒥ	ᓄᓇᒥ ᐱᓕᕆᔪᓐᓇᐅᑎ	N2004C0017	ᔪᓂ 28, 2007

ᐃᓚᖓ 3: ᐱᓕᕆᐊᒃᓴᐅᔪᒪᔫᑉ ᑐᒃᓯᕇᑉ ᖃᓄᐃᑦᑑᓂᖓᓂᒃ ᐅᓂᒃᑳᖅ

1. ᓇᓗᓇᐃᕐᓗᒋᑦ ᐅᔾᕿᓇᐊᖑᓂᐊᖅᑐᑦ ᐱᓕᕆᐊᒃᓴᐅᔪᒪᓪᓗᓂ ᑐᒃᓯᕆᖅ:

	ᓄᓇᓕᕆᓂᖅ (ᓄᓇᐅᑉ ᐃᓕᕐᑯᓯᖓ ᖃᓄᐃᓕᖓᓂᖓᑕ, ᓯᓚᑐᐃᓐᓇᐅᑉ ᐃᓕᕐᑯᓯᖓ, ᐃᑰᑦᕐᓂᖅ)
x	ᑲᔪᓯᒪᓂᖏᑦ ᓇᓂᓭᐅᓯᒪᔪᑦ ᐅᔾᕿᓇᐊᑦ/ᐆᒃᑐᕋᒃᓴᑦ ᐃᓗᐃᒃᑲᑦ ᐊᖏᔪᑦ
	ᐱᕚᓪᓕᐊᑎᕐᓯᓂᖅ ᐅᔾᕿᓇᕖᒃᓴᒥ
	ᓄᓇᒥᒃ ᓴᓇᒥᐊᕐᓂᖅ ᑮᒍᖕᖓᒍᑦ/ᐅᑎᖅᑎᓇᓗᓂ
	ᖃᐅᔨᓴᕐᓂᖅ
	ᑑᓚᐃᒃᑯᓐᓂᒃ ᓴᓗᒪᖅᓴᐃᓂᖅ/ᓄᓇᒥᒃ ᖃᐅᔨᓴᕐᓂᖅ ᑐᓚᒃᑕᖅᕕᒃ
	ᐊᓯᖏᓐᓂᒃ ᐱᔾᔪᑎᓕᒃ:

2. ᓇᓗᓇᐃᕐᓗᒋᑦ ᐊᐅᓚᕐᓯᒍᑏᑦ ᐱᓕᕆᐊᒃᓱᖕᖓᔪᑦ ᑐᒃᓯᕋᒧᑦ:

X	ᐃᑰᑦᕐᓂᖅ ᓄᓇᒥᒃ ᓱᕐᑯᐃᔭᐃᑐᐃᓐᓇᖏᓪᓗᓂ		ᖄᖅᑎᕐᓯᕖᒃ ᐅᔾᕿᓇᕖᒃ
	ᐅᖓᓯᒋᔅᖓᓃᑦᑐᑦ ᐋᕿᒃᓯᒪᔅᓴᑦ		ᐊᕐᑯᑕᐅᔪᓐᓇᖅᑐᖅ ᖃᖓᓕᒫᖅ
X	ᖃᖓᑕᔫᒃᑯᕕᒃ/ᐱᑦᑕᖅᕕᒃ	X	ᐊᕐᑯᑦ ᐅᑭᐅᒃᑯᑦ
X	ᓄᓇᒋᔭᐅᑲᐃᓐᓇᖅᑐᖅ ᐊᓯᓂ		ᐊᕐᑯᑕᐅᔪᓐᓇᖅᑐᖅ
X	ᐅᖅᓱᐊᓗᖃᐅᑦ		ᐊᕐᑯᑦ ᐋᕿᒋᐊᖅᑕᖅ
	ᓯᑎᕚᑎᑦ ᐊᒃᑕᑯᑦ		ᐃᒡᓗᕋᖀᑦ ᐊᓯᓂ
	ᓱᕈᖅᑎᓇᕙᓐᓇᖅᑐᖅᑕᓖᑦ ᐊᒃᑕᑯᑦ	x	ᖁᒃᑕᑯᑦ ᐅᕙᓗᕿᐊᖅ ᐊᒃᑕᑯᑦ ᐅᐊᓴᕈᑎᒥᓃᑦ
X	ᖃᐅᔨᓴᕐᓂᖅ		ᖄᖅᑎᕐᓯᓂᖅ
	ᕿᒪᒧᑦ ᐊᒪᓗ ᐋᕿᒃᓱᖅᑕᑦ ᐅᑎᕐᑎᑕᑦ		ᐊᓯᓂᒃ ᐱᕙᓂᒃ ᐆᒪᕙᓂᒃ ᐱᐅᓕᕐᓯᓂᖅ
X	ᐃᑭᑦᓯᖃᑦᑕᕐᓂᖅ ᐊᒃᑕᑯᓂᒃ		ᓴᐅᓯᓂᖅ
X	ᓴᓇᔾᑦ ᓴᓂᖏᑦ ᐱᓕᕆᕝᕕᒃᓴᒥᒃ		ᐃᑎᖅᓴᓕᐅᕆᓂᖅ ᓄᓇᒥᒃ ᖃᐅᔨᓴᕐᒃᓴᓂᒃ
	ᐲᔭᖅᑕᐅᕙᒃᑐᑦ ᐊᒪᓗ ᐃᓕᐅᖃᖅᑕᐅᕙᒃᑐᓪᓗᑭᐊᖅ		ᐲᔭᐃᓂᖅ ᐱᕈᖅᑐᓂᒃ ᓄᓇᒥᒃ
	ᑯᓕᒃᑯᑦ/ᐃᓂᖓ (ᓴᓇᔭᖅ/ᕿᒪᒃᑕᖅ/ᐲᔭᖅᑕᖅ/ᐋᕿᒋᐊᖅᑕᖅ		ᓴᓇᔪᑦ ᓄᓇᒥᒃ ᐃᑎᖅᓴᓕᐅᖅᑐᑦ
	ᑰᒃᕖᑦ ᐊᑑᑕᐅᔪᓐᓇᖅᑐᑦ ᓇᓪᓕᐊᒃᑯᑐᐃᓐᓇᖅ		ᓴᒃᑲᕐᓂᖅ
X	ᐃᓚᒍᑕᒃᓴᔪᓄᑦ ᐃᓂᒋᔭᖅ ᓯᕐᓗᐊᖅ	X	ᓄᓇᓕᕆᓂᖅ ᖃᐅᔨᓴᕐᓂᖅ ᕿᖑᒻᒧᑦ
	ᖄᖅᑎᑦᓯᒍᑎᖅᑳᕝᕕᒃ ᓯᕐᓗᐊᖅ		ᐅᔭᖅᑲᓂᒃ ᐆᒃᑐᕋᓂᖅ ᐃᑎᖅᓴᓕᐅᖅᓯᓂ ᓄᓇᒥ
X	ᐆᒃᑐᕋᖅᑕᐅᓂᖕᒋᑦ ᐅᔭᖅᑲᑦ ᓯᑎᖂᒃ ᐃᑰᑦᕐᑕᐅᓂᑯᑦ		ᐅᔭᖅᑲᓂᒃ ᐆᒃᑐᕋᓂᖅ ᑲᐃᕝᕕᖅᑕᐅᓂᑯᓂᒃ
X	ᐆᒃᑐᕋᖅᑕᐅᓂᖕᒋᑦ ᓯᕐᒦᑦ ᓄᓇᔾᑦ ᐃᔾᕙᑦ	X	ᐃᒥᐅᑉ ᓇᒧᖕᖒᓂᖕᖓᓂᒃ ᖃᐅᔨᓴᕐᓂᖅ
	ᑯᓪᓚᒃ/ᑯᒐᖜᖅ/ᑕᓯᖅ ᓴᓂᒧᑦ/ ᐃᑳᖅᕕᒃ		ᓄᓇᒥᒃ ᐅᑎᕐᑎᓇᓂᖅ (ᐱᕈᑉᐹᓪᓕᕈᑏᑦ/ᒪᖑᓕᓇᓂᖅ/ᓄᓇᐅᑉ ᖃᖓᓂᒃ ᕿᓱᒃᓯᓂᖅ/ᑎᒻᒥᖄᖅᑎᕐᓯᓂᖅ/ᑭᒡᓕᓕᐅᓇᓂᖅ
X	ᓯᕐᒦᑦ ᐃᔾᕙᐃᑦ ᓄᓇᔾᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᖕᒋᑦ		ᐃᔾᕙᐃᑦ ᐊᒃᑕᑯᑦ/ᐃᔾᕙᑕᓕᒃ ᓯᕐᓗᐊᖅ
	ᓄᓇᐅᑉ ᐃᓗᐊᒍᑦ ᐃᑎᖅᕕᒃᓴᖅ ᓱᓪᓗᓕᒃ		ᐊᓯᖏᑦ (ᖃᓄᑐᐃᓐᓇᖅ ᐅᓂᒃᑳᓇᓗᒋᑦ):

3. ᐃᖃᓇᐃᔭᕐᓂᐊᖅᑐᑦ

ᖃᑦᓯᐅᕗᑦ ᐃᖃᓇᐃᔭᖅᑐᑦ ᑖᕝᕙᓂ: = (A)	80	ᖃᑦᓯᐅᕝᑲᑦ ᖃᐅᑕᒫᑦ = (A) x ᐅᓪᓗᐃᑦ ᖃᑦᓯᑦ ᑖᒪᓂ ᓄᓇᒥ	20,000

NUNAVUT IMPACT REVIEW BOARD
Nunavutmi Kanogillivalianikot Elittohaiyeoplotik Katimayiit

4. ᖃᖓ ᐱᒋᐊᕐᓗᑎᒃ

ᖃᓄᑎᒋ ᐊᐅᓚᕙᓯᕙᑦ:	ᕕᕗᐊᕆ 15, 2007	*ᑎᑭᓪᓗᒍ*	ᑎᓯᐱᕆ **31, 2009**
ᑐᒃᓯᕋᕈᓐᖓᕗᑦ ᑐᑭᖏᑦ ᐱᕙᓐᓇᕈᑦ:	ᔭᓄᐊᕆ 1, 2007	*ᑎᑭᓪᓗᒍ*	**ᑎᓯᐱᕆ 31, 2009**

ᓇᓗᓇᐃᔭᕙᐊᕐᓗᒋᑦ ᐱᕙᓪᓕᐊᓂᖏᑦ ᐱᔾᔪᑎᓖᑦ ᑐᒃᓯᕋᒥᒃ ᐱᓕᕆᐊᖑᓂᐊᖅᑐᑦ (ᓴᓇᔭᑦ/ᐊᐅᓚᑕᑦ/ᓄᖅᑎᕙᒍᑎᑦ)
ᐃᓚᖃᓪᓗᑎᒃ ᖃᓄᑎᒋ ᐊᑯᓂᐅᑎᓪᓗᒍ ᐊᒻᒪᓗ ᖃᖓᒃᑯᑦ ᐱᓕᕆᐊᖑᖃᑦᑕᓂᐊᖅᐸᑦ ᐃᖕᒥᒃᑰᓕᖓᓗᑎᒃ.
HLᑯᐊ ᓯᓚᐅᐸ ᐊᓯᔾᔨᕐᐸᓕᐊᓂᖏᖓ ᒪᓕᓗᒍ ᐊᒻᒪᓗ ᓄᓇᐅᐸ ᖃᓄᐃᓂᖓ ᓂᐅᕐᑐᒃᒪᐅᓂᖓ ᐱᐊᓯᐅᑎᓗᒍ ᐊᕙᑎᖓ ᖃᐅᔨᑕᐅᓂᒃᓴᖓ. ᓂᕆᐅᒋᔭᐅᕗᖅ ᐱᓕᕆᐊᐱᓗᒍ ᐊᕐᕋᒍᓄᑦ ᐅᓄᖅᑐᓗᑦ

5. ᓇᓪᓕᐊᓐᓂ ᓄᓇᒥ ᐊᕕᒃᑐᖅᓯᒪᓂᐊᓂ

☒ ᕿᑭᖅᑖᓗᒃ ☐ ᑭᕙᓪᓕᖅ ☐ ᕿᑎᕐᒥᐅᑦ ☐ ᓄᓇᐅᐸ ᑭᒡᓕᖓ: ____

6. ᓄᓇᓕᕆᕕᐅᓂᐊᖅᑐᖅ:

☒ ᑲᓇᑕᐅᐸ ᓄᓇᖁᑖ ☐ ᑲᒥᓴᓇᐃᑦ ☒ ᐃᓄᐃᑦ ᓇᖕᒥᓂᖓ ᓄᓇᐅᐸ ᖃᖓᓅᖓᕗᑦ ☒ ᐃᓄᐃᑦ ᓇᖕᒥᓂᖓ ᓄᓇᐅᐸ ᐃᓗᐊᓂ

7. ᖃᓄᑎᒋ ᐅᖓᓯᖕᓂᖏᓐᓅᖓᕗᑦ:

ᖃᓂᓪᑐᒧᑦ ᐅᖓᓯᖕᓂᖓ ᖁᒻᒧᑦ ᐊᖑᒧᑦ (ᓈᓴᐅᑖ)	69° 49’	ᖃᓂᓪᑐᒧᑦ ᓴᓂᒧᑦ (ᓈᓴᐅᑦ)	77° 45’
ᐊᕗᖓᑲᓪᓚᒃ ᐅᖓᓯᖕᓂᖓ ᖁᒻᒧᑦ ᐊᖑᒪᑦ (ᓈᓴᐅᑖ)	72° 5’	ᐊᕗᖓᑲᓪᓚᒃ ᓴᓂᒧᑦ (ᓈᓴᐅᑦ)	81° 00’

ᓄᓇᙳᐊᑎᒍᑦ No: 37F, 37G, 47H
ᐅᔾᔨᕆᔭᐊᕐᓗᒋᑦ ᓄᓇᙳᐊᑦ ᐱᔾᔪᑎᓖᑦ ᐱᓕᕆᐊᒃᓴᒥᒃ ᐊᓪᓚᒃᓯᒪᕗᓄᑦ ᐃᓚᒋᓕᐅᑎᓯᒪᕗᑦ (1:50,000 **ᐊᑐᐃᓐᓇᐅᒃᐸᑕ**, 1:250,000 **ᐊᑑᑎᓪᓚᕆᐊᓖᑦ ᐊᑑᑕᐅᕐᑯᔭᑦ** ᐊᑐᐃᓐᓇᐅᕗᑦ ᑲᓇᑕᒥ ᓄᓇᒥᐅᑕᐅᖏᓐᓇᖅᑐᓕᕆᔨᒃᑯᓐᓂᒃ

ᐱᓕᕆᕕᒃᓴᒥᒃ ᐱᔾᔪᑎᓖᑦ ᑐᒃᓯᕋᑦ ᐃᓚᖃᑉᐸᑕ **ᐊᓯᓂ ᓄᓇᓕᒃᓴᒥᒃ**, ᐃᓚᒋᓕᐅᑎᒃᑭᑦ ᒪᑯᓄᖓᖓᕗᓄᑦ ᓇᒥ ᓄᓇᖃᖁᕕᒃᓴᒥᒃ ᓄᓘᔾᔪᓂ ᑕᖕᒫᕕᒃ Lat. 71° 19‘ 35 “ Long. 79° 33’

ᐊᔾᔨᒋᖕᒋᐸᐅᒃ ᖁᓚᓃᓪᑐᒥ ᓄᓇ ᐊᓯᓂ ᓄᓇᓕᒋᔭᖅ:
ᓄᓇᙳᐊᑎᒍᑦ ᓈᓴᐅᑖ: ____
ᐅᔾᔨᕆᔭᐊᕐᓗᒋᑦ ᓄᓇᙳᐊᑦ ᐱᔾᔪᑎᓖᑦ ᐱᓕᕆᐊᒃᓴᒥᒃ ᐊᓪᓚᒃᓯᒪᕗᓄᑦ ᐃᓚᒋᓕᐅᑎᓯᒪᕗᑦ (1:50,000 **ᐊᑐᐃᓐᓇᐅᒃᐸᑕ**, 1:250,000 **ᐊᑑᑎᓪᓚᕆᐊᓖᑦ ᐊᑑᑕᐅᕐᑯᔭᑦ** ᐊᑐᐃᓐᓇᐅᕗᑦ ᑲᓇᑕᒥ ᓄᓇᒥᐅᑕᐅᖏᓐᓇᖅᑐᓕᕆᔨᒃᑯᓐᓂᒃ

8. ᖃᓄᖅ ᐊᑑᑕᐅᓂᐊᖅᑐᑦ ᐱᓕᕆᒍᑕᐅᓗᑎᒃ ᑐᒃᓯᕋᖅ ᐅᓂᒃᑳᕆᓗᒍ ᓇᐃᓈᖅᓯᒪᕗᖅ
ᐃᓚᒋᓕᐅᑎᓗᒋᑦ ᖃᓄᖅ ᐱᓕᕆᕕᖕᒥ ᐊᑑᑕᐅᓂᐊᖅᑐᑦ ᐅᓂᒃᑳᑦ ᐱᓕᕆᐊᒃᓱᖕᖓᕗᑦ ᑐᒃᓯᕋᒧᑦ, ᐅᖓᑖᓄᖏᑦᑐᖅ ᐃᖕᒥᑯᐊᖅᑐᑦ 500 ᐅᖃᐅᓯᖅ ᐊᑕᐅᓯᖅ, ᖃᓪᓗᓈᑎᑐᑦ, ᐃᓄᒃᑎᑐᓪᓗ (ᐃᓄᐃᓐᓇᖅᑐᑦ ᕿᑎᕐᒥᐅᓃᑉᐸᑦ). ᐱᓕᕆᐊᒃᓴᒥᒃ ᐅᓂᒃᑳᖅ ᖃᓄᐃᑦᑑᓂᖓᓂᒃ ᐱᔾᔪᑎᓕᒃ ᓇᓗᓇᐃᔭᖅᓯᒪᕙᓯᐊᕐᓂᖃᕆᐊᓕᒃ ᐃᒫᒃ ᐅᑯᐊᑎᑐᑦ:

- ᐱᓕᕆᕕᖕᒥ ᐊᐅᓚᕙᒍᑎᑦ, ᐊᑑᑎᔭᕆᐊᓕᖏᑦ, ᖃᓄᑎᒋᓗ ᐊᑯᓂᐅᕗᒥᒃ ᐱᓕᕆᕕᐅᓂᐊᖅᐸ;
- ᖃᓄᐃᑦᑐᓂᒃ ᐊᑐᕐᓂᐊᖅᐸᑦ ᐱᓕᕆᔾᔪᑎᒥᓐᓂᒃ ᐃᖏᕐᕋᒍᑎᓂᒃ;
- ᖃᓄᑐᐃᓐᓇᖅ ᐋᕿᒃᓯᒪᔭᐅᓂᐊᖅᑐᑦ ᓇᐸᑎᖅᑕᐅᓗᑎᒃ (ᑕᐃᒪᖓᓕᒫᖅ/ᕿᓚᒥᒃᑯᑦ);
- ᐊᓯᐊᒍᑦ ᐊᑑᑕᐅᕗᓐᓇᕐᒥᕗᑦ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑎᒃᓴᒃᑲᓐᓂᕐᓂᒃ ᑕᒪᒃᑯᓄᖓᖓᕗᓄᑦ; ᐊᒻᒪᓗ
- ᐊᑯᓂ ᐱᕙᓪᓕᐊᔭᒃᓴᔭᑦ, ᖃᓄᖅ ᓴᕿᐊᓂᕆᓂᐊᖅᑕᖏᑦ ᐱᕙᓪᓕᐊᔭᑦ ᑖᒪᓂ ᓄᓇᒥ, ᖃᓄᑎᒋ ᐊᑯᓂᐅᕗᒥᒃ.

ᑕᑯᓗᒍ ᐊᕙᑎᑦᑎᓐᓄᑦ ᐅᔭᐅᒪᕗᓄᑦ ᐅᓂᒃᑲᓕᐊᕆᓯᒪᔭᖓ ᓇᐃᑦ ᐸᐃᑦᓯᑦ.

ᐃᓚᖓ 4: ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ ᓴᓇᕈᑕᐅᓗᑎᒃ

ᓄᓇᕗᑦ ᐊᕿᑎᓕᕆᓂᕐᒧᑦ ᑲᑎᒪᔩᑦ

NUNAVUT IMPACT REVIEW BOARD
Nunavutmi Kanogillivalianikot Elittohaiyeoplotik Katimayiit

1. ᑎᑎᕋᑦᓗᒋᑦ ᓴᓇᕐᕈᑎᑦ (ᐃᓚᒋᓕᐅᑎᓗᒋᑦ ᐃᑰᑕᕈᑎᑦ ᑲᐃᕝᕕᑎᑦ, ᒥᑦᓗᐊᕈᑎᑦ, ᖃᖓᑕᔫᑦ, ᐊᓯᖏᑦᓗ):

ᓴᓇᕐᕈᑎᑦ ᖃᓄᐃᑦᑐᑦ, ᖃᓯᐅᕙᑦ	ᐊᖏᓂᖏᑦ - ᓇᓗᓇᐃᖅᓯᒪᓗᒋᑦ	ᑐᒃᓯᕋᖅᑕᒨᖓᔪᑦ
• 4ᓄᑦ 5ᓄᑦ ᕿᓕᒥᒎᓕᑦ (BellB2-star ᐅᕙᓘᓂ Bell long Rangers)		ᐃᑰᑕᐅᑎᑦ ᓅᖃᑦᑕᕐᓗᒋᑦ, ᓄᓇᒥ ᕿᒥᕈᔾᔭᓪᓗ
• D-4 ᐅᓯᕕᓖᑦ ᓄᓇᒃᑯᕈᑎᑦ		ᑕᑯᐊ ᐃᑲᔪᑎᐅᒐᔭᒃᑐᑦ ᐃᑰᑕᖅᑐᓂᒃ, ᒥᕕᓕᐅᑦᑐᓕᒃ, ᐊᒻᒪᓗ ᐊᕐᑯᑎᖏᑦ ᐱᐅᔪᓐᓃᖅᑲᑕ
• 2 ᐅᓯᑲᑕᐆᑎᒃ		ᓂᐅᕋᐃᕗᒃᓗᑎᒃ ᖃᖓᑕᓱᖏᓪ
• 6 ᐃᖏᕋᔾᔪᑏ (ᑎᓴᒦᓖᑦ)		ᐃᖏᕋᔾᔪᑎᖏᔭᐅᑐᐃᓐᓇᕙᓗᑎᒃ
• 5 ᐃᑯᑕᐃ ᐅᔭᖃᓂᒃ ᒥᓗᒃᓯᓰ ᐊᒻᒪᓗ ᒪᕌᒃ ᐃᑰᑕᕈᑏᒃ ᐊᑐᐃᓇᐅᔫᒃ		ᐃᑯᑦᑦ
• 2. ᖃᓗᕋᐅᑎᒃᔪᐊᑦ		ᐃᖅᑲᓇᐃᔭᖅᑎᑦ ᓇᒗᖓᐅᑎᔭᐅᖃᑦᑕᕈᑎᒃᓴᖏ
• 2 ᐅᓯᑲᖅᑕᐅᑎᑦ		ᐃᑲᔪᕐᓗᑎᒃ ᐃᑰᑕᒃᑐᓂ, ᒥᖒᖏ ᐊᖅᑯᑎᓕᓇᔪᓂᓪᓗ
• 1 ᓯᕐᑯᑎᕈᑏᑦ		
• 2 ᓴᒻᒪᐅᑎᑦ ᐅᕐᑯᒪᐃᑦᑐᖅ		ᐃᖏᕋᔾᔪᑎᑐᐃᓐᓈᒃ
• 3 ᐅᕚᓂᑦ 4 ᓯᑮᑑᑦ		ᐃᖏᕋᔾᔪᑎᑐᐃᓐᓈᒃ

2. ᐱᔾᔪᑎᖏᑦ ᐅᕐᓯᐊᓗᖏᒃ, ᐊᑦᑕᓈᕿᔪᓐᓇᖅᑐᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ:

ᐅᕐᓯᐊᓗᐃᑦ	ᖃᑦᓯᐅᕙᑦ ᔮᒃᓴᑦ	ᖃᓄᐃᓪᓗᐊᕐᐸᑦ, ᔮᒃᓴᖏᑦ (gal & litre)
· ᐊᐅᓚᐅᑎᓯᐅᑦ	960	200 L
· ᒦᓴᓖ	12	200 L
· ᑎᖏᕞᖅᓯᐅᑦ	150	200 L
· ᐳᓪᓚᖅ	990	200 L
· ᐊᓯᐊ	10	100 lbs. + 20 lbs
ᕿᐊᕐᓴᓇᖅᑐᖅᑕᓖᑦ ᓴᓇᕐᕈᑎᑦ		
· ᐸᓂᖅᑐᖅ ᑲᑦᓯᐊᒻ ᑯᓗᕋᐃᑦ	(1,500 t)	

ᐃᓚᖓ 5: ᐊᒃᑕᑯᑦ ᐃᓂᒥᓃᑦᑐᑦ ᐊᒻᒪᓗ ᐱᓕᕆᔾᔪᑏᑦ ᐊᒃᑕᑯᓂᒃ

1. ᐊᑕᖏᖅᑐᑦ ᖃᓄᐃᑦᑑᓂᖏᑦ ᐊᒃᑕᑯᑦ:

ᖃᓄᐃᑦᑑᓂᖏᑦ ᐊᒃᑕᑯᑦ	ᓯᕗᕐᖓᒍᑦ ᖃᐅᔨᒪᓯᓐᓇᖅᑕᑦ ᖃᓄᐃᓪᓗᐊᕐᓂᖏᑦ	ᖃᓄᐃᑦᑐᓂᒃ ᐊᒃᑕᐅᑯᓂᒃ ᐊᑐᖅᐸᑦ	ᐃᓚᒋᓕᐅᑦᑐᑦ ᐅᒃᑕᕈᑎᓄᑦ ᐱᓕᕆᔾᔪᑎᑦ
ᕿᖅᑕᑯᑦ	50 m^3/d ᓄᒃᔫᖏᓂ 7.5 m^3/d ᕿᕐᖑᐊᓂ	ᐋᖅᑭᒃᓱᖅᓯᒪᔪᑦ ᑯᕕᖅᑕᕐᕖᑦ	ᐃᑯᐊᓚᑎᑦᓯᕕᒃ
ᐊᑐᖅᑕᐅᓂᑯ ᐃᒥᖅ	1000 m^3 ᐊᖏᔫᑎᑦ ᐊᒃᑕᑯᐃᑦ	ᐊᒃᑕᕐᕕᒃ	ᐱᑕᖃᖏᑦᑐᖅ
ᐊᒃᑕᑯᑦ	ᐱᑕᖃᖏᑦᑐᖅ	ᐊᑐᖏᑦᑐᖅ	ᐊᑐᖏᑦᑐᖅ
ᓄᓇᐅᑉ ᖄᖑᓅᖃᖅᑕᐅᓂᑯᑦ (ᓱᕋᒃᓯᒪᖏᑦᑐᑦ ᐃᔾᔪᑦ, ᐊᒃᑕᑯᑦ, ᐅᔭᕿᕆᒍᑎᒥᓃᑦ)	ᐱᑕᖃᖏᑦᑐᖅ	ᐊᑐᖏᑦᑐᖅ	ᐊᑐᖏᑦᑐᖅ
ᐊᑦᑕᓇᖅᑐᖅᑕᓖᑦ ᕿᒃᓴᓇᖅᑐᓂᒃ ᐊᒃᑕᑯᑦ	50 m^3/d ᓄᒃᔫᖏᓂ 7.5 m^3/d ᕿᕐᖑᐊᓂ	ᐋᖅᑭᒃᓱᖅᓯᒪᔪᑦ ᑯᕕᖅᑕᕐᕖᑦ	ᐃᑯᐊᓚᑎᑕᐅᓂᖅ
ᐊᓯᖏᑦ:			

ᐃᓚᖓ 6: ᓄᓇᓖᑦ ᐃᓚᐅᑎᕐᓂᖏᑦ ᐊᒻᒪᓗ ᓄᓇᑎᒍᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᑦ ᐊᑑᑎᓂᖏᑦ

1. ᐊᑎᖏᑦ ᓄᓇᓕᖕᓂ ᕿᒻᒐᖅᑐᖅᐅᑦ ᐅᖅᑲᖅᑕᐅᔾᔪᖅᓯᒪᔪᑦ ᐊᒻᒪᓗ ᑐᓂᓯᓯᒪᕖᑦ ᓇᓕᖅᑲᖏᓐᓂᒃ ᑲᑎᒫᔪᑎᒥᓃᑦ ᐊᑐᐃᓐᓇᐅᑉᐸᑕ:

ᓄᓇᓖᑦ	ᐊᑎᖏᑦ	ᑲᑐᔾᔨᖃᑎᖏᑦ	ᐅᕙᓂ ᐅᖅᑲᖅᑎᒥᓃᑦ	ᐅᖃᓘᑖ	ᓱᒃᑲᓕᔫᑯᑦ
ᒥᑦᑎᒪᑕᓕᒃ	ᑕᐃᕙᑦ ᖃᒪᓂᖅ, ᒪᓚᑲᐃ ᐋᓇᐊᒃ, ᑳᓚᓐ ᓴᓐᑐᔅ, Hᐊᒪᓚᒃᑯᑦ ᑲᑎᒪᔨᖏᓪᓗ	Hᐊᒪᓚᒃᑯᑦ ᒥᑦᑎᒪᑕᓕᖕᒥ	ᑕᕿᑦ ᒪᕐᑉᐹ ᐱᖓᓯᑕᒫᓪᓘᓐᓃᑦ 2004ᒥᓂᑦ; ᐊᕐᕌᒍᑕᒫᑦ ᑕᑯᔭᖅᑐᖅᑲᑦᑕᖅᑎᑦ ᓄᓘᔾᔪᓄᑦ, ᕿᖑᓪᓕᖅᐸᖅ ᓯᑎᐱᕆ 7, 2006	(867) 899-8934	(867) 899-8940
ᒥᑦᑎᒪᑕᓕᒃ		ᓄᓇᓕᖕᓂ ᑲᑎᒪᑎᑦᑎᓂᖅ	ᐃᐳᕈ 22, 2006		
ᒥᑦᑎᒪᑕᓕᒃ		ᓄᓇᓕᖕᓂ ᑲᑎᒪᑎᑦᑎᓂᖅ	ᓯᑎᐱᕆ 6, 2006		
ᒥᑦᑎᒪᑕᓕᒃ	ᐃᓯᒪᐃ ᑲᑦᓴᒃ, ᔮᐃᑯ ᐋᑦᑐᓗᓯ, ᔪᐊᓇᓯ ᐊᑦᑖᕐᔪᐊᑦ, ᐃᓕᓴᐱ ᐆᑦᑐᕈᒃ, ᑭᓲᓂ ᖃᓕᖅᑎ, ᐃᓇ ᒫᒃᑖᖅ, ᓲᓗᒧᓂ ᑯᓄ	ᐱᓯᒃᓯ ᐱᓕᕆᐊᓕᑦ ᑲᑎᒪᔩᖅᑳᖏᑦ	ᑲᑎᒪᖅᑲᑦᑕᖅᓯᒪᔪᑦ ᕼᐊᑉᐳᕈᐊᕆ ᓯᑎᐱᕆᐅᓪᓗ 2006 ᐊᒃᑯᓐᓂᖓᓂ; ᓄᓘᔭᓕᐊᓚᐅᕐᒥᔪᑦ ᓯᑎᐱᕆ 8, 2006.		
ᒥᑦᑎᒪᑕᓕᒃ	ᑲᑎᒪᔩᑦᐅᔪᑦ	ᒥᑦᑎᒪᑕᓕᖕᒥ ᐆᒪᔪᓕᕆᔨᒃᑯᑦ	ᑎᓯᐱᕆ 14, 2005 ᐄᐳᕈ 7-8, 2006	(867) 899-8856	(867) 899-8095
ᐃᒡᓗᓕᒃ	ᐸᐅᓪ ᖁᐊᓴ (ᒪᐃᔭ) Hᐊᒪᓚᒃᑯᓪᓗ ᑲᑎᒪᔨᖏᑦ	ᓄᓇᓕᖕᓂ ᒐᕙᒪᑦ ᐃᒡᓗᓕᖕᒥ	ᔪᓚᐃ 24, 2006	(867) 934-8830	(867) 934-8757
ᐃᒃᐱᐊᕐᔪᒃ	ᐱᐅᓪ Hᐊᑎᖅ	Hᐊᒪᓚᒃᑯᑦ ᐃᒃᐱᐊᕐᔪᖕᒥ	ᔪᓚᐃᑦ 12, 2006	(867) 439-9917	(867) 439-8767

ᑐᑭᓯᖅᑐᖅ:

ᐊᑎᓕᐅᕈᓯᐊ | **ᐃᖅᑲᓇᐃᔮᖑᑕ ᐊᑎᖓ** | **ᐅᓪᓗᖓ**

SCREENING PART 2 FORM
PROJECT SPECIFIC INFORMATION REQUIREMENTS (PSIR)
ADVANCED EXPLORATION / BULK SAMPLING

2. PROJECT DESCRIPTION

General

1. Name and location of proposed project.

Mary River Project – Exploration and Geotechnical Drilling Program

2. Contact information for proponent(s) and other project contacts.

Baffinland is a Canadian mining company (TSX: BIM) that is solely focused on its 100%-owned Mary River Project. Company contact details are as follows: Baffinland Iron Mines Corporation Suite 1016, 120 Adelaide Street West Toronto, Ontario M5H 1T1 Tel: (416) 364-8820 Fax: (416) 364-0193 Contact: Rodney (Rod) Cooper, P.Eng. Vice-President, Operations and Chief Operating Officer

3. List of acts, regulations and guidelines that apply to project activities

The following acts, regulations and guidelines apply to the Project:
• Nunavut Land Claims Agreement • *Territorial Lands Act*, Territorial Lands Regulations, Territorial Land Use Regulations, and the Canada Mining Regulations • *Nunavut Waters and Nunavut Surface Rights Tribunal Act* • *Northwest Territories Waters Act*, and Northwest Territories Waters Regulations • *Environmental Protection Act (Nunavut)*, and Spill Contingency Planning and Reporting Regulations • *Public Health Act*, Camp Sanitation Regulations and Water Supply Regulations • *Mine Health & Safety Act*, and Mine Health & Safety Regulations • *Nunavut Safety Act* • *Fisheries Act* • *Explosives Use Act (Nunavut)*, and Explosives Regulations

4. List of approvals, permits and licenses required including the authorizing agency, activity to which the authorization applies, and dates.

Type of Authorization	Permit No.	Authorizing Agency	Governing Activity	Dates Valid
Water License (Type B)	NWB2MRY0406	Nunavut Water Board	Water use and waste disposal	Mar 10, 2004 to Dec 31, 2006
Inuit Land Use License	Q05L2C14	Qikiqtani Inuit Association	Exploration activities on Inuit Owned Lands	June 17, 2005 to Dec 31, 2006
Land Use Permit	N2004C0017	Department of Indian and Northern Affairs Canada	Exploration activities on Crown Land	June 29, 2004 to June 28, 2007

Project Information

5. History of the site if it has been used in the past.

The iron ore deposits at Nuluujaak Mountain were discovered by prospectors Murray Watts and Ron Sheardown in 1962. The mineral leases that now cover Baffinland's deposit areas were staked shortly thereafter and were assigned to a private company to hold the claims: Baffinland Iron Mines Limited (BIML). An exploration program was proposed and was contracted to Watts, Griffis and McOuat (WGM) of Toronto, of which Murray Watts was one of the founding principals. The program lasted from 1963 to 1966 and included geophysical surveys, geological mapping, drilling (3,319 m in about 30 holes) and trenching among other development efforts. The Project identified 143 Mt of resources grading 67.3% iron at Deposit No. 1. The Project became dormant shortly thereafter.

From 1971 to 1973, Hudson's Bay Mining and Smelting (HBM&S), one of the partners in the BIML syndicate, undertook a review and update of the Project comprised of an economic review and metallurgical testwork, but included no new field work. Their study arrived at a capital cost requirement of CAD 134 million, for an annual production of 5 Mt. In 1992, and again in 2001, WGM reviewed the Project's economics and indicated that the Project could have a positive feasibility based on an annual production of 10 Mt. As a result, BIML was reconstituted as the publicly-traded company Baffinland Iron Mines Corporation (Baffinland) began operation and management of the deposits in 2004.

Exploration activities during the 1960s involved construction of three gravel airstrips, the 105-km Milne Inlet Tote Road, site access roads, and buildings at both the exploration site and at Milne Inlet. Other remnants of 1960s exploration activities include a wooden building next to Sheardown Lake, now utilized by the Mittimatalik Hunters and Trappers Organization (MHTO) of Pond Inlet, and various equipment and scrap metal at the site and at Milne Inlet, which Baffinland has been collecting for eventual disposal.

6. Map of the project site within a regional context indicating the distance to the closest communities.

See Figure 1, attached.

7. Map of any camp site including locations of camp facilities.

See Figures 1 to 7, attached.

8. Map of the project site indicating existing and/or proposed infrastructure, proximity to water bodies and proximity to wildlife.

See Figures 1 to 7, attached.

9. Describe the type of mineral resource under exploration. Indicate if the mineral of interest is any of the following:

Base metals
Diamonds
Uranium
Other

The mineral resource of interest is iron ore. Exploration is not directed at base metals, diamonds, uranium or other mineral resources.

10. Discuss the project need and purpose.

Exploration activities are focused on identifying and quantifying the iron ore resource at Mary River. The project addresses the world-wide need for iron ore for steelmaking.

11. Discuss alternatives to the project and alternatives to project components.

All proposed activities (exploration drilling and geotechnical drilling) will input into a definitive feasibility study for the project. The feasibility study is the next step in the advancement of the project towards mine development, and the drilling activities are essential to the feasibility study.

The only alternative to the project is to stop all activities at the Mary River Project and remove all materials and equipment.

Geotechnical investigations will study two major transportation alternatives. The only plausible alternative to the proposed work is to focus investigations on a single transportation corridor. The evaluation of project alternatives (for a mine at Mary River) is very important to be able to select a lowest impact and most feasible/lower cost alternative.

12. Indicate the type of exploration activity:

- Ground-based geophysical work
- Deposit delineation drilling
- Geotechnical drilling

13. Describe all activities included in this project:

- Soil sampling
- Sediment sampling
- Land-based drilling (rock coring drill)
- On-ice drilling (rock coring drill)
- Winter road use
- Airstrip use
- Camp use/construction
- Fuel transportation and storage
- Chemical transportation and storage

14. Indicate whether any of the following Department of Fisheries and Oceans (DFO) Operational Statement (OS) activities apply to the project proposal:

None of the DFO Operational Statements apply to the undertaking. The winter road is used late in the season only, when the land and watercourse crossings are sufficiently frozen and no snow fills or ice bridges are required.

15. If any of the DFO OS apply to the project proposal, does the Proponent agree to meet the conditions and incorporate the measures to protect fish and fish habitat as outlined in the applicable OS? If yes, please provide a signed statement of confirmation.

Not applicable.

16. Provide a schedule for the above activities

- November to March - seasonal shutdown
- March and April - partial camp operation to support remote geotechnical drilling and environmental studies
- May to October - full camp operation to include exploration activities (drilling)
- Exploration activities expected to continue for several years

Geophysical

17. Indicate on map the boundary subject to air and/or ground geophysical work.
18. Provide flight altitudes and locations where flight altitudes are below 300m.

Ground-based geophysical surveys may be carried out, at the potential hydro site as well as the iron ore deposits.

Drilling

19. The number of drill holes and number of meters (provide estimates and maximums where possible).

A total of 7 rock coring drill rigs will be used for exploration and geotechnical drilling in 2007-2008. Approximately 4-5 drills will be focused on the exploration drilling and at least two drill rigs will be completely dedicated to geotechnical drilling.

Exploration drilling on the deposits over the next two years (2007-2008) is expected to consist of approximately 35-40 holes each year with an annual total meterage in the order of 10,000-12,000 m, depending upon drill productivity.

Geotechnical drilling at areas of potential project infrastructure and transportation route alignments over the same two year period will have the following maximum holes:

Transportation route drilling – up to 100 drill holes
Steensby Inlet port site drilling – up to 70 on-land drill holes and 30 on-ice drill holes
Milne Inlet drilling – up to 70 on-land drill holes and up to 30 on-ice drill holes
Hydro site drilling – up to 20 drill holes
Wind farm drilling – up to 20 drill holes

The above number of holes is considered upset maxima possible for each location, and the total number of holes drilled will be much less than the total maximum number at each location. The majority of drill holes will be in the order of 10-30 m depth, with a very small portion of holes at select locations reaching depths in the order of 100 m.

20. Drill additives used.

Calcium chloride
Darina rod grease
EZ-Mud

21. Describe method for dealing 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.

22. Describe method for dealing with drillwater.

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.

23. Describe how drill equipment will be mobilized.

Drill equipment will be mobilized by helicopter.

24. Describe how drill holes will be abandoned.

Drill holes will be located with GPS and marked in the field; no other abandonment measures are proposed.

25. If project proposal involves uranium exploration drilling, consider the potential for radiation exposure and radiation protection measures. Please refer to the *Canadian Guidelines for Naturally Occurring Radioactive Materials* for more information.

Not applicable.

Stripping/ Trenching/ Pit Excavation/ Bulk Sample

26. Discuss methods employed. (ie. mechanical, manual, hydraulic, blasting, other)
27. Describe expected dimensions of excavation(s) including depth(s).
28. Show location on a map.
29. Expected volume material to be removed.
30. Discuss methods used to determine acid rock drainage (ARD) and metal leaching (ML) potential and results.

There is no stripping/trenching/pit excavation or bulk sample proposed with the exploration and geotechnical drilling program.

Underground Activities

31. Describe underground access.
32. Describe underground workings and provide a conceptual plan.
33. Show location of underground workings on a map.
34. Describe ventilation system.
35. Describe the method for dealing with ground ice, groundwater and mine water when encountered.
36. Provide a Mine Rescue Plan.

There are no underground activities associated with the exploration and geotechnical drilling program.

Waste Rock Storage and Tailings Disposal

37. The location and conceptual design of waste rock storage piles(s) and tailings disposal facility. (show on map)
38. Anticipated volumes of waste rock and tailings.
39. Discuss methods used to determine acid rock drainage (ARD) and metal leaching (ML) potential and results.

There will be no waste rock or tailings generated during the exploration and geotechnical drilling program.

Stockpiles

40. The location and conceptual design of stockpile(s). (show on map)
41. Describe the types of material to be stockpiled. (ie. ore, overburden)
42. Anticipated volumes of types of material to be stockpiled.
43. Discuss methods used to determine acid rock drainage (ARD) and metal leaching (ML) potential and results.

There will be no stockpiles generated during the exploration and geotechnical drilling program.

Transportation

44. Describe how the site will be accessed and how supplies will be brought to site. (show route on map)

Supplies are brought to site via aircraft from either Pond Inlet or directly from southern destinations. Other materials are brought to Milne Inlet in August by sealift and are subsequently transported over the Milne Inlet tote road during the period of March to May, as authorized by Baffinland's water license.

45. If an airstrip is being used or constructed provide a description and its location (show location on map).

Three gravel airstrips are located in the region, each constructed in the 1960s. The locations are shown on Figure 2. Only the airstrips at Mary River and Milne Inlet have been used to date, although the airstrip at Katiktok Lake will be used once exploration drilling begins at Deposit No. 4.

46. Describe expected flight altitudes.

Expected flight altitudes are above 300 m.

Camp Site

47. A list of existing and proposed camp structures and infrastructure.

Figures 4 and 5 show the existing camp and facilities. Up to 6 additional Weatherhaven tents could be added to the existing camp at Mary River, and the water intake into the adjacent lake will be modified for existing use. Temporary drill (tent) camps will be placed at Milne Inlet and Steensby Inlet to support geotechnical drilling investigations each March to May (Figures 6 and 7). Another fly camp will be established at Deposit No. 4 to facilitate drilling there. The drill camps will accommodate 8-12 persons each, will be equipped with a kitchen and sleeping facilities, and will utilize latrine toilets and bottled water. Waste will be returned to Mary River for incineration.

48. Describe the type of camp:
a. Mobile
b. Temporary
c. Seasonal
d. Permanent
e. Other

The main camp at Mary River is operated seasonally and the proposed drill camps will also be seasonal.

49. Maximum number of people expected on site.

The maximum number of people expected on site is 100 persons.

50. Describe the source of power for the camp.

Diesel generator plus back-up.

Equipment

51. A list of equipment indicating uses and approximate dimensions.

The following equipment will be operating at Mary River for the exploration activities:

4 to 5 Helicopters (either Bell B2 A-star or Bell Long-Rangers)
D-4 dozer
2 Steer skid loaders
7 Rock coring drills (Longyear 38 and Longyear 70)
1 Excavator

2 (1-tonne) Toyota flatbed pick-ups
6 All-terrain vehicles (Honda or Polaris Rangers)
3-4 snowmobiles
CAT zoom boom

52. If possible, provide digital photos of equipment.

53. Method of moving equipment within the project site.

Equipment is moved using existing roads or by helicopter.

Water

54. Location of water source(s) (show on map).

The location of the camp water source is shown on Figure 4. Known long-term (i.e., entire drilling season) water take locations for drilling are shown on Figures 3 and 4, and potential short-term (one drill hole) water take locations for drilling are shown on Figure 2.

The following summarizes the proposed water takes over the next few years.

Location	Use/Purpose	Duration / Period	Maximum Daily Volume (m^3)	Maximum Total Volume (m^3)
Camp Lake	Camp water supply	8 months (each Mar-Oct)	20	4,800
Camp Lake	Geotechnical Drilling (mine site area)	6 months (during May-Oct)	455 (up to 4 drills)	82,000
Sheardown Lake	Geotechnical Drilling (mine site area)	6 months (each May-Oct)	455 (up to 4 drills)	82,000
Mary River	Exploration drilling	6 months (each May-Oct)	455 (up to 4 drills)	82,000
Mary River (upper tributary)	Geotechnical Drilling (wind farm)	2-3 weeks	65 (1 drill)	1,365
Unnamed lake and ponds adjacent to Deposit No. 4	Exploration drilling	6 months (each May-Oct)	455 (up to 4 drills)	82,000
Unnamed lake & Separation Lake	Geotechnical Drilling (hydro site)	2-3 weeks	65 (1 drill)	1,365
Various unidentified water bodies	Geotechnical Drilling (transportation routes)	8 months (each Mar-Oct)	65 (per location)	82,000
Various unidentified lakes and ponds	Geotechnical Drilling (Steensby Inlet port and infrastructure areas)	8 months (each Mar-Oct)	65 (per location)	82,000
Milne Inlet Creek at Road Terminus	Geotechnical Drilling (port and infrastructure areas)	6 months (each May-Oct)	65 (per location)	82,000

It should be noted that the maximum volumes provided are maximum theoretical volumes that could be taken from each specified watercourse, and do not correspond with the expected water use based on available pumping equipment. The estimated total volume of water to be extracted based on the available equipment is summarized as follows (as per the water license application):

- Up to 7 drills could withdraw a maximum total of 455 m^3/day from all locations assuming all drills were operational over a 24-hour period
- The camp water consumption is 20 m^3/day

---

55. The estimated rate of water consumption (L/d).

See #54 above.

56. Describe water intakes. Describe methods for the prevention of fish entrapment.

Each water intake is equipped with a screen to prevent the entrapment of fish. A floating outfall arrangement will be set up for the camp water supply in Camp Lake.

57. If applicable, discuss how surface water and underground water will be managed.

Not applicable.

Waste (Grey water, Sewage, Other)

58. Describe the characteristics, quantities, treatment, storage, transportation, and disposal methods for the following:

Sewage;

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

Camp grey water;

Greywater is disposed of in an excavated sump.

Combustible solid waste;

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

Non-combustible solid waste;

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

Bulky items/ scrap metal;

Very limited amounts of bulky items and scrap metal are stored at an existing boneyard consisting of scrap metal from exploration activities in the 1960s.

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.

Contaminated soils;

Contaminated soils are placed in drums and are transported off-site for disposal.

Empty barrels/ fuel drums; and

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

Other.

59. If project proposal includes a landfill and/or landfarm, describe the location (show on map), conceptual design, and management.

No landfill or landfarm is located at the Project site. The location of an existing scrapyard or boneyard, storing primarily materials remnant from 1960s exploration activities, is shown on Figure 5.

Fuel

60. The types, quantities (number of containers, type of containers and capacity of containers), method of storage, method of containment, location of storage (show on map) and uses.

	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. All fuel is stored in lined containment facilities. Primary fuel uses include the operation of drills, aircraft, the camp generator, and heating of tents and buildings.

The location of fuel storage at Mary River is shown on Figure 5. The smaller fuel storage caches at the drill sites will be situated near the camps.

61. Describe secondary containment measures including the type of material or system used. If no secondary containment is required, please provide justification.

Secondary containment for drummed fuel storage consists of a 60 mm thickness high density polyethylene (HDPE) geomembrane, placed over earthen berms with sand bedding inside.

62. Describe the method of fuel transfer and the method of refueling.

Fuel transfer for equipment and aircraft is from drums to the equipment using wobble pumps or small explosive-proof fuel pumps. Equipment is grounded before refueling.

Chemicals and Hazardous Materials (i.e. oils, greases, drill mud, antifreeze, calcium or sodium chloride salt, lead acid batteries, cleaners)

63. The types, quantities (number of containers, the type of container and capacity of containers), method of storage, method of containment, location of storage (show on map), and uses.

The main chemical stored and used at the Mary River site is calcium chloride, used as a drill water additive to prevent drill water from freezing while drilling in continuous permafrost conditions. Approximately 1,500 tonnes of calcium chloride is stored at the Mary River camp at the location shown as the “salt storage location” on Figure 5. The calcium chloride is in 20 kg plastic bags, inside large fiberglass sacks and on pallets. Other hazardous materials include oils (approximately 5-200 L drums), greases (very small volumes in tubes), antifreeze (up to four drums), lead acid batteries (10-20) and cleaners. These materials are used to operate diesel generators, drill rigs and mobile equipment. Lubricants are stored in drums inside containers until used. Waste oils are temporary contained in drums within lined containment and are incinerated in the camp incinerator during regular waste incineration. Used antifreeze is contained in drums, and used batteries are stored in approved leak-proof containers for off-site disposal.

64. Describe any secondary containment measures including the type of material or system used.

All chemicals stored in drums are kept in the lined containment facility for fuel storage.

65. Describe the method of chemical transfer.

Oils and lubricants are decanted from drums in the workshop, or at the drill rigs. Calcium chloride for drill water is mixed in a tub at a mixing station near the drill rig, by opening the bags and emptying the contents in the water. Worker protection is used for handling the salt.

Explosives

66. Describe the explosive type(s), hazard class, volumes, uses, location of storage (show on map), method of storage.

No explosives will be used in the Exploration and Geotechnical Drilling Program.

Public Involvement/ Traditional Knowledge

67. Describe the level of public involvement, a summary of public involvement measures, a summary of concerns expressed, and methods of addressing the concerns.

Baffinland held two meetings in Pond Inlet in 2006. On April 22, 2006 a public meeting was held to update the community on both the progress and proposed exploration activities at Mary River. On September 6, 2006 Baffinland held another public meeting that was solely focused on the bulk sampling program. One concern that was voiced during the meeting was the increased level of aircraft traffic in Pond Inlet, which Baffinland acknowledges is in good part related to the activities at Mary River, although there are other activities in the region that contribute to this. Under current operating conditions, nearly all personnel movements have been via the scheduled First Air flight to Pond Inlet. In 2007, direct charter flights from Iqaluit to Mary River are planned several times per week. The charter flights should result in a decrease in the volume of Project-related flights through Pond Inlet. Pilots have been counseled to respect the community requests in terms of the path of air traffic in relation to land use.

Most of the comments and questions at the September 6, 2006 public meeting related to the potential mine at Mary River. Some questions related to potential for employment and training opportunities from the bulk sampling program.

Since February 2006, Baffinland and Knight Piésold have been working with the Pisiksik Working Group, a collection of community representatives established in Pond Inlet to design and conduct an Inuit Qaujimajatuqangit (IQ) study for the Mary River Project. Through numerous meetings, Pisiksik has developed and finalized a research agreement with Baffinland and have designed the study, including the development of approximately 170 interview questions and the identification of informants within the community. Interviews have recently begun with a trial interview of a Pisiksik elder. Pisiksik have also had discussions with Knight Piésold biologists regarding wildlife, land use and archaeology to assist with planning of field surveys.

Road Construction

14. Describe any field investigations and the results of field investigations used in selecting the proposed route.
15. Conceptual plan.
16. Describe surface preparation.
17. Describe use of snow berms.
18. If flooding is proposed, indicate the location of the water source on map.
19. Show the location of water crossings, flooded areas, and snow berms on map.

The road alignment was established in the 1960s, and Baffinland has continued to utilize the same alignment. Winter road construction each year consists of an initial transit of the road by a dozer, guided by a helicopter, to establish the track and pack or push any large drifts of snow. No flooding or infilling or other measures are used to prepare the road or crossings.

Road Operation

20. The annual operating time period.
21. Traffic speed.
22. Discuss the type and volume of traffic using the road/trail. (i.e. type of vehicles and cargo and number of trips annually).
23. Discuss public access to the road and public safety measures.

24. Describe maintenance procedures.
25. If winter road includes travel over a waterbody consider the potential effect of below ice vibrations on fish.

The winter road is used during the period of March through May, in compliance with Baffinland's water license. The road is used only to move equipment and materials delivered to Milne Inlet by sealift the August before; once those materials are brought to site the road is no longer used. Essentially, a cat train is used, so traffic speed remains quite low (5-15 km/hr). The estimated number of cat train trips in 2007 may range from 10 to 50, depending upon whether or not calcium chloride is delivered by plane to Milne Inlet and then transported over the road, instead of directly airlifting to Mary River as in the past.

Public access to the road, used currently as a winter road, is by snowmobile. To arrive at the road at Milne Inlet from Pond Inlet is about a 6-8 hour snowmobile ride, or longer if ice conditions are poor. The snowmobiles are used by hunters, who do not preferentially use the road alignment but do travel through the general corridor hunting caribou. The level of traffic associated with moving equipment and materials into Mary River each spring, and the speed of the cat train, are such that public safety is not at risk.

Limited maintenance work is conducted on the road during its operation, aside from an initial trip to establish the path and pack any snow drifts, before the cat train makes its trips.

The road crosses tributary watercourses leading into Phillips Creek, all of which appear to freeze to the bottom during winter. Therefore, no fish are present at the crossings such that ice vibrations would be an issue.

3. DESCRIPTION OF THE EXISTING ENVIRONMENT

1. Describe the existing environment, including physical, biological and socioeconomic aspects. For guidance see Appendix A.
Note: The detailed provided in the description of the existing environment should be appropriate for the type of project proposal and its scope.

1. PHYSICAL ENVIRONMENT

1.1. Regional Setting

The Mary River Project is located on northern Baffin Island, approximately 160 km southwest of Pond Inlet, within the Northern Arctic Ecozone (Ecological Stratification Working Group, 1996). The region is characterized by long dark winters and short summers, with continuous daylight from approximately May to August, and continuous darkness from November through February.

1.2. Proximity to Designated Environmental Areas

Within the North Baffin Region there are two parks: Sirmilik National Park and Tamaarvik Territorial Park. National park boundaries do not coincide with watershed boundaries of the Mary River Project, although marine access to the Mary River via Milne Inlet passes adjacent to the parks. There are no established national wildlife areas, historic sites or heritage rivers in the area.

Sirmilik National Park includes Bylot Island, which is also a migratory bird sanctuary and is home to more than 70 species of birds (Lepage et al., 1998) including large breeding colonies of Snow Geese and seabirds such as Thick-billed Murres and Black-legged Kittiwakes. Both areas have special federal and international protection under the Migratory Birds Sanctuary Regulations, the Migratory Birds Convention Act, and Canada's National Parks Act.

At the southern end of the regional study area, but also outside of the Project boundaries at the north eastern end of Steensby Inlet, is an area that has been designated as 'Key Migratory Bird Habitat' by the Canadian Wildlife Service. The area is used by thousands of breeding Snow Geese and Canada Geese, seabirds, seaducks, shorebirds, and Peregrine Falcons.

Three critical wildlife areas are situated within west-central Baffin Island (Government of Nunavut, 2005): the Baird, Dewar, and Longstaff Calving Areas. Each of these areas is of recognized importance for caribou calving but is removed from the Mary River study area. No critical wildlife areas have been identified within North Baffin.

1.3. Regional Surface Geology

Surficial landforms and deposits are associated with recent, widespread glaciation on Baffin Island. The existing Milne Inlet tote road lies primarily on or around Holocene glacio lacustrine sediments and early Holocene and Wisconsinian tills (Knight Piésold, 2006a). Other surficial units that the road crosses are Holocene fluvial sediments (alluvial deposits) and Marine and glacio-marine deltaic sediments, early Holocene and Wisconsinian end moraine till, and occasional outcrops of pre-Quaternary bedrock (Knight Piésold, 2006a).

1.4. Regional Bedrock Geology

The Mary River area lies within the Committee Belt, a granite-greenstone terrane mixed with rift basin sediments and volcanic rocks, within the Churchill Province. The Belt is divided into five major assemblages: (1) the Archean, granite migmatites and gneissic granitic intrusions and amphibolite dykes; (2) the Mary River Group, metasedimentary and metavolcanic rocks; (3) the Piling Group, also metasedimentary and metavolcanic rocks; (4) the Bylot Supergroup,

metasedimentary rocks; and (5) the Turner Cliffs-Ship Point Formation, clastic and carbonate sedimentary rocks (Aker Kvaerner, 2006).

1.5. Palaeontology

In the Turner Cliffs-Ship Point Formation, the Ordovician rocks of the northwest-trending escarpment, fossil presence is rare or common depending on location. Fossils include bioturbation (borings), the high-spired gastropods Hormotoma and Maclurites, and, possibly, the cephalopod Tripteroceras and stromatolites (Stromatocerium) (Geological Survey of Canada, 2000).

1.6. Mary River Iron Ore Deposits

Four of the five known deposits, 1, 2, 3, and 3A, occur within a 30 km2 area and Deposit No. 4 is approximately 27 km northwest of the Mary River camp. The high-grade iron ore of Deposit No. 1 (Nuluujaak Mountain) is the largest of the five deposits. Typical ores include massive, layered and brecciated hematite, specularite, and magnetite and banded iron formations (Aker Kvaerner, 2006).

1.7. Permafrost and Permafrost-related Features

The Mary River Project is in a zone of continuous permafrost. The active layer through the Project area ranges from approximately 1 to 2 m (Knight Piésold, 2006a). The depth of permafrost in the region is in the order of a half kilometre, based on ground temperature measurements at the former Nanisivik Mine (Gartner Lee, 2003).

1.8. Climate and Predicted Future Climate Trends

North Baffin Island has a semi-arid climate with relatively little precipitation and experiences 24-hour darkness from November 12 to January 29 and continuous sunshine from May 5 to August 7. The yearly average temperature at Pond Inlet is -15.1 ºC (Environment Canada, 2004). The mean annual precipitation is 190.8 mm, 144.5 cm of snow and 85.4 mm of rain (Environment Canada, 2004).

1.9. Unique or Fragile Landscapes

The North Baffin region is characterized by distinct fiords and permanent snow at high altitudes and ice caps. Subsequent periglacial processes have been and continue to be the dominant forces shaping the landscape of the region. These processes result in ground ice accumulation; frost heaving; sorting of materials within the upper soil matrix; fracturing of the upper bedrock profile; and development of patterned ground (tundra polygons), drumlins and pingos.

1.10. Hydrology

There is a short period of runoff that occurs from June to September. All rivers and creeks, with perhaps the exception of the very largest systems, freeze completely solid during the winter months. The mean annual discharge in the area was estimated to be of four to eight litres per second per square kilometre (Knight Piésold, 2006b).

1.11. Tidal Processes, Bathymetry, Temperature and Salinity

Milne Inlet has semi-diurnal tides. The lowest tide ranges from 0.1 to 0.3 m and the highest tide for this period ranges from 2.2 to 2.4 m (Fisheries and Oceans Canada, 2006).
Water depths in Milne Inlet range from 100 m to 400 m (Fisheries and Oceans, Canadian Hydrographic Service, 2006).

Nearby temperature and salinity characteristics are typical of the region (Department of Indian and Northern Affairs, 1981; Buckley et al., 1987). Their distributions are primarily controlled by cooling and freezing. Water temperature during ice covered conditions is suspected to be around -1.5 ºC throughout the water column. During open water conditions temperatures are approximately 4 ºC at the surface and to -1 ºC at 70 m depth (Buckley et al., 1987). Salinity was uniform at ~32 parts per trillion (ppt) through the water column during June, but was stratified during August (Buckley et al., 1987).

1.12. Inland Water Quality

Water Quality Index (WQI) values from the exploration property ranged from 86.1 to 100, indicative of excellent water quality (CCME, 2001). The lower values, in the 80 to 94 range, are indicative of water quality that is "protected with only a minor degree of threat or impairment; conditions rarely depart from natural or desirable levels" (CCME, 2001). A small percentage of the sample parameters exceeded various Canadian Council of Ministers for the Environment (CCME) guidelines for the protection of aquatic life.

Water chemistry immediately downstream of drilling activities had WQIs between 74.3 (fair) and 100 (excellent) in 2006. The water contained a high SpC and chloride and calcium concentrations because of the addition of CaCl salt to drill process water. High concentrations of magnesium, potassium, sodium and strontium were noted and the water is very hard. The pH of the water was generally neutral. Metal concentrations were not consistently high but varied greatly between sampling events, with occasional samples exceeding of CCME guideline limits.

All water chemistry sampling sites along the existing Milne Inlet tote road received a value of 100, the highest possible outcome, indicating excellent water quality that is "protected with a virtual absence of threat or impairment; conditions very close to natural or pristine levels" (CCME, 2001).

1.13. Soil Quality

Ten soil samples were collected from shallow test pits (i.e., 0.15 m depth) at the Mary River site in August 2006 to determine the nutrient and metal content of the soils and the potential variability of these parameters within the soils of different local environments. The pH ranged from 6.2 to 7.5. Most soil is low in organic carbon and nutrients. Metal concentrations did not exceed soil quality criteria for agricultural and residential/parkland land use in all but one sample.

1.14. Air Quality

Baseline air quality conditions for the region have not yet been evaluated for the Project, but should be very good based on the distance from any emitters. Two types of vegetation were collected in 2006 and were analyzed for metals concentrations, as part of the larger baseline program. These samples may provide baseline for which to compare to in the future, as part of long-term air quality monitoring.

1.15. Noise Levels

Baseline noise levels for the region have not yet been evaluated. The main source of noise in the area is from the current exploration activities at Mary River and air traffic from other exploration or scientific operations in the region. The impact of noise expected to be localized.

1.16. Other Physical Environment VECs

No other physical environment valued ecosystem components (VECs) were identified in community consultation or literature reviews.

2. Biological Environment

2.1. Vegetation

To date 426 vegetation plots have been studied around the Project site, infrastructure, and proposed transportation routes.

On the uplands, the vegetation varies from exposed bedrock with a few crustose lichens and rooted plants to barrens where the flora is limited to purple mountain saxifrage, two species of poppies, woodrushes, and a few small mustards and sandworts. Mosses are scattered, most concentrated in the sheet flow of streams, and there are almost no soil lichens.

Lower slopes are covered in marsh and heath species with mounds built up around cottongrass tussocks. These mounds are crowned with heaths like white arctic heather and blueberry and purple mountain saxifrage plus some sedges and mountain avens. Wetter areas contain mosses and cottongrasses and wetland sedges.

Drier slopes and sheltered banks support a heath tundra community with low shrubs, sometimes amidst boulders. White arctic heather is the common indicator of this community, which may also include blueberry, arctic willow, woodrush, mountain avens, yellow crazyweed, mouse-ear chickweed, curly sedge, and rich in lichens.

Around the iron deposits are Dryas barrens, mats of mountain avens, plus prostrate arctic willow and xeric sedges, and sometimes blueberry, capitate lousewort, woodrushes, and sedges. Where the ground is sandy there may be mats of prickly saxifrage, and blueberry

Wetlands are usually covered with sedge associations, including non-tussock sedges or cottongrasses, grasses, small rushes, prostrate willows on moss mounds or tussocks of Eriophorum vaginatum. Sudetan lousewort, yellow marsh saxifrage, mastodon flower, Saxifraga hieracifolia, and bulblet saxifrage are also common.

Defined stream channels exhibit a distinct riparian association, characterized by the presence of the shrubby Richardson's willow and possibly a raised ridge of mosses including some Sphagnum sp. and Arctagrostis latifolia, Dupontia fisherii. In some areas with slow flow, emergent semaphore grass occurs in the shallow waters. Other species (including mountain avens and heaths) take root in the mossy ridges and mounds, so this association is quite diverse.

Snow bank associations include white arctic heather, least willow, grey mealy lichen, mountain sorrel, mustards, Saxifraga caespitosa, Luzula confuse, L. nivalis, net-veined willow, Poa arctica, Potentilla hyparctica, Ranunculus pygmaeus, and R. nivalis. In some areas, dandelions are common.

Littoral communities in North Baffin include sand or silt flats with carpets of goosegrass, marine star chickweed, and several halophytic sedges. Or, they may include backshore associations on small sand dunes or sand flats with beach rye grass, seabeach sandwort, or flat rosettes of seaside bluebells. Rocky areas often support tufts of scurvy-grass. A very sterile intertidal zone was found at the Milne Inlet port site with virtually no rooted vegetation at all.

None of the plants identified in 426 vegetation plots are listed by Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

2.2. Terrestrial Mammals

The terrestrial mammal fauna of North Baffin is comprised of nine species: Caribou, Wolf, Wolverine, Arctic Fox, Red Fox, Ermine, Brown Lemming, PearyLand Collared Lemming, and Arctic Hare.

2.2.1. Barren-ground Caribou

Caribou were seen during all 2006 surveys in low numbers and small groups. In May caribou were mainly found south of Mary River. All sightings were of females, at times accompanied by yearlings. All movements were from south to north, and appeared to be related to travelling to calving areas. Longer distance movements were observed in early June, along with the first sightings of males. As spring progressed, the numbers of caribou moving north from Steensby Inlet increased. The most extensive use of habitat in the Project area by caribou appears to occur in spring, because of these directed movements to calving areas. In late June, a few new calves were seen in the vicinity of the Project site. Visibility in July was low, due to their dark summer coats and their use of boulder fields for insect relief. Few caribou were observed and an estimate of their distribution is not possible.

2.2.2. Furbearers and Denning Habitat

There is an abundance of potential denning habitat for foxes and wolves in the Project area but only one den has been located from aerial surveys conducted to date, concentrated at the Mary River sites and along the existing road. Their rarity suggests a typical low density of foxes and wolves, and a depressed prey base. Both red and arctic foxes were occasionally observed in the Project area, especially at the camp and drill sites where they had access to human food. Two or three breeding pairs are suspected to have used the Project area this year. Wolves occur in the Project area but they are rare (Pisiksik Working Group, 2006). Reported harvests from Pond Inlet range from zero to 27 wolves (Parks Canada, 1983). In the past, a large pack of wolves, 20 or so, was seen in the Steensby area and south Baird Peninsula. Wolverines and their sign were not observed in the Project area during 2006.

2.2.3. Small Mammals and Hares

A 50-trap grid of Sherman live-traps was established between the existing camp and the iron ore deposit and was operated for a 2-week period in July of 2006. No lemmings were captured, likely because of the newness of the traps. However, the abundance of lemming sign, including animal sightings, winter nests, faecal pellets and remains in carnivore scats, and the frequent sightings of falcons, hawks and snowy owls, suggests that lemmings were abundant in 2006.

Ermine and their sign were noted during the 2006 field season and one was caught in lemming traps set at the Project site. Ermines are expected to be wide-spread in the Project area.

Arctic hares appear to be widespread and abundant through the region, based on incidental sightings.

2.3. Birds

North Baffin Island is characterized by a wide variety of bird habitats and is home to a large diversity of migratory species that use this area annually for breeding from June through September. These habitats include marine and coastal environments, low-lying coastal plains, river deltas, and tundra, an extensive array of inland waterbodies (wetlands, large lakes, stream and rivers), and rocky uplands and cliffs.

A study on neighbouring Bylot Island observed a variety of loons, fulmars, geese and ducks, falcons and hawks, upland game birds, cranes, shorebirds and gulls, owls, and songbirds and other perching birds.

Three bird species near the Project site are designated under the Species at Risk Act – SARA (Environment Canada, Canadian Wildlife Service, 2004): (1) Ivory gull (special concern), (2) Ross's gull (threatened), and (3) Tundra peregrine falcon (special concern).

2.3.1. Raptors

Four species of raptors use this area for breeding (Peregrine Falcons, Rough-legged Hawks, Gyrfalcons, and Snowy Owls) and were observed in the Project area during the 2006 field survey. All four species primarily use tall, steep cliffs for nesting locations (although Snowy Owls are known to nest on the ground in areas lacking cliffs), and lowlands for foraging. The four species are known to defend the same territories, and use the same nest locations, year after year.

Peregrine Falcon, Rough-legged Hawks, and two Snowy Owl nests were found through-out the road corridor and in the control area, indicating that the area is well used by these species. In particular, the abundance of peregrine falcon in the region appears to be quite high.

2.3.2. Songbirds and Shorebirds

Several species of song birds migrate to this area annually to breed, and are predominately found in the various types of lowland habitats (river deltas, coastal plains, tundra, wetlands) that offer an abundant source of insects and vegetation for food and nest concealment. Several species of plovers and sandpipers breed in this area, and like the songbirds, they rely heavily on the various types of lowland habitats for food and nesting habitat.

Bird densities in and around the deposits were low compared to other areas like the road corridor and Milne Inlet because of the rocky, sub-alpine and alpine environment. Species that were most common were Snow Buntings, American Pipits, and Lapland Longspurs. The only shorebirds seen in the area were Baird's Sandpipers and Common Ringed Plovers but these were scarce.

Songbirds and shorebirds along the road corridor and in control sites adjacent to the corridor include Lapland Longspurs, Horned Larks, American Pipits, Baird's Sandpipers, American Golden Plovers, Black-bellied Plovers, and Common Ringed Plovers.

Songbirds and shorebirds along the shoreline and adjacent areas of Milne Inlet include Lapland Longspurs, Horned Larks, American Pipits, Baird's Sandpipers, American Golden Plovers, Black-bellied Plovers, and Common Ringed Plovers.

2.3.3. Loons, Ducks, and Geese

There is an abundant supply of wetlands, streams, rivers, and waterbodies of various sizes (ranging from small shallow ponds up to large deep lakes) in the Project area and these are used by a high density, but low diversity, of water birds including geese, ducks, and loons.

All wetlands, streams, rivers, and lakes and control sites at the Mary River site were surveyed on a weekly basis during the spring migration, breeding season, and fall migration periods. No ducks, loons, nor geese were found nesting in the area. A pair of Red-throated Loons and a pair of Yellow-billed Loons nested on Sheardown Lake and both nests were observed to have been depredated by Glaucous Gulls. Thousands of Snow Geese migrated over the area in the spring and fall, but none were found nesting. The Mary River site did not appear to be a 'stop-over' area for migrating birds as very few were seen resting in the water or foraging on land.

All wetland areas and bodies and control sites of water along the existing road corridor were also surveyed on a weekly basis during the spring migration, breeding season, and fall migration periods. Loon pair densities were high and most lakes had at least one pair. Four species of loon were seen: Red-throated Loon, Arctic Loon (Pacific Loon), Yellow-billed Loon, and the Common Loon. Long-tailed Ducks were plentiful in the area and some Red-breasted Mergansers

were seen in the rivers. Hundreds of King Eiders and Common Eiders migrated through the area but were not found nesting. Thousands of Snow Geese also migrated over the area in the spring and fall, but less than 20 pairs were found nesting. However, thousands of these geese stopped in various lakes along the road or in control sites to rest or to forage on-shore, before continuing their migration.

All wetland areas and bodies of water and control sites around Milne Inlet were also surveyed on a weekly basis during the spring migration, breeding season, and fall migration periods. Loon pair densities were high and most lakes had at least one pair. Four species of loon were seen: Red-throated Loon, Arctic Loon (Pacific Loon), Yellow-billed Loon, and the Common Loon. Long-tailed Ducks were plentiful and some Red-breasted Mergansers were seen in the rivers. Hundreds of King Eiders and Common Eiders migrated through the area but were not found nesting. Thousands of Snow Geese also migrated over the area in the spring and fall, but less than 20 pairs were found nesting. Thousands of these geese stopped in various lakes along the road or in control sites to rest or to forage on-shore, before continuing their migration.

2.3.4. Seabirds

There are about 45 bird species that are known to breed in the area. The region's avian community includes colonial nesting seabirds and waterfowl, as well as solitary nesting species such as loons or shorebirds. Within the Mary River study area, at least 55 bird species occur that are associated with marine waters for at least part of their annual cycle (Environment Canada, Canadian Wildlife Service, 1996). Most are generally associated with coastal waters, but several species, such as jaegers or the northern fulmar, spend large portions of their annual cycle in offshore areas.

2.4. Freshwater Aquatic Life

Baffin Island has fewer fish species in freshwater than are found on the adjacent Nunavut mainland and several islands in the western Arctic. Arctic char are the most abundant and widely distributed fish species in the lakes, rivers, and streams of Baffin Island. Four other fish species that are reported to occur on Baffin Island in freshwater include: Lake trout, threespine stickleback, ninespine stickleback, and landlocked populations of Atlantic cod.

2.4.1. Benthic Macroinvertebrates

Benthic macroinvertebrate samples were collected from ten surface water sampling sites in and around the Mary River site in August 2005. Benthic communities within the Mary River area are represented by very few individual taxa. Higher population densities were found in the lower reaches of the rivers and streams, where nutrient availability was greater. The stability of the benthic communities is highly varied throughout the exploration property and the overall community richness is relatively low throughout the site, as is the diversity.

2.4.2. Sediment

Sediment samples were collected within the exploration property in August 2005, at all benthic macroinvertebrate sample locations. Metal concentrations were generally low throughout the property and none, except one, of the sample parameters exceeded any of the CCME limits for sediments. The predominant metals in each of the samples were aluminium, calcium, iron and magnesium, with significant but lesser amounts of potassium, manganese, sodium, phosphorus and titanium. Total organic carbon (TOC) concentrations were generally low to below detection and nitrite and nitrate concentrations were below the limits of detection in all of the samples.

2.4.3. Fisheries

Fisheries investigations found Arctic char and ninespine stickleback in the Mary River watershed. Arctic char were sampled by angling, gillnetting, and minnow trapping while ninespine stickleback were captured in minnow traps.

Milne Inlet tote road crosses 246 watercourses, of which, thirty were sampled. Sixty-nine Arctic char and one ninespine stickleback were captured in the Phillips Creek catchment with no mortalities. Forty-one Arctic char and four ninespine stickleback were captured in the Upper Ravn River catchment.

The extra-small watercourse crossings with catchment areas less than 0.5 km (174) were found to have very limited fish habitat capability. Three crossings are rated as important, 37 as marginal, and 129 as containing no fish habitat.

The small to medium sized streams were ranked as important or marginal and some are likely used primarily as rearing habitat for young char.

Large watercourses were identified as marginal and all of the extra-large watercourses contained important fish habitat.

2.5. Marine Wildlife

Milne Inlet and Koluktoo Bay are predominantly cliffs and talus shores interspersed with raised beaches and coastal flats in the vicinity of the Tugaat River and estuarine delta habitat along the west coast of Koluktoo Bay (Dickens et al., 1990).

2.5.1. Fish

Marine fish known or suspected in the region are: Greenland Shark, darkbelly skate, Arctic char, polar cod, arctic cod, Greenland cod, rock grenadier, fish doctor, safddled eelpout, polar eelpout, sea poacher, rough hookear, Arctic staghorn, twohorn sculpin, spatulate sculpin, ribbed sculpin, smooth lumpfish, leatherfin lumpsucker, Atlantic spiny lumpsuker, Greenland seasnail, dusky snailfish, gelatinous seasnail, Reinardtius hippoglossoides, veiled anglemouth, and Scorpaenidae.

The distribution and abundance of most of these species is poorly documented within the region. Species that are of ecological significance or are of domestic or economic significance to people from Pond Inlet include Arctic cod (ecological significance), Arctic char and Greenland halibut (economic or domestic importance).

2.5.2. Marine Mammals

Twenty-one species of marine mammals occur either year-round or seasonally around the Milne Inlet port site or along proposed shipping corridors.

During August and September, narwhal, bowhead whale, ringed seal, bearded seal, and harp seal occur within the waters of Milne Inlet and Eclipse Sound. Beluga and killer whales may also occasionally occur in those waters during that time.

Large numbers of beluga that winter along the west coast of Greenland and migrate past Bylot Island during spring to summering areas concentrated near Somerset Island. Only a small number of animals move into areas inland of Bylot Island for calving and feeding.

Large numbers of narwhal summer in Milne Inlet and nearby Koluktoo Bay, Tremblay Sound, and Eclipse Sound.

Bowhead whales occur in Eclipse Sound and Milne Inlet through the open water period in most years.

A small number of killer whales appear to move into the Canadian Arctic from the north Atlantic during ice break up, and retreat south with ice formation in fall. They are frequently observed in small numbers in Eclipse Sound and Milne Inlet, likely because of the abundance of other marine mammal species in the area.

Ringed seals are year-round residents in the Arctic and are generally associated with fast ice habitats through most of the year. Harp seals are seasonal migrants into waters along both shipping routes. Bearded seals are found throughout most of the Canadian Arctic, and occur in small numbers along proposed shipping routes and in waters near Milne Inlet. Bearded seals are less abundant than ringed seals, but are actively harvested along the Pond inlet floe edge and waters inland of Bylot Island by Pond Inlet hunters.

Atlantic walrus winter in the North Water and other polynyas among the Canadian arctic islands, as well as along the west coast of Greenland. They move westward along the southern coast of Devon Island during spring to summering areas in the Canadian Arctic islands.

Polar bears are year-round residents in most Arctic areas, occupying terrestrial habitats during summer in locations where the sea ice melts, and marine habitats when the sea ice forms. They occur throughout the Mary River project area, and have been observed at the head of Milne Inlet and in close proximity to the Mary River Camp.

2.6. Other Biological VECs

The biological valued ecosystem components identified through community consultation include the components discussed above, namely vegetation, terrestrial mammals, birds, fisheries and marine mammals.

2.7. Species of Concern

Marine species resident near the Project site are designated under SARA (Environment Canada, Canadian Wildlife Service, 2004) and includes the Atlantic Blue Whale (endangered).

COSEWIC has also assessed additional species in the Project area and assigned status categories (COSEWIC, 2006). These are: Polar Bear (special concern), Beluga Whale (see below), and Walrus (special concern).

Two of four identified beluga populations occur within the Mary River study area: the Cumberland Sound population (endangered) and the Eastern High Arctic/Baffin Bay population (special concern).

3. Socioeconomic Environment

3.1. Archaeology and Culturally-Significant Sites

The shoreline of Milne Inlet is rated as high potential for archaeological sites. During the initial surface survey, three sites were recorded, at least one of which is of high scientific significance. Additional sites may also be identified with more intensive assessment of the entire inlet. Portions of the beach with low archaeological potential were surveyed and cleared by archaeologists in 2006 prior to sealift. Future sealifts will utilize the same location.

The Milne Inlet tote road has high archaeological potential since it has undoubtedly served as a common travel route throughout human use of this region. A total of 18 sites were recorded during the 2006 survey along the existing road alignment. One additional site was located in an area adjacent to the airstrip at the south end of Katiktok Lake, and two more sites were found in a large section of sand and gravel deposits at the opening into Milne Inlet.

The surficial material, cobbles and boulders of various sizes, suggests low potential for archaeological resources at the Mary River Project site. Two archaeological sites were recorded, both near Sheardown Lake along the southern edge of the Project area. These sites are well removed from currently proposed infrastructure and no impacts are anticipated.

A total of 26 archaeological sites were recorded during investigations to date. Three sites were recorded in Milne Inlet, 21 sites along the road and associated facilities, and two in the Mary River Project area. Almost all the sites contain stone circles, and various types of stone structures such as caches, cairns, and traps. Two sites contain lithic remains from stone tool manufacture.

3.2. Land and Resource Use

3.2.1. Subsistence Harvesting

Contemporary land and resource use in the area, focusing primarily on the traditional land use activities of hunting, fishing, trapping and gathering, is described in the Nunavut Wildlife Harvest Study (NWMB, 2004).

24 to 33.5% of people in the region were identified as occasional, active or intensive hunters. 75% to 90% of registered hunters harvested within the year, suggesting a high participation rate.

Data suggests that the inland area of Mary River, the existing Milne Inlet road and the Milne Inlet and Eclipse Sound areas used by the Project are primarily used by the people of Pond Inlet.

A total of 49 wildlife species were reported as harvested by at least one of the five North Baffin communities shown, during the study period. This included caribou, polar bear, wolves, two fox species (arctic and coloured), four species of seals, walrus, narwhal, beluga, a large number of waterfowl and bird eggs, and a small variety of fish and seafood.

In 2006, caribou were found in low densities and this will likely persist for some time until the vegetation recovers in the North Baffin (Pisiksik Working Group, 2006; MHTO, 2006). It is likely that during periods of high caribou abundance harvest activities shift accordingly.

Information from Pisiksik Working Group (2006) and the Mittimatilik Hunters and Trappers Organization (2006) suggests that the inland areas in and around Mary River have increased in importance with caribou hunting since the animals have become less abundant closer to the community.

3.2.2. Soapstone Quarries

North Baffin communities have a long heritage of carving using natural materials such as stone, including soapstone and animal bone. Carving stone is often difficult to obtain and thus known deposits are important to the community and there is always an interest in identifying new deposits. One soapstone deposit was identified several kilometres southeast of the Mary River Project. Members of the Pisiksik Working Group in Pond Inlet have indicated that these soapstone deposits are still actively used by the community (Pisiksik Working Group, 2006).

3.2.3. Non-Traditional Land Uses

Non-traditional land use in the region is generally limited to mineral exploration, re-supply operations, and tourism.

Mineral exploration includes the Mary River Project and other projects that are currently at an early stage. Lancaster Sound is known to contain oil and gas deposits, but up to now, exploration has been limited to geophysical surveys and no wells have been drilled.

All Nunavut communities rely on an annual re-supply of non-perishable goods and fuel by marine shipping, locally referred to as the "sea-lift". Sea-lift generally occurs through August and September, and each community might receive several ships in a season.

With respect to tourism, the Government of Nunavut estimated in 2000 that 18,000 people visit Nunavut annually, with a range of tourism activities including eco-tourism in Milne Inlet and Koluktoo Bay, sport hunting and fishing, and cultural, adventure and educational tourism activities.

3.3. Local and Regional Traffic Patterns

Local traffic patterns in the study area are seasonally-dependent, broadly described within the following categories: travel over ice, travel over land, facilitated by ice, travel over open water, and travel over land, facilitated by boat.

Regional traffic patterns are dominated by snowmobile movements during the winter months. Other regional traffic includes sealift and cruise ship operations, which visit Pond Inlet and area each summer, and scheduled and chartered air services to support local exploration.

3.4. Brief Community Profile

Pond Inlet is the nearest community, located 160 km from the Mary River Project site. Residents of Pond Inlet regularly utilize the Milne Inlet and Mary River areas for hunting. Other communities in the region within several hundred kilometres of the Mary River area include Igloolik, Arctic Bay and Hall Beach. Current plans are to draw from the communities of Pond Inlet, Arctic Bay and Igloolik to staff the Project.

3.5. Human Health

Human health is broadly defined as a complete state of well being, including physical, social, psychological, and spiritual (NIRB, 2006). Socio-economic studies to collect information on human health of the people in the region are currently underway as part of the environmental baseline studies for the Mary River Project.

3.6. Other Valued Socio-economic Components

Work is underway to identify valued socio-economic components (VSECs) that would apply to a future full-scale mining operation at Mary River, but this exercise is not yet complete.

4. IDENTIFICATION OF IMPACTS AND PROPOSED MITIGATION

1. Please complete the attached Table 1 – Identification of Environmental Impacts, taking into consideration the components in Appendix A. Identify impacts in Table 1 as either positive (P), negative and mitigable (M), negative and non- mitigable (N), or unknown (U).
2. Discuss the impacts identified in the above table.
3. Discuss potential socioeconomic impacts, including human health.
4. Discuss potential for transboundary effects related to the project.
5. Identify any potentially adverse effects of the project proposal on species listed under the Species at Risk Act (SARA) and their critical habitats or residences, what measures will be taken to avoid or lessen those effects and how the effects will be monitored.

Identification of Potential Impacts and Mitigation

Table 1 is attached, separating out the various activities related to the Exploration and Geotechnical Drilling Program into construction, operations and decommissioning phases.

Construction phases for the program consist of an expansion of the existing camp and placement of the temporary drill camps at Milne Inlet, Steensby Inlet, and Deposit No. 4. Any activity that uses equipment will generate air and noise emissions, which will be mitigated to a certain extent through the use of modern equipment with mufflers, reducing idling, and flying aircraft above prescribed altitudes, but emissions will still occur. Ground disturbance associated with the establishment of the temporary drill camps and fuel storage will disrupt vegetation and displace a minor area of wildlife habitat. Any activity that involves local employment has been assigned a positive rating, since employment positively influences community wellness.

Operations consist of annual delivery of materials, camp activities, drill activities, and operation of aircraft. Various impacts to the physical and biological environment are mitigatable, with the exception of air and noise emissions which, as described above, do have measures to minimize effects. Ground stability and permafrost can be affected by vehicular traffic, although this will be minimized by remaining on existing roads and taking corrective action through sediment and erosion control measures if required. Fuel storage has the potential to impact on soil and water quality, but the use of lined containment and implementation of a spill contingency plan will mitigate these potential effects. Drilling activities will involve the withdrawal of water from nearby watercourses, generation of air and noise emissions, and have limited ground disturbance to vegetation. There is the potential to affect archaeological resources, but this will be migitated by adhering to areas that have been cleared by the archaeologists, or by obtaining such clearance before moving into new areas. Aircraft movements will generate air and noise emissions, and have the potential to affect traditional land use. These impacts will be mitigated by utilizing direct flights from Iqaluit, flying above prescribed altitudes, and by avoiding harvesting areas including the fiords as much as possible. Again, there are various positive socio-economic benefits during operations associated with employment.

During decommissioning, grounds will be restored and made amenable to the reestablishment of vegetative cover. The removal of materials and cease of activities at project sites will make these areas available again to wildlife as well as traditional land uses. The camp dismantling and removal and site restoration will provide local employment.

Potential Socio-economic Impacts

Potential socio-economic impacts identified relating to the exploration and geotechnical drilling programs are as follows:

- Increased seasonal employment and resulting income, training and work experience (positive)
- Potential stresses on families from remote shift work
- Potential increased alcohol and substance abuse arising from increased income
- Potential disturbance of local land uses, including harvesting and tourism

The primary socio-economic impact of the project is the provision of employment, and the various benefits derived from this employment, including increased income, an increased sense of well-being, training and work experience. The remote and rotational nature of the work likely provides some stress on families with one parent away from the household for periods of time, and there is a potential for increased alcohol consumption and substance abuse associated with the increased income.

Potential disturbances to local land uses include disturbance to hunting. It has been observed that the sealift into Milne Inlet has resulted in the narwhal temporarily vacating the area, although this appears to be a temporary response. This could temporarily affect both subsistence hunting in the area as well as any groups of kayakers known to visit Koluktoo Bay during the summer. Hunters from Pond Inlet access the Milne Inlet and Mary River areas in both winter and during open water season. The very small amount of cat train traffic on the winter road during March through May is not expected to have a substantial effect on hunting in the area, as snowmobile traffic does not preferentially use the existing road alignment to access the area. Drilling activities at Milne Inlet and Steensby Inlet will generate some noise locally, as will exploration and camp operation activities at Mary River. These activities are not expected to greatly affect harvesting activities, which cover a very large area of the region compared with the localized activities of the project.

Potential for Transboundary Effects

The potential for transboundary effects related to the project is minimal. Only the annual sealift ship that re-supplies the exploration project has the potential for transboundary effects, primarily through the potential for fuel spills or introduction of foreign aquatic species. The sealift company utilized has been conducting sealift operations in Nunavut for decades, and complies with the regulations and guidelines that have been established under the *Canada Shipping Act* and *Arctic Waters Pollution Prevention Act*, including the Arctic Waters Oil Transfer Guidelines (Transport Canada, 1997), Arctic Shipping Pollution Prevention Regulations, and The Canadian Ballast Water Management Guidelines (Transport Canada, 2001).

Potential to Adversely Effect Species at Risk

Three bird species near the Project site are designated under the Species at Risk Act – SARA (Environment Canada, Canadian Wildlife Service, 2004): (1) Ivory gull (special concern), (2) Ross's gull (threatened), and (3) Tundra peregrine falcon (special concern). The gull species migrate through the area, but primary nesting habitat is on Bylot Island and the Brodeur Peninsula. Knight Piésold's wildlife surveys have found that peregrine falcons and their habitat are abundant and well distributed throughout the region, and therefore the local population does not appear to be at risk.

Marine species resident near the Project site are designated under SARA (Environment Canada, Canadian Wildlife Service, 2004) and includes the Atlantic Blue Whale (endangered). COSEWIC has also assessed additional species in the Project area and assigned status categories (COSEWIC, 2006). These are: Polar Bear (special concern), Beluga Whale (special concern in Eastern High Arctic/Baffin Bay population), and Walrus (special concern). Two of four identified beluga populations occur within the Mary River study area: the Cumberland Sound population (endangered) and the Eastern High Arctic/Baffin Bay population (special concern). Potential impacts to marine mammals include:

- Disturbance to beluga whale summering in Eclipse Sound
- Disturbance to summering Atlantic blue whale
- Increased incidence of human/polar bear interactions

Potential effects to beluga whale would primarily be noise-associated disturbance associated with ship passage through Eclipse Sound during August. The single sealift per year associated with the exploration drilling program is unlikely to cause adverse disturbance to beluga or blue whale populations.

The biggest potential impact of the drilling programs on polar bears is through a potential increase in human/bear interactions and the resultant possibility that a bear may need to be killed to protect people or equipment. This will necessitate full-time bear monitors at coastal drilling camps.

5. MITIGATION OF IMPACTS

1. Describe measures to mitigate impacts to the physical, biological and socioeconomic environment as identified in Section 4.

Mitigation is described in Section 4.

6. CUMULATIVE EFFECTS

1. Discuss how the effects of this project interact with the effects of relevant past, present and reasonably foreseeable projects in a regional context.

To focus a discussion on cumulative effects, reference is made to the definition outlined by NIRB (2006b) for Cumulative Effects Assessment:

"The assessment of impacts on the biophysical and socio-economic environment that results from the incremental effects of a development when added to other past, present, and reasonably foreseeable future developments, regardless of what agency or person undertakes such other developments. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

There is no currently operating mine or other industrial development in the North Baffin region, nor is there any mineral exploration in the region at an advanced stage of development, other than the Mary River Project. Some grassroots exploration activities are underway throughout the region but none known to be in close proximity to the Mary River Project.

Potential cumulative effects can be considered from the Mary River Project itself, and the various components. It is possible that, concurrent with the Exploration and Geotechnical Drilling Program, Baffinland will also conduct a bulk sampling program, for which a separate screening document has been prepared. The main cumulative effect of the two concurrent programs at Mary River will be with respect to the level of required air traffic, and general activity in the region. Collectively, there will be up to 5 rotary aircraft and 1-2 fixed-wing aircrafts operating throughout the region when both bulk sampling program and exploration/geotechnical activities are underway during the late spring and summer period.

The potential impacts of air traffic include disruption to wildlife, people out on the land, and in the communities. The following mitigation will address the issue of cumulative air traffic:

- Scheduled charter flights will operate between Iqaluit and Mary River, thereby reducing the associated air traffic into Pond Inlet associated with staging personnel via scheduled air service from Pond Inlet

- Use of the Milne Inlet tote road as a winter road for the transport of equipment and materials to site overland, thereby reducing air traffic
- Flying at heights in excess of the minimum flight altitude of 300 m specified in land use permits and licenses, when feasible

The above mitigation is expected to alleviate the potential impacts associated with Project-related air traffic in the region.

7. SUPPORTING DOCUMENTS

1. Please provide the following supporting documents:
   Abandonment and Decommissioning Plan
   Existing site photos with descriptions
   Emergency Response and Spill Contingency Plan

The abandonment and restoration plan and Spill Contingency Plan are attached.

References

1. Aker Kvaerner. Mary River Iron Ore Project – Bulk Sample Pit Design, Revision A. Project Number 176710. Prepared for Baffinland Iron Mines Corporation. Toronto: Aker Kvaerner, June 2006.

2. Buckley, J.R., B.R. de Lange Boom and E.M. Reimer. "The physical oceanography of the Cape Hatt region, Eclipse Sound, N.W.T." Arctic 40 (1987): 20-33.

3. Canada. Department of Indian and Northern Affairs. The physical oceanography of western Baffin bay and Lancaster Sound. Eastern Marine Environmental Studies Report No. 25. Prepared by Fissel, D.B, D.D. Lemon, and J.R. Birch. Ottawa: Indian and Northern Affairs, 1981.

4. ---. Environment Canada. Climate Normals (1971 – 2000), Pond Inlet. 25 Feb. 2004. <http://www.climate.weatheroffice.ec.gc.ca/climate_normals/results_e.html>.

5. ---. Environment Canada. Canadian Wildlife Service. Key marine habitat sites for migratory birds in Nunavut and the Northwest Territories. Occasional Paper No. 109. Prepared by Mallory, M.L., and A.J. Fontaine, eds. Ottawa: Canadian Wildlife Service, 2004.

6. ---. Environment Canada, Canadian Wildlife Service. Key marine habitat sites for migratory birds in Nunavut and the Northwest Territories. Occasional Paper No. 109. Prepared by Mallory, M.L., and A.J. Fontaine, eds. Ottawa: Canadian Wildlife Service, 2004.

7. ---. Environment Canada, Canadian Wildlife Service. Species at Risk Web Mapping Application. 2004. 15 Nov. 2006. <http://www.sis.ec.gc.ca/ec_species/ec_species_e.phtml>.

8. ---. Environment Canada. Canadian Wildlife Service. Conservation issues for Canadian Wildlife Service priorities for marine birds. Unpublished. Prepared by Gaston, A.J. Ottawa: Canadian Wildlife Service, 1996.

9. ---. Fisheries and Oceans. Canadian Hydrographic Service. Chart 7212 Bylot Island and Adjacent Channels. Ed. Notices to Mariners. Ottawa: Canadian Hydrographic Service, 31 Mar. 2006.

10. ---. Fisheries and Oceans Canada. Tides, Currents and Water Levels. 15 Oct. 2006. <http://www.waterlevels.gc.ca/cgi-bin/tide-shc.cgi?queryType=showRegion&language=english&region=2>.

11. ---. Natural Resources Canada. Geological Survey of Canada. Memoir 440 Geology of the Clyde-Cockburn Land Map Area, North-Central Baffin Island, Nunavut. Prepared by G.D. Jackson. Ottawa: Geological Survey of Canada, 2000.

12. ---. Parks Canada. A natural resource survey of Bylot Island and adjacent Baffin Island, Northwest Territories. Prepared by Zoltai, S.C., K.J. McCormick and G.W. Scotter. Ottawa: Parks Canada, 1983.

13. ---. Transport Canada. Arctic Shipping Pollution Prevention Regulations, Arctic Ice Regime Shipping System (AIRSS) Standards. Third Amendment. Ottawa: Transport Canada, May 1998.

14. ---. Transport Canada. Arctic Waters Oil Transfer Guidelines. TP#10783. Ottawa: Transport Canada, 1997.

15. ---. Transport Canada. The Canadian Ballast Water Management Guidelines. TC13617E. Ottawa: Transport Canada, 8 Jun. 2001.

16. "Canada Shipping Act, Ballast Water Control and Management Regulations, P.C. 2006-495." Canada Gazette 140.13 (2006). 8 Jun. 2006. <http://canadagazette.gc.ca/partII/2006/20060628/html/sor129-e.html>.

17. Canadian Council of Ministers of the Environment (CCME). ed. "Canadian Water Quality Guidelines for the Protection of Aquatic Life: CCME Water Quality Index User's Manual." Canadian Environmental Quality Guidelines, 1999. Winnipeg: CCME, 2001.

18. Committee on the Status of Endangered Wildlife in Canada (COSEWIC). COSEWIC. 21 Jan. 2002. Environment Canada. 15 Nov. 2006. <http://www.cosewic.gc.ca/eng/sct5/index_e.cfm>.

19. Dickens, D., I. Bjerkelun, P. Vonk, S. Potter, K. Finley, R. Stephen, C. Holdsworth, D. Reimer, A. Gordon, W. Duval, I. Buist, and A. Sekerak. Lancaster Sound Region – A Coastal Atlas for Environmental Protection. Yellowknife: Environment Canada, Environmental Protection Division, 1990.

20. Ecological Stratification Working Group. A National Ecological Framework for Canada. Ottawa: Agriculture and Agri-Food Canada, Minister of Supply and Services Canada, 1996.

21. Gartner Lee Ltd. Phase II Environmental Site Assessment Nanisivik Mine, Nunavut. Bracebridge: Gartner Lee, Jan. 2003.

22. Knight Piésold Ltd. Baffinland Iron Mines Corporation Mary River Project Bulk Sampling Program Tote Road Investigation Summary (Ref. No. NB102-00181/6-2). North Bay: Knight Piésold, 2006a.

23. ---. Baffinland Iron Mines Corporation Mary River Project Pre-feasibility Study of Alternative Energy Options (Ref. No. NB102-00181/3-1). Vancouver: Knight Piésold, 2006b.

24. Lepage, D., D.N. Nettleship and A. Reed. “Birds of Bylot Island and adjacent Baffin Island, Northwest Territories, Canada, 1979-1997.” Arctic 51.2 (1998): 121-141.

25. Mittimatalik Hunters and Trappers Organization (MHTO). Personal communication. 8 Apr. 2006.

26. Nunavut. Department of Environment (DOE). Known Ecological Area of Interest in Nunavut Version 2.0. Map. Prepared by Setterington, M. Arviat: DOE, 2005.

27. Nunavut Impact Review Board. Guide to Terminology and Definitions. Cambridge Bay: NIRB, Aug. 2006.

28. Nunavut Wildlife Management Board (NWMB). The Nunavut Wildlife harvest Study: Final Report, August 2004. Prepared by Priest, Heather and Usher, Peter J. Nunavut: NWMB, 2004.

29. Pisiksik Working Group. Personal communication. 10 Apr. 2006.

THE NUNAVUT IMPACT REVIEW BOARD
SCREENING PART 2 FORMS

TABLE 1 - IDENTIFICATION OF ENVIRONMENTAL IMPACTS

		ENVIRONMENTAL COMPONENTS	PHYSICAL	designated environmental areas (ie. Parks, Wildlife Protected areas)	ground stability	permafrost	hydrology/ limnology	water quality	climate conditions	eskers and other unique or fragile landscapes	surface and bedrock geology	sediment and soil quality	tidal processes and bathymetry	air quality	noise levels	BIOLOGICAL	vegetation	wildlife, including habitat and migration patterns	birds, including habitat and migration patterns	aquatic species, incl. habitat and migration/spawning	wildlife protected areas	other VEC: marine wildlife	SOCIO-ECONOMIC	archaeological and cultural historic sites	employment	community wellness	community infrastructure	human health	other VSEC: traditional land use
	PROJECT ACTIVITIES																											
CONSTRUCTION																												
	Mary River Camp Expansion (80 to 100 pp)																											
	Additional tents				M												M								P	P			
	Expansion of greywater sump				M	M								N	N		M								P	P			
	Movement of water intake onto a raft																								P	P			
	Placement of temporary drill camps																											
	Tent placement																M	M						M	P	P			M
	Construction of small fuel containment berm																M	M						M	P	P			M
OPERATION																												
	Delivery of Supplies																											
	Annual sealift transit through area													N	N							M						M
	Barge unloading of dry cargo													N	N							M		M	P	P			M
	Overland transport				M	M						M		N	N		M	M						M	P	P			M
	Camp Operation																											
	Vehicular traffic				M	M		M				M		N	N			M	M	M					P	P			
	Waste incineration													N											P	P			
	Water taking						M													M					P	P			
	Fuel storage							M				M													P	P			
	Water/waste water treatment																												
	Drilling Activities																											
	Water taking for drilling						M				M	M		N	N		M							M	P	P			M
	Drilling													N	N									M	P	P			M
	Fuel storage and transfer							M				M																	
	Aircraft Operation																											
	Helicopter movements													N	N										P	P			M
	Fixed-wing aircraft movements													N	N										P	P			M
DECOMMISSIONING																												
	Camp Dismantling and Removal																											
	Camp Dismantling and Removal													N	N		P	P	P						P	P			P
	Waste incineration													N											P	P			
	Ground restoration				P	P		P				P		N	N		P	P	P						P	P			P
	Excavation and removal of contaminated soils				M	M		P						N	N										P	P			P

Notes: Please indicate in the matrix cells whether the interaction causes an impact and whether the impact is:

P *Positive*
N *Negative and non-mitigatable*
M *Negative and mitigatable*
U *Unknown*
If no impact is expected then please leave the cell blank