

MUNICIPAL WATER USE INSPECTION FORM

Date: July 7, 2011	Licensee Rep. (Name/Title): Paul Clow, Frank Ford Shaun Holmes
Licensee: City of Iqaluit	Licence No.: 3AM-IQA0712 (extended)

WATER SUPPLY

Source(s): Lake Geraldine	Quantity used: Unknown- est. 2,000,000 l per day
Owner:/Operator: City of Iqaluit	

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

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

Comments: During the Inspection of the Water Treatment Plant the Inspector noted the following:

- UV light Sensors are to scheduled to be calibrated
- Water sampling and daily testing records were found complete
- Chlorination treatment systems require service
- Gaseous Chlorine containment and clean up training for on site staff is out of date
- The recommendations contained within the Dam Safety Inspection conducted in 2010 have not been yet been fully implemented
- Chemical storage continues to be an issue with the Licensee, old, dated and crystallized chemicals have not yet been disposed of after three years of warnings

WASTE DISPOSAL

Sewage: Sewage Treatment System (Prim./Sec/Ter.): Solids Removal

Natural Water Body: No	Continuous Discharge (land or water): Yes	
Seasonal Discharge: Decant of lagoon as required	Wetlands Treatment: N	Trench: None

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: U	A&R Plan: U
Periods of Discharge: Cont.	Effluent Discharge Rate: Unknown	

Comments: During the Inspection of the Waste Water Treatment Facility the Inspector noted the following;

- The WWTP requires major maintenance that will require the plant to be off line a minimum of 7 days.
- The Plant was recently off line for a period of 14 days.. Discharge volumes and decanting samples collected following the discharge to the Emergency Lagoon are pending.
- Daily sampling results and logs were found on site and were up to date.
- Because of equipment wear the mechanical system is not functioning as designed. As a result the volume of sludge transferred to the solid waste management facility has increased to double the normal levels.
- A sludge waste management manual was not available on site for review.

Solid Waste: Municipal solid waste site **Owner/Operator:** City of Iqaluit

Landfill: Y	Burn & Landfill: N	Other:
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Comments: During the Inspection of the Solid Waste Management Facility the inspector noted the following;

- Sewage sludge in facility is not contained on a liner, water and run off is not contained around the sludge allowing the run-off to surrounding facility grounds. It is unclear exactly how long the sludge remains in compost before being used as fill materials in waste pile.
- Facility is nearing capacity
- Water diversion and control program has not yet been implemented on site. It is scheduled for the summer of 2011
- Run off from the waste management area is pumped to a retention pond prior to discharge to environment. Sampling results show some sampling parameters that exceed CCME.
- Hazardous materials are being properly segregated
- City has purchased a Freon recovery unit that is now in use at facility
- City has installed a florescent bulb crusher in waste management facility
- Waste metals continue to build up in the facility. Some metals are now stored off site.

FUEL STORAGE:

Owner/Operator: Government of Nunavut

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	

Waste Oil Storage: None noted during the inspection

SURVEILLANCE NETWORK PROGRAM (SNP)

Samples Collected	Owner /Operator: Samples collected by Licensee to be submitted with annual report	
3	INAC: Potable water source, Leachate, Effluent	
Signs Posted	SNP: None	Warning: None
Records & Reporting: Records of daily checks and sampling at Water Treatment and Waste Water Treatment Facilities were noted.		
Geotechnical Inspection: N/A		

Non-Compliance of Act or Licence:

The City of Iqaluit and Inspector identified a number of deficiencies and issues of Non compliance with the newly renewed License. As a result the City of Iqaluit has committed to the following;

- To provide the required safety training to all staff working within the water Treatment facility and specifically the training required to deal with a leak of chlorine gas.
- To provide proper safety equipment, spill containment and clean-up materials and other such resources as are required to workers working within the water treatment facility including SCBA units.
- To initiate a properly maintain a safety and compliance program with respect to hazards working within the water treatment facility.
- To provide Hazardous materials identification, handling and safe transportation/ storage training to all staff who working with hazardous materials including staff at the waste management facility.
- To implement the surveillance monitoring program as outlined in the license.
- To submit for review to the NWB and the Inspector a complete set of Operation and Maintenance (O&M) Manual as required by Schedule B Item 1 of the recently extended water license by August 30th 2011.
- To submit to the NWB and the Inspector the report on the options available to the Licensee to address the issue of collection, treatment and release West 40 Landfill Waste Water by August 30th 2011.
- To submit a Final Assessment of the Sludge Management Pilot Project to the NWB and the Inspector by August 30th, 2011.
- To work with the Inspector and the Nunavut Water Board to prepare for a supplementary Compliance Inspection scheduled for September of 2011.

A.Keim

Inspector's Name

Sent by E-mail (Original signed and on file)

Inspector's Signature

Cc:
Bernie MacIsaac- A/Manager Field Operations
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