



WATER USE INSPECTION REPORT

Date: Aug 4-5th, 2009	Licensee Rep. (Name/Title): Don LeBlanc (SAO), Nick Hummituq (Hamlet employee)
Licensee: Municipality of Gjoa Haven (Hamlet)	Licence No.: 3BM-GJO0409 (expired)

WATER SUPPLY

Source(s): Swan Lake	Quantity used: NI
Owner:/Operator: Hamlet	

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

Intake Facilities: U – repairs needed	Storage Structure: NI (not in service)	Treatment Systems: WTP not in service	Chemical Storage: A - Improved from last year
Flow Meas. Device: No	Conveyance Lines: NI (not in service)	Pumping Stations: NI (not in service)	Screen : NI

Comments: Water Intake Facility (WIF) is only treatment station; left unlocked. Water Treatment Plant (WTP) is currently not in operation due to operator error.

- Spill kits in place at WIF and WTP, but lack of training and contingency planning remains an issue
- Lack of adequate operator training and support
- Unmeasured water withdrawal occurs from Water Lake (near WTP) for various purposes –Nunavut Airport truck was observed extracting water at time of inspection.

Swan Lake is a popular recreational area; garbage and debris in and around Lake is a major issue: Licensee is to take measures which encourage better stewardship of the area and potable water protection, which is to include appropriate signage.

Other: Lack of essential replacement parts/inventory for water supply and treatment system. Example: glycol leak at WIF awaiting repairs.

WASTE DISPOSAL

Sewage: Sewage Treatment System (Prim./Sec/Ter.): Single cell lagoon with a small overflow cell

Natural Water Body: No	Continuous Discharge (land or water): yes (both)	
Seasonal Discharge: NA	Wetlands Treatment: No; effluent flow path is vegetated.	Trench: yes – created by effluent flow path

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

Discharge Quality: U	Decant Structure: U	Erosion: U
Discharge Meas. Device: NA	Dyke Inspection: NA	Seepages: yes -U
Dams, Dykes: NA	Freeboard: U	Spills: U
Construction: NA	O&M Plan: No -U	A&R Plan: No
Discharge: Continuous	Effluent Discharge Rate: not measured	

Comments: Lagoon is seeping continuously; decant area is overflowing due to seepage (and not via overflow culvert) and breached in several places. The ground surrounding lagoon is saturated in effluent, streaming out in multiple directions, with the main established flow path continuing past the metals dump and municipal dump, out to the marine environment.

- Lagoon has insufficient capacity; base of lagoon berm is saturated and discharges continuously to the environment. Serious potential for complete structural failure.
- Erosion issues at truck delivery point; chute needs replacement
- Former honey bag disposal area beside lagoon still requires clean up

Solid Waste:

Owner/Operator: Hamlet

Landfill: U	Burn & Landfill: yes	Other: Bulk Wastes/Metals Dump -U
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Comments: Area is a complete catastrophe and conditions have deteriorated much further from issues observed last year. There is a severe lack of waste management by the Hamlet. Lack of proper compaction and fill combined with lack of segregation has resulted in a very dangerous situation: the dump was on fire in multiple locations at time of inspection.

- Landfill fires are toxic, dangerous and can burn indefinitely once they start: experienced waste management professionals are required to bring the situation safely under control and leachate is to undergo proper treatment.
- Multiple pools of sludge-like liquid were observed; several small explosions occurred which were likely the result of aerosol containers or batteries in hot-spot/burning areas.

- Landfill capacity is an issue; debris and dumping extend well outside of dump boundaries and over the road inside the dump; navigation inside both dump areas is unsafe.
- No signage present or areas designated for segregation of wastes; no area designated for hazardous wastes or liquid waste products, resulting in mixed waste streams at both dump sites (e.g.: vehicle batteries, paint, propane tanks, construction debris, fuel cans, tires, aerosol containers, wood products, etc).

Bulk waste/Metals dump: mass of largely unsegregated and unmanaged wastes.

- Construction debris and wastes; possible asbestos-containing materials left in the open
- Debris and large items were falling into effluent flow path which runs along perimeter of dump site

Licensee is advised to take measures to bring the situation at the solid waste site back under control, and to implement measures that will encourage responsible disposal practices not only by Hamlet operators, but by private operators and contractors as well.

FUEL STORAGE:

Waste Oil Storage: Improperly constructed bermed area **Owner/Operator:** Hamlet
Indicate: **A** - Acceptable **U** - Unacceptable **NA** - Not Applicable **NI** - Not Inspected

Berms & Liners: A (Tank farm)	Water within Berms: A	Evidence of Leaks: U
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Comments: Currently a rough earthen bermed area, loosely lined with plastic, exists just outside dump entrance. This “bermed” area has become an unofficial dumping site for waste liquids and hydrocarbon products, contaminated soils and absorbent materials: multiple spills have occurred at this site as a result. This structure must be removed and area remediated immediately before more contaminants are released to the environment.

Licensee is in need of a properly constructed storage and/or disposal area for liquid and hazardous wastes and contaminated soils.

Other: Cahill Enterprises (located near airport) was observed to have a large quantity of fuel drums stored directly beside a stream.

Licensee is strongly advised to take measures that will encourage better fuel handling and disposal practices by business operations on Commissioner’s Lands.

Tank Farm and other fuel storage areas: **Owner/Operator:** GN (Contractor: Arctic Coop)
Indicate: **A** - Acceptable **U** - Unacceptable **NA** - Not Applicable **NI** - Not Inspected

Berms & Liners: A	Water within Berms: A	Evidence of Leaks: U
Drainage Pipes: NA	Pump Station & Catchments Berm: U –lack of spill kits	
Pipeline Condition: NI	Condition of Tanks: see comments	

Comments: Arctic Coop is responsible for the Hamlet fuel contract and manages the Tank farm area and refuelling station: no spill kits were observed on site; hoses were in place for pumping accumulated water over Tank farm berm to receiving environment.

- Tank #11 showed fuel staining on and below side portal: maintenance inspection is required by qualified professional.

It is highly recommended that the Owner ensures their contractor(s) tests for BTEX and Oil and Grease (HEM) in water collected within the tank farms next spring, prior to discharge to the environment. This is confirmatory sampling to ensure compliance.

Licensee is advised to take measures that will encourage better fuel handling and storage practices by business operations on Commissioner’s Lands.

SURVEILLANCE NETWORK PROGRAM (SNP)

Samples Collected		Owner /Operator: Potable (bacterial only)
3		INAC:. Potable water supply, effluent discharge point (after metals dump)
Signs Posted	SNP: No	Warning: No; one sign observed at entrance to dump
Records & Reporting: U		
Geotechnical Inspection: NA		

Non-Compliance of Act or Licence:

Licence is currently expired; licensee submitted an application in spring of 2009 with has been found insufficient by the NWB. Licensee is to provide necessary info as requested by the NWB to complete the application.

Licensee has not yet met the requirements set out in the previous (expired) licence and is legally obligated to meet those terms and conditions –many of which are directly related to issues noted during the inspection.

- Lack of signage, monitoring and reporting requirements
- Lack of operations and maintenance manuals, spill contingency plans and related training
- Unmonitored withdrawals from Water Lake; potable source lacks management by the Hamlet
- Overall lack of solid waste management

- Lack of properly constructed site for the handling, storage and disposal of hazardous and liquid waste products and contaminated soils; site currently used is allowing contaminants to be directly discharged to the environment.

M. Joy

Inspector's Name

Inspector's Signature