



2005 May 25

Mr David Hohnstein  
Technical Advisor, Mining  
Nunavut Water Board  
PO Box 119, Gjoa Haven, NU  
X0B 1J0

Dear Mr Hohnstein,

**Re: Baffinland Iron Mines Corporation – NWB2MRY0406 Amendment Application**

As requested in your letter dated 2005 May 09, I have attempted to clarify and answer the questions raised. I have followed the format of your letter:

- i. At the time of the submission of the amended application and at the present time, it is unclear whether or not there is a potential fourth drill available for Baffinland Iron Mine's programme. A third drill has been brought to site and drilling will commence with three drills and if available a fourth drill will be brought in to increase productivity on the site. The Abandonment and Restoration Plan does not need to be modified as the possible fourth drill will be removed from site prior to the completion of the 2005 programme or if required by the contractor Boart Longyear, it may be stored onsite until demobilisation can occur to its primary contractor. However I have modified the specific sentence in the Plan as requested. DeBeers, located some 50 kilometres to the south of Baffinland's Mary River Camp is the potential source of the fourth drill. It is possible that Baffinland may utilize the drill for a period in July and August 2005 to maximise productivity.

Assuming that an individual supply pump is on maximum output for a 24-hour period, the water draw would be 78 cubic metres per day per drill. The total would be 234 cubic metres of water with three drills or 312 cubic metres per day with four drills. This theoretical maximum is not really achievable as this assumes that the drill is operating and drilling also on a 24-hour basis with pumps operating at full capacity for the full 24 hours. Based upon normal productivity and expected availability of the drill:

- The average actual water use should average 25 cubic metres per day per drill or 75 cubic metres per day for three drills and 100 cubic metres per day per drill for four drills; and
- the maximum actual water use should be 37.5 cubic metres per day per drill or 112.5 cubic metres per day for three drills or 150 cubic metres per day with four drills.

However, to ensure that no theoretical violation of a water licence occurs, the requested increase is to 312 cubic metres of water per day for drilling and 2 cubic metres of water for the camp. As documented in its annual water report, specific pumping stations utilised in 2004 are tabulated below. It is expected that similar sites will be utilised in 2005.

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Locations FOR WATER SITES AND WASTE DISPOSAL in 2004

PUMPING LOCATIONS

FOR DRILL SITE	LATITUDE			LONGITUDE		
	degrees	minutes	seconds	degrees	minutes	seconds
MR1-04-31	71	18	32	79	12	22
MR1-04-32	71	18	32	79	12	22
MR1-04-33	71	19	45	79	10	46
MR1-04-34	71	19	45	79	10	46
MR1-04-36	71	19	45	79	10	46
MR1-04-37	71	19	34	79	10	46
MR1-04-38	71	19	34	79	10	46
MR1-04-39	71	19	34	79	10	46
MR1-04-40	71	19	54	79	10	51
MR1-04-41	71	19	28	79	10	51
MR2-04-42	71	18	20	79	8	2
MR1-04-44	71	18	28	79	12	22
MR1-04-45	71	18	28	79	12	22
BASE CAMP	71	19	26	79	22	20
WASTE DISPOSAL LOCATION						
BASE CAMP	71	19	26	79	22	0

- ii. There appears to be some misunderstanding regarding source of water for drilling. The Mary River bifurcates to the south of the project area and water is accessed from either camp creek, a seasonal drainage or the northern (feeder?) tributary of Mary River. The misunderstanding appears to be due to semantics. The northern tributary remains the source of drill water and has been calculated to have an average flow rate during the year of approximately 1 million cubic metres per day. This is the tributary that the flow rate was measured as requested in the 2004 water licence.
- iii. Sewage disposal has been a challenge at Mary River camp. The original Pacto toilet system supplied with the Weatherhaven camp did not work very well and a latrine system was utilised. All human waste was collected, burned in an incinerator, remains buried onsite and covered with chloride of lime. Burning was relatively effective and two locations were used during the programme. Four propane toilets (see picture below) were ordered in 2004, however due to a manufacturing defect, these units were unavailable in 2004 and will only be available in June 2005. They will be flown to the site and their effectiveness is debateable dependent upon the source sited. Other toilet systems have been investigated; however have limited effectiveness in a permafrost environment. A more modern toilet system will very probably be purchased for the 2006 field season; however, these systems require considerable lead time to be built and are contained in an ATCO-style container. They are bulky and expensive to transport and install and are not easily demobilised from site. The cost of this system is approximately \$600,000, including transportation to site.

### Propane Toilet



Greywater is disposed of in a sump behind the ablution tent and off the kitchen tent. All soaps being used are biodegradable.

The sumps and latrine pits are located approximately 150 metres from the closest drainage to the south of the camp. This drainage is some 150 metres from Camp Lake and the drainage flow is seasonal. The lake is the water source for the Mary River camp. Impacts are mitigated due to burning of waste material and treatment with lime. Should the Water Board have any suggestions to improve mitigation beyond Baffinland's efforts, please provide input?

- v. NWB Culvert Bridge Information Request for rehabilitation of the Milne Inlet Access Road is attached. The Milne Inlet Access Road was built in 1964 and has not been maintained since that time. It is important for the NWB to realise that **Baffinland is planning to rehabilitate the existing road and replace culverts**. It is not building a new road. Two Photos showing existing road are as follows.

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MILNE INLET ACCESS ROAD – ROAD FOLLOWS NORTHERN MARGIN OF PHILLIPS CREEK AND ASSOCIATED LAKES. CULVERTS ARE REQUIRED FOR TOPOGRAPHICAL DRAINAGES FEEDING INTO CREEK. ACCESS IS ONLY DURING WINTER ACTIVITY.



SECOND VIEW OF MILNE ACCESS ROAD  
NOTE AREA IN LEFT QUADRANT WHERE EXISTING CULVERT MATERIAL REQUIRES REPLACEMENT

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- v. Use of EK-35 on the Airstrip has been approved by Environment Canada (as reported by Manufacturer), but no official documentation supports this statement. Attached under separate cover is Environmental Protection Agency information as well as documentation of its use in Kuujuaq in Nunavik. Baffinland has requested information from Environment Canada, however as its use in Canada is apparently limited, Environment Canada believes it is a low priority item. I have attached available information regarding its use in compacting gravel airstrips. Should the NWB have a more acceptable solution, please advise.
- vi. Figures 11 and 12 show historical channel sampling completed in 1964 and 1965. Baffinland has not completed any surface sampling with the exception of collection of representative samples for geological knowledge. Surface sampling is planned and will be limited to two inch wide - two inch deep channel samples of outcrop for confirmation and orientation. The samples will be cut with a diamond saw. Samples will be generally restricted to areas where existing sampling has occurred (historic data). As disturbance is minimal, no reclamation of these limited two inch wide - two inch deep sample sections was envisioned. *No blasting or trenching is planned or contemplated in 2005.*
- vii. Existing Permits in place for Baffinland's Mary River Project are:
  - **IOL Land Use Permit – Q04L2C03**
  - **DIAND Land Use Permit - #N2004C0017**

The IOL Land Use Permit has been submitted for amendment to the Qikiqtani Inuit Association, who have reviewed the application and evaluation is in progress.

I have recalculated water fees to be \$120 rather than the \$150 as per the cheque. Please cash the existing cheque and if possible please credit Baffinland or donate the funds to the NWB coffee fund. The cost to courier a replacement cheque would prohibit any refund of the overpayment.

Yours sincerely,

**Baffinland Iron Mines Corporation**

"Michael Zurowski"

Michael T Zurowski, P.Eng.  
President

Attachments