

WATER USE INSPECTION REPORT FORM

Date: August 5, 2011	Licensee Rep. (Name/Title): Ed Murphy SAO & Cyril Malla Hamlet staff; Meghan Lusty – Regional Engineer C&GS, Government of Nunavut
Licensee: Hamlet of Arviat	Licence No.: 3AM-ARV1014

WATER SUPPLY

Source(s): Wolf River Creek	Quantity used: Unknown –
Owner:/Operator: Government of Nunavut	Treatment systems operated by C&GS, Gov. Nu.

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

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

Comments:
The Government of Nunavut, Dept. of Community and Government Services owns, operates and staffs a Class 2 Water Treatment facility in the community. Staff members from the Government of Nunavut were available to provide access to the facility for inspection. The facility was found clean and well organized. Records on the Chlorination of the source water and exchange of filters within the facility were noted and found complete. On going maintenance to repair rips in the liner of Cell one of the reservoir were on-going during the Inspection. These repairs were expected to be done within the week so that filling of the reservoir could begin.

Water Samples were collected. Chlorination records found on site show that sampling protocols were modified after the last inspection to ensure that all trucks are tested.

As the Government of Nunavut retains the ownership of the pump house, intake and treatment facilities, and employs staff to provide water treatment services to the Municipality of Arviat, the Government of Nunavut, Department of Community and Government Services should apply for a Water License for this activity. This would be consistent with previous licensing precedents in communities such as Rankin Inlet and Resolute Bay. The ownership and operations of the facility were confirmed by staff on site contrary to the document submitted Dec 22, 2010 by Nuna Burnside on behalf of the Government of Nunavut and the Licensee in response to the Inspection carried out on September 2nd of 2010.

WASTE DISPOSAL

Sewage: Sewage Treatment System (Prim./Sec/Ter.): Single cell Lagoon

Natural Water Body: No	Continuous Discharge (land or water): seepages	
Seasonal Discharge: none	Wetlands Treatment: N	Trench: None

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

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

Comments:
Effluent discharge from Lagoon is continuous through the toe of the berm. Effluent then travels overland to the ocean. Samples were collected from ponded water outside but adjacent to the lagoon. Decanting of the Lagoon is not required (according to Hamlet staff) as there is never enough effluent in the lagoon to decant.

An obvious flow of effluent was noted flowing through the ditch behind the lagoon. The effluent flows into a pond immediately adjacent to the lagoon and down gradient. The flow also travels in a ditch behind the old lagoon, past the Municipal Waste Management area and into ponded water adjacent to the Municipal Waste Management Area.

This location (ARV-4) is the designated sampling site for effluent quality and where samples are collected by the Inspector. The relocation of this sampling site to somewhere farther away from the lagoon to enhance the results of sampling is not recommended by the inspector as it is not an accurate reflection of the effluent quality exiting the Waste Water Facility (Lagoon).

The Old lagoon remains on site. An Abandonment and Restoration Plan was submitted but a review by INAC Waters Division has found the plan to be incomplete and additional information was requested in the submission to the Nunavut Water Board.

Solid Waste:

Owner/Operator: Hamlet of Arviat

Landfill: A- evidence of segregation	Burn & Landfill: U	Other: Waste Metals (bulk)
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Comments: During the Inspection of the Municipal Waste Management Area the following was noted;

- Works to contain and control water within and the facility have not been undertaken by the licensee
- Water Management is required to address runoff and leaching of contact water outside the management area
- Cover materials are not applied in sufficient volume to cover burned materials within the facility.

Bulky (Metals) Waste management Area:

- Waste material is not segregated
- Batteries and other hazardous wastes found within the facility
- Contaminated soils remain piled at the back of the facility without secondary containment or a liner to prevent migration of hydrocarbons 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: Not Inspected

SURVEILLANCE NETWORK PROGRAM (SNP)

Samples Collected: 0		Owner /Operator: Samples from 2010 were submitted in annual report. No sampling has been undertaken this year by the licensee.
Samples Collected: 3		INAC: Potable (Reservoir), Effluent discharge, Dump Leachate
Signs Posted	SNP: None	Warning: Some signage was present
Records & Reporting: A number of plans were submitted by a consultant for the licensee.		
Geotechnical Inspection: A geotechnical inspection report on the sewage lagoon was not submitted to the Nunavut Water Board		

Non-Compliance of Act or Licence:

The Nunavut Water Board issued the Hamlet of Arviat a Class A license August 23rd 2010.

The Municipality was required to address those deficiencies identified in the 2010 Inspection and submit a Plan for compliance with the 2010 Annual Report. This was submitted.

So far in 2011 the Inspector has noted the licensee has failed to implement the required monitoring Program, take steps to address water management and containment within the Waste Management facility and failed to take action in the Hydrocarbon Impacted soils area to prevent the deposit of deleterious substances into Water.

The Licensee will be required to take steps to address these deficiencies prior to the period of the next Inspection.

A.Keim

Inspector’s Name

Sent by E-mail

Inspector’s Signature