

# WATER USE INSPECTION REPORT

<b>Date:</b> Aug 1-2, 2009	Licensee Rep. (Name/Title): Chris Dickson (SAO)	
<b>Licensee:</b> Municipality of (Hamlet)	Taloyoak	Licence No.: 3BM-TAL0813 (applies to water use only; amendment is required); 1BR-TAL0712 (operation of landfarm)

### **WATER SUPPLY**

Source(s): Water Lake	Quantity used: NI
Owner:/Operator: Hamlet	
	NIA NICA P. LI NII NICI

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

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

**Comments:** Garbage and debris are an issue; proximity to community creates high risk for potential contamination. Northern Store is located above potable water source and activities occur in close proximity to water supply –i.e.: sealift containers and storage, fuel tank, sewage tank, etc.

- GN CGS Project to relocate water source to Long Lake and build new Water Treatment Plant has been deferred for a second year.
- WTP: chemical storage status is to be confirmed by Licensee.
- Lack of contingency planning, signage

Licensee is advised to look into prevention and contingency planning options due to risk potential to water supply, such as physical barrier controls or berms.

### **WASTE DISPOSAL**

**Sewage:** Sewage Treatment System: Two-stage natural lagoon and wetlands area

Natural Water Body: yes	Continuous Discharge (land or water): yes (both)	
Seasonal Discharge: n/a	Wetlands Treatment: heavily vegetated along flow paths	Trench: yes-along main flow path

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

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

**Comments:** Effluent flows into two interconnected ponds, then into a satuarated wetlands area at the second pond. It then flows toward the municipal dump and continues behind the dump and out to open water. Many geese and goslings were observed using the second pond.

- Honeybag/garbage pit beside sewage lagoon requires cleanup: various wastes, including diapers have been dumped here.
- Erosion issues at sewage truck delivery areas.
- Effluent flow path and wetland area is littered with a lot of garbage, debris and animal carcasses.
- ATV crossing occurs through effluent flow path behind municipal dump: erosion issues; no signage.

#### **Solid Waste:**

 Owner/Operator:
 Hamlet
 Note:
 Hamlet currently contract Lyall Construction to manage dump

 Landfill:
 U
 Burn & Landfill:
 Other:
 Metals Dump -U

**Comments:** Municipal dump is overflowing with construction and demolition debris; lack of signage and overall segregation. Overall lack of management at landfill and waste fuel areas; most large items have been pushed to perimeter of dump.

- Petroleum, hazardous and liquid waste products in various containers and barrels are dumped haphazardly; heavy hydrocarbon staining as well as discarded hydrocarbon-soaked absorbent materials. These items should be going into the designated waste fuel-product storage area (near landfarm).
- Lack of segregation and designated hazardous waste drop-off points
- Currently, metals waste is combined with waste in municipal dump
- Capacity issues: garbage not being contained by current fence structure; wastes extend outside dump fence boundaries: debris, barrels, abandoned skidoos, etc.
- Wetland area and effluent flow path littered with plastics and debris.

Metals Dump: old metals dump located across from Tank farm facility; area requires clean up.

Licensee is advised to implement measures that will encourage responsible operations and disposal practices by Hamlet operators and other landfill users. Waste storage and disposal activities are currently unlicensed.

### **FUEL STORAGE:**

**Waste Oil Storage:** Designated area; not being used effectively **Owner/Operator:** Hamlet Indicate: **A** - Acceptable **U** - Unacceptable **NA** - Not Applicable **NI** - Not Inspected

ı				í
	Berms & Liners: U –requires maintenance	Water within Berms: ∪	Evidence of Leaks: A	

**Comments:** Fenced bermed area (locked) with large volume of accumulated water inside; monitoring wells in place around perimeter. Landfarm area is empty.

- Area is not being maintained or utilized appropriately, e.g.: liquid waste containers are being dumped in landfill. Barrels and containers of waste products sitting outside bermed area as well.
- Signage in place is inadequate
- Contaminated soils storage area (fenced) is full of accumulated water.
- Lack of adequate operator training and support, and operations and maintenance manuals (i.e.: handling, storage, packaging for final disposal).
- Hamlet has issues with indiscriminate dumping.

Other: GN Dept of Env has a large quantity of fuel drums stored nearby (stacked on pallets); no secondary containment or recent monitoring activity apparent (based on condition).

Licensee is advised to take measures that will encourage better fuel/waste handling and disposal practices by business operator and contractors operating on Commissioner's Lands.

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

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

**Comments:** Lyall Construction is responsible for the Hamlet fuel contract and Tank farm; they are also the designated contractor for spill cleanups. Overall poor fuel management and handling practices observed, including lack of spill cleanup and reporting; direct discharging of contaminants to the environment.

- Water accumulated in Tank farm berm has recently been pumped directly down hill toward a pond.
- Sample results for water inside Tank farm berm tested as 9.6 mg/L Hydrocarbons (total extractable);
   sheen visible on water inside bermed area.
- Barrels of petroleum product within bermed area stored haphazardly.
- Outside Tank farm: used absorbent materials found inside spill kit containers, reeking of petroleum; barrels left upside-down on ground to drain.
- Near shop area: dark staining of substrate, smelling strongly of hydrocarbons, located near heavy equipment and trucks.

Refuelling station: Tanks (x2) are older, single-walled, placed on galvanized steel stand

Lack of appropriate secondary containment and drip containment under refuelling tank

# Fuel resupply line: located at Barge area

- Fuel stains on ground nearby
- Fuel leaking from red supply line (at cap) and into containment structure.
- Containment structure contains accumulated water with visible hydrocarbon sheen.

It is highly recommended that the Owner ensures their contractor 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.

Both Owner and Licensee are encouraged to review responsible fuel handling practices, spill prevention and contingency practices with their contractor.

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

# **SURVEILLANCE NETWORK PROGRAM (SNP)**

Samples Collected	Owner /Operator: No		
5	INAC:. Potable water supply, effluent discharge point (before ocean), Dump leachate (near entrance point), Pond below Tank farm, Water within Tank farm bermed area		
Signs Posted: Waste Fuel Storage area		SNP: No	Warning: No
Records & Reporting: U (Records at WTP not inspected)			

**Records & Reporting:** U (Records at WTP not inspected)

**Geotechnical Inspection: NA** 

**Non-Compliance of Act or Licence:** The Licensee is not yet operating under a valid Water Licence. The current licence only covers the new WTP (yet to be built). The current water source, sewage and waste disposal activities remain unlicensed. An amendment application must be submitted to include these activities.

- Lack of capacity at municipal dump: increased construction in the community combined with the number of existing dilapidated buildings will generate critical levels of debris/waste in the near future.
- Overall lack of solid waste management.
- Lack of operations and maintenance manuals; lack of training for appropriate hazmat handling and storage
- Lack of monitoring and related signage for SNP points: Hamlet was told funding for signage was included in deferred WTP project.

M. Joy	
Inspector's Name	Inspector's Signature