Wednesday, 30 July 2008

Andrew Keim
Water Resources Officer
INAC Nunavut Regional Office
PO Box 2200
IQALUIT, NU X0A 0H0

Mr. Keim,

On July 25, 2008, representatives from the department of Indian and Northern Affairs Canada (INAC) and the Government of Nunavut, Department of Environment (DoE) travelled to the Mary River Project site to inspect the bulk fuel storage facility at Milne Inlet.

On July 28, Baffinland received a directive from yourself pursuant to subsection 87 (1) (ii) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*.

The purpose of this letter is to provide initial response to the above noted Order by summarizing commitments made during the site visit and to provide further details as to Baffinland's operational plans for the treatment and release of the water from within the containment area. As discussed on Friday, the 2008 bulk fuel re-supply sea-lift has been loaded in Montreal and it is estimated to arrive at Milne Inlet on or about August 4th, 2008. Transfer of fuel into the bulk fuel facility is scheduled to commence upon arrival of the ship and is contingent upon your review and approval under the said Order.

The bulk fuel storage facility at Milne Inlet consists of seventy-five (75) fuel bladders each with a capacity of 113,560 litres installed inside of a lined and bermed containment area. This facility was commissioned in the summer of 2007. Please note that this facility was constructed with a very conservative containment allotment of 110% of the aggregate storage capacity of the entire bladder facility, as compared to a much smaller capacity requirement under CCME guidelines.

It is our understanding that the site visit was prompted by:

- Reports from Baffinland that in June 2008 a welded seam on one of the bladders had failed which resulted in the release of an estimated 8,000 litres of fuel inside of the lined containment area. This was an isolated incident and there was no release of fuel to the receiving environment. We feel it is important to note that none of the other bladders have failed and that in fact the manufacturer advises that this is the first failure in the history of their operation.

- A notification by Baffinland of an intent to discharge water from within the lined containment area to the receiving environment contingent on meeting effluent discharge quality criteria as stipulated under Water License 2BB-MRY-0710. To date there has been no discharge of water from within the containment area to the receiving environment.

Baffinland would like to acknowledge INAC and GN DOE for constructive discussion through the course of the July 25, 2008 site visit. We, and the manufacturer, share concern regarding the failed bladder and have initiated a comprehensive technical investigation into its cause with the manufacturer. As discussed, given the containment capacity of the secondary containment area, and our remediation plan that was being acted upon prior to your inspection and order we do not foresee any risk to the environment associated with refuelling this facility upon arrival of the ship. SEI will be completing an assessment of the integrity of the fuel bladders in advance of the fuel shipment arriving, and we will forward their certification as soon as this has been completed.

We agree that the water that has accumulated within the containment requires treatment and discharge and as discussed planning for this has been in process. The process will employ two designated bladders within the containment area and will proceed until completed. We anticipate that this will be accomplished before freeze up. Recent results from July 26th sampling have indicated that our treatment system is meeting discharge criteria (see attached) and discharge will occur once approval from yourself is obtained.

Please find attached a written copy of Baffinland's plans of action currently underway and additional measures prompted by your site inspection. Should you have any questions, please do not hesitate to contact our Environmental Superintendents (Cheryl Wray or Jim Millard) or Operations Manager, Al Gorman at (416) 814-3164.

Yours sincerely,

Baffinland Iron Mines Corporation

Derek Chubb
VP, Sustainable Development

cc: NWB – Phyllis Beaulieu
GN- Robert Eno
EC – Craig Broome
QIA – John Amagoalik
INAC – Carl McLean, Bernie MacIsaac

Attachments:

Milne Inlet Fuel Farm – Operations Plan.

Milne Inlet Fuel Farm – Operations Plan.

As you are aware, the current short term operational concerns arose from three events:

- The failure of a welded seam on a Jet A fuel bladder that resulted in the release of an estimated 8000 liters of Jet A fuel inside the engineered lined fuel farm berm;
- The inability of the oil water separator (OSW) system as purchased to meet the discharge limits; and
- Continuous rains at Milne Inlet.

Baffinland submits the following plan to address concerns brought forward by INAC and DoE and in response to the directive:

In relation to the resupply of fuel into the Milne Inlet Bulk Fuel Storage Facility, Baffinland Iron Mines Corporation will not conduct a re-supply of fuel into the facility until the following plan has been approved by the Inspector

Treatment and dewatering of water within the Milne Inlet Tank Farm.

The water currently contained within the Milne Inlet Tank fuel storage facility has accumulated from snow melt and high rainfall during the month of July.

Baffinland's Water License 2BB-MRY0710 stipulates effluent must meet the following:

- Benzene – 370 ug/L
- Toluene – 2 ug/L
- Ethylbenzene – 90 ug/L
- Lead – 1 ug/L
- Oil and Grease – 15, 000 ug/L and no visible sheen

The treatment and dewatering methodology will be as follows:

- The originally purchased oil water separator has been upgraded to include an activated carbon polishing circuit to allow the permitted discharge limits to be achieved.
- Water from the fuel farm will be treated on a batch basis. Water from the containment area will be circulated through the entire oil water separator treatment system and stored, within two clean designated bladders within the fuel farm pending laboratory results. The treated water will be discharged from the stored batch to the receiving environment pending sample results confirming that water license criteria has been met and approval has been granted for discharge. Sampling during the course of discharge will be collected and analyzed once as per your email dated June 23rd, at the geographic midway point and final discharge point prior to Milne Inlet. We anticipate that this will be accomplished before freeze up.
- The 300 barrels of untreated water will be treated or removed in either one of two ways. It will be treated through the oil water separator upon completion of the fuel farm water

and or shipped out as hazardous materials during the August freight sea lift for disposal at an approved facility.

- Volumes of discharged treated water and photographic documentation will also be collected and reported.

Summary of Treatment Equipment

The Milne Inlet oil water separator is an FII "flow and plug" oil absorption system manufactured by Filter Innovations. It is a 3 phase oil & water separator consisting of:

- A particulate filter that pre-filters to effectively remove dirt and dust particles, followed by;
- Oil adsorbing media contained in two removable stainless steel canisters. Organite 52 adsorbs oil and grease through partitioning phenomena. The organite has a capacity for holding 10 kg of free hydrocarbon product. Based on assays of water in the fuel farm, the expected life of the organite is 500,000 liters with a 25% safety factor built in. The organite 52 adsorbing material will be replaced at its predicted life expectancy.
- The final polishing stage is an activated carbon filtering system to reduce effluent parameters to permitted discharge limits. The 600 kg of activated carbon has a capacity for holding 60 kg of free hydrocarbon product. Based on assays of discharge from the first two stages, the expected life of the activated carbon is 6.4 million liters with a 25% safety factor built in.

Reconfirmation of Fuel Farm Berm & Liner Integrity

- While there is no evidence that there has been any leakage associated with the liner we acknowledge that your request is a prudent preventative measure**.** A sampling program will be undertaken to conduct analysis in the vicinity of the tank farm. This program is being initiated in response to a minor surface sheen that was observed on standing water adjacent to the fuel facility during the site inspection. Testing will include soil and water testing within 12 test pits around the tank farm and samples collected for BTEX and TPH. **The results of this will be forwarded to your office by August 31, 2008.**

- Baffinland will submit the manufacturer's assessment certified by a professional engineer confirming the integrity of the bladders currently contained within the Milne Inlet fuel farm addressing the items in the order. **The Assessment will be forwarded to yourself by August 1, 2008.**

Milne Inlet Tank Farm Bladder Failure

- Baffinland will submit a complete investigation report including a copy of the manufacturer's failure analysis of the June 16th, 2008 failure. **The report will be submitted upon completion of the manufacturers analysis expected by August 8th, 2008**
- At the time of the incident, Baffinland measured the total fuel farm inventory and not individual bladder inventory. Therefore the estimated volume of fuel released from the

bladder is a subjective estimate based on the observations of the Baffinland Assistant Manager of Operations who was present and accountable for the filling of the fuel farm in 2007 and on his estimates post event on June 19, 2008.

Fuel loaded in 3 bladders -	Full Bladder	113,500 liters
	Partial Bladder 1	~68,250
	Partial Bladder 2	~68,250
	Total Jet A Received	=250,000
	Less	
Sept, 2007-June 15th	Jet A dispensed	~15,000 liters
June 19th post incident	Full Bladder	113, 500
	Partial Bladder 1	~113,500
	Partial Bladder 2	0
Estimated fuel released into containment area		**8000 liters**

Client: Baffinland Iron Mines Corporation
120 Adelaide Street West, Suite 1016
Toronto, ON
M5H 1T1
Attention: Ms. Cheryl Wray

Report Number: 2818424
Date: 2008-07-30
Date Submitted: 2008-07-29
Project:
P.O. Number: 270615
Matrix: Water

Chain of Custody Number: 71977

		LAB ID:	645774			**GUIDELINE**		
		Sample Date:	2008-07-26					
		Sample ID:	MRY-7-ACF					
PARAMETER	**UNITS**	**MRL**				**TYPE**	**LIMIT**	**UNITS**
VOLATILE ORGANIC COMPOUNDS - VOCs								
Benzene	ug/L	0.5	<0.5					
Ethylbenzene	ug/L	0.5	<0.5					
Toluene	ug/L	0.5	<0.5					
VOC SURROGATES								
Toluene-d8	%		95					
Oil & Grease								
Oil & Grease - Total	mg/L	1	1					

MRL = Method Reporting Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

645775: Total oil and grease MRL elevated due to insufficient sample volume.

APPROVAL: _____
Mina Nasirai
Organic Lab Supervisor

Client: Baffinland Iron Mines Corporation
120 Adelaide Street West, Suite 1016
Toronto, ON
M5H 1T1
Attention: Ms. Cheryl Wray

Report Number: 2818424
Date: 2008-07-30
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Project:
P.O. Number: 270615
Matrix: Water

Chain of Custody Number: 71977

			LAB ID:			GUIDELINE		
			Sample Date:					
			Sample ID:	LAB QC % RECOVERY	DATE ANALYSED			
PARAMETER	**UNITS**	**MRL**				**TYPE**	**LIMIT**	**UNITS**
VOLATILE ORGANIC COMPOUNDS - VOCs								
Benzene	ug/L	0.5		90	2008-07-29			
Ethylbenzene	ug/L	0.5		88	2008-07-29			
Toluene	ug/L	0.5		91	2008-07-29			
VOC SURROGATES								
Toluene-d8	%			98	2008-07-29			
Oil & Grease								
Oil & Grease - Total	mg/L	1		102	2008-07-30			

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Comment:

APPROVAL: _____
Mina Nasirai
Organic Lab Supervisor

Client: Baffinland Iron Mines Corporation
120 Adelaide Street West, Suite 1016
Toronto, ON
M5H 1T1
Attention: Ms. Cheryl Wray

Report Number: 2818425
Date: 2008-07-30
Date Submitted: 2008-07-29
Project:
P.O. Number: 270615
Matrix: Water

Chain of Custody Number: 71977

			LAB ID:	645777			**GUIDELINE**		
			Sample Date:	2008-07-26					
			Sample ID:	MRY-7-ACF					
PARAMETER	**UNITS**	**MRL**					**TYPE**	**LIMIT**	**UNITS**
Lead	mg/L	0.001	<0.001						

MRL = Method Reporting Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

APPROVAL: _____
Lorna Wilson
Agriculture Lab Supervisor

Client: **Baffinland Iron Mines Corporation**
120 Adelaide Street West, Suite 1016
Toronto, ON
M5H 1T1
Attention: **Ms. Cheryl Wray**

Report Number: 2818425
Date: 2008-07-30
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Project:
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Matrix: Water

Chain of Custody Number: **71977**

			LAB ID:			**GUIDELINE**		
			Sample Date:					
			Sample ID:	LAB QC % RECOVERY	DATE ANALYSED			
PARAMETER	**UNITS**	**MRL**				**TYPE**	**LIMIT**	**UNITS**
Lead	mg/L	0.001	106	2008-07-30				

MRL = Method Reporting Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

APPROVAL: _____
Lorna Wilson
Agriculture Lab Supervisor