

WATER USE INSPECTION REPORT FORM

CIDM # 428916

Date: August 31, 2010	Licensee Rep. (Name/Title): Gary Perkins – Operations Manager – Baker Lake
Licensee: Hamlet of Baker Lake	Licence No.: 3BM-BKL1015

WATER SUPPLY

Source(s): Baker Lake	Quantity used: Meter reading: unknown
Owner:/Operator: Government of Nunavut	Treatment systems operated by Public works, GN

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

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

Comments: The Government of Nunavut, Dept. of Public Works provides the oversight and drinking water treatment services for the community. Government of Nunavut staff were available to provide access to the pumping station for inspection. Water Samples were collected. Chlorination records were noted on site. Chlorination records show that sampling is not done daily as required and that not all trucks are tested. This must be addressed. Trucks are also to be cleaned on a quarterly basis.

As the Government of Nunavut has retained ownership of the pump house and intake facilities and employs staff to provide water treatment and distribution to the Municipality it would be prudent for the Government of Nunavut, Department of Community and Government services apply for a license for this use of Water.

WASTE DISPOSAL

Sewage: Sewage Treatment System (Prim./Sec/Ter.): Primary cell flowing into lake system

Natural Water Body: No	Continuous Discharge (land or water): to lake system then Bake Lake.	
Seasonal Discharge: NA	Wetlands Treatment: Unknown	Trench: None

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

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

Comments: Sewage from the community is discharged into a ditch which flows into a low walled hollow or Lagoon. It was stated during the Inspection that a local contractor had been awarded a contract to expand the size and depth of the current lagoon.

Effluent from the lagoon runs in a continual flow down gradient through an obvious channel to a small lake. From this lake effluent travels again down gradient to a marshy area and via a culvert to a second lake. Samples were collected at the 1st culvert. From the second lake a lowland valley channels the effluent to a final lake (Finger Lake system) and to finally discharge into Baker Lake.

An obvious sheen was noted in the run-off from both lakes. It is suspected that the sheen is from Hydrocarbons leaching into the effluent stream from the Hazardous materials and waste oil storage adjacent to the Lagoon. Leaks and spills of waste oil and other unidentified products were noted on the ground and in the wetlands.

Solid Waste: Hazardous waste not properly stored. Obvious spills and leakage throughout site.

Owner/Operator: Hamlet of Baker Lake

Landfill: U – haz waste not contained	Burn & Landfill: U	Other: Barrels of unknown liquids noted leaking in area.
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Comments: The Municipal waste management area had construction materials and batteries in the burn areas. Insulation was found to have been recently burned on site.

In the hazardous waste management area batteries were noted both stacked outside and inside a sea-can. The batteries need to be properly crated and shipped of site. A large number of these batteries were broken open and on the ground. No liner was present.

Drums of waste oil and other unknown fluids remain on site. They are stored haphazardly and without any form of secondary containment. Many leaks and spills from these barrels were noted throughout the facility. Waste oil and other hydrocarbons are likely the cause of an oil sheen on the effluent steam running adjacent to the hazardous wastes area. It appears that hydrocarbons are being carried downstream by the effluent into the wetlands treatment area. The Municipality was required to have addressed this issue prior to the 2010 Inspection.

The Municipality must address the sorting, segregation and containment of hazardous wastes from mining and exploration camps taken in by the municipality. It is noted that the Municipality was recently issued a license, however further acceptance of wastes from outside the community is to be prohibited until such time as a plan to address the current state of the Hazardous wastes within the Waste Management Area is submitted. It is to be noted that private contractors within the Municipality who take such wastes from exploration and mining activities and who then transport this waste into the Municipal Waste Management area also place the Municipality at risk. The Municipality is ultimately responsible for the management and control of the facility and as such should more vigorously police the area.

FUEL STORAGE:

Owner/Operator: Government of Nunavut

Waste Oil Storage: Noted in waste management area

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

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

SURVEILLANCE NETWORK PROGRAM (SNP)

Samples Collected: 0		Owner /Operator: No sample results have been submitted	
Samples Collected: 3		INAC: Potable, Effluent discharge, Out-fall area.	
Signs Posted	SNP: None		Warning: Some signs were noted
Records & Reporting: No records of water usage, waste discharge, annual reports, manuals or sampling results have been submitted at the time of the inspection.			
Geotechnical Inspection: N/A			

Non-Compliance of Act or Licence:

The Hamlet of Baker Lake was recently issued a new Water License.

It was noted during the 2010 Inspection that planned work to up-grade the Sewage disposal facilities is scheduled to commence and that a contract for this work has been issued by the Government of Nunavut. As these facilities were only recently relicensed, there is a concern that any work completed without the approval Nunavut Water Board would be in contravention of the License. The Licensee is encouraged to provide copies of the plans and work description to the Board prior to undertaking the work.

It was also noted that the Government of Nunavut retains ownership and control of the pumping station and water treatment system within the community. The Government of Nunavut requires a water license for this activity and the continued use of water without a license is a contravention of the Act.

The applicant has also not filed, since 2005, any of the required annual reports. Without these reports it is impossible for the Inspector and the Nunavut water Board to have an understanding of what is occurring related to the use of water and the deposits of waste within the community.

None of the recommendations contained within the last Inspection report (2009) have been addressed by the Municipality. Hazardous wastes continue to leach into the ground around the waste management area, spills remain uncontained, no secondary containment is present within the facility and hydrocarbon contaminated soils and waste oil are found within the Non-hazardous waste management area. Such obvious disregard for authority and disrespect for the environment are of great concern to the Inspector.

As such, the Inspector recommends that formal enforcement action up to and including legal proceedings against both the Government of Nunavut and the Municipality of Baker Lake is warranted in these circumstances and are recommended.

A.Keim

Inspector’s Name

Sent by E-mail

Inspector’s Signature

