



WATER USE INSPECTION REPORT

Date: Aug 12, 2011	Licensee Rep. (Name/Title): Jim Millard
Licensee: Baffinland Iron Mines Corp. (Baffinland)	Licence No.: 2BB-MRY1114

WATER SUPPLY

Source(s): Camp Lake	Quantity Permitted: 385 m ³
Owner:/Operator: Baffinland	

Indicate: **A** - Acceptable **U** - Unacceptable **NA** - Not Applicable **NI** - Not Inspected

Intake Facilities: NI	Storage Structure: A	Treatment Systems: A	Chemical Storage: A
Flow Meas. Device: A	Conveyance Lines: NI	Pumping Stations: NI	Screen : NI

Comments: The pump shack located next to Camp Lake was in poor shape after the spring ice pulled the lines away from the shack causing a fuel spill. The spill (~ 12 m³) occurred in early July and the shack was moved so the contaminated soil could be removed and replaced with clean fill. Until the pumps and shack is repaired, water is transported by truck to the Mary River Camp. Water is filtered and treated with UV and all water usage is recorded and was available during the inspection.

WASTE DISPOSAL

Sewage: Sewage Treatment System (Prim./Sec/Ter.): RBC Unit and polishing ponds

Natural Water Body:	Continuous Discharge (land or water):	
Seasonal Discharge:	Wetlands Treatment:	Trench:

Indicate: **A** - Acceptable **U** - Unacceptable **NA** - Not Applicable **NI** - Not Inspected

Discharge Quality: U	Decant Structure: A	Erosion: A
Discharge Meas. Device: NI	Dyke Inspection: NI	Seepages: A
Dams, Dykes: A	Freeboard: A	Spills: A
Construction: A	O&M Plan:	A&R Plan:
Discharge:	Effluent Discharge Rate: Unknown	

Comments: Sewage is transferred to the RBC unit and then to the polishing ponds for further treatment. Due to higher than normal phosphorous concentrations in the sewage effluent, all treated effluent is transferred to the polishing ponds (2 & 3) for further treatment. Sewage sludge is contained in polishing pond #1. When the effluent meets the discharge criteria then it is discharge to the land which eventually runs into Sheardown Lake.

Solid Waste:

Owner/Operator: Baffinland

Landfill: U	Burn & Landfill:	Other: Incinerator
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Comments: General garbage consisting of food wastes, paper and smaller wood products are burned in the incinerator. The incinerator was working at the time of the inspection. All other non-hazardous wastes are stored at the landfill.

- It was noted that oil filters were found in the landfill which is not permitted and should be removed immediately. All staff responsible for bringing materials to the landfill should be aware of this and should not continue to occur.

FUEL STORAGE:

Waste Oil Storage:

Owner/Operator: Baffinland

Indicate: **A** - Acceptable **U** - Unacceptable **NA** - Not Applicable **NI** - Not Inspected

Berms & Liners: A	Water within Berms: U	Evidence of Leaks: U
Drainage Pipes: NI	Pump Station & Catchments Berm: NI	
Pipeline Condition: NI	Condition of Tanks: A	

Comments: Waste oil and fuels are stored in secondary containment structures. Baffinland has between 500,000 to 600,000 Litres of fuel in bladders onsite.

- Contaminated soil for the pump shack fuel spill was placed in the secondary containment berm.
- Opens drums of waste fuels/oils contained in secondary containment. These drums should be covered in order to prevent spills from occurring.
- An oil/water separator and drums crusher is onsite and used when needed.
- There are numerous hydrocarbon spills around site, especially around the waste oil/fuel

storage. A spill had occurred next to the green tank at the airport, possible due to overfilling.

- General cleaning is required around the drillers area.

SURVEILLANCE NETWORK PROGRAM (SNP)

Samples Collected		Owner /Operator:	
2		INAC:.MRY-11B & MRY-1	
Signs Posted	SNP: Yes		Warning: Yes
Records & Reporting:			
Geotechnical Inspection:			

Mid-Rail Camp

Mid-rail camp has not been operational since 2008 and no activity is occurring at this site.

- There are 11 drums of Jet A and 1 drum of gasoline in secondary containment.
- All fuel drums used to supply fuel to the camps have been closed off and zip tied to prevent leakages. However, the fuel drum that supplies fuel to the pump shack is leaking and the drip tray is full of water. This water has what looks to be sheen on the surface and should be treated and disposed of appropriately.
- A black double walled tank is used to provide fuel for the incinerator is located in a secondary containment structure. However, the structure contains water that should be treated (if required) and discharged.
- General clean up around the camp is required.
- Walls of the insta-berm for the white double wall tank (generator shack) have collapsed and should be repaired.

Drill SI – MHS – 018 – PS

This drill was operational at the time of the inspection. Fuel was stored approximately 1 meter from the nearest water body, but did have secondary containment and no leaks were noticed during the inspection. Insta-berms for the drill fuels and chemicals should be constructed on flat ground and walls in an upright position.

Steensby Inlet Camp

The Steensby Camp began operations in March and will close sometime in October. There are approximately 35-45 people onsite at all times. Water is pumped using 2 gas powered generators and piping approximately 3 KM from an unnamed lake source. Four to five hundred gallons of water is used per day; water is filtered and UV treated for camp purposes. General garbage, food wastes and paper products are burned daily in the incinerator. Fuel for the camp and helicopter is being stored in secondary containment

- Some drums used to supply fuel to the tents and shacks are leaking around the hoses and bungs. This should be repaired as soon as possible
- General clean up, mainly wood and paper products, is required around the camp.
- Hazardous wastes are being packaged to ship out on the next sealift.

Milne Inlet Camp

The Milne Inlet camp has an oil/water separator (carbon filtered) to treat the water accumulating in the fuel bladder bermed area. There is a 3 or 4 staged process to remove and treat the contaminated water before it is discharged. No discharging was occurring during the inspection. Sewage and grey water is pumped to an RBC unit which removes the solids before the water is discharged. Any water that does not meet the discharge water quality guidelines is transferred to the sewage sump for further treatment. Wastewater that meets the discharge guideline is discharged approximately 200 meters from Milne Inlet. Potable water for the Milne Inlet camp is taken from Camp Lake at Mary River and transported via water trucks.

- All wastes (hazardous and non-hazardous) located down at the laydown area will be shipped out during the summer 2011. All records should be available for the inspector during the next inspection in 2012.
- Fuel drums located behind tents and shacks should be inspected regularly by staff and any leaks repaired immediately.
- The maintenance shop contains waste oil that should be covered stored in secondary containment and all spills cleaned up.

Non-Compliance of Act or Licence:

- All hydrocarbon spills around the site should be cleaned up as soon as possible.
- Opens drums of waste fuels/oils contained in secondary containment. These drums should be covered in order to prevent spills from occurring.
- All other issues and concerns in the Inspectors report should be addressed.

Ian Rumbolt

Inspector’s Name

Sent by E-mail

Inspector’s Signature