



MUNICIPAL WATER USE INSPECTION FORM

Date: July 17, 2013	Licensee Rep. (Name/Title): Gord Dinney, Acting SAO and Walter Jacque (CG&S) Shah Alam, Regional Engineer and Peter Evaluk- Municipal Technician.	
Licensee: Hamlet of Gjoa Haven		Licence No.: 3BM-0409- Expired

Comments: Upon arrival in the community a meeting was set up with the acting SAO Mr. Dinney. Mr. Dinney advised that his Foreman, Mr. Jacob Keniak would be made available to conduct the inspection however this did not happen because Hamlet staff members were required to take part in the sampling training being conducted by EXP in the community at the same time. The Municipality was able to provide a vehicle and Mr. Peter Evaluk a GN-Community Government and Services (GN-CGS) representative attended the inspection on behalf of the Municipalities behalf.. Walter Jacque was also available to provide details on the water treatment plant and the pipeline.

This inspection was completed to determine the state of compliance with the Compliance Plan submitted by the Government of Nunavut’s Department of Community Government and Services. Currently the Municipality has an expired License. The GN-CGS, in the Compliance Plan stated that the renewal process has been started. It was later confirmed by the Nunavut Water Board that documents in support of the renewal Application and the on-going construction of the new sewage lagoon in the community were given to one of the water Board’s technicians but had not yet been recorded or sent to stakeholders for comment.

WATER SUPPLY

Source(s): Swan Lake	Quantity used: Not available at the time of inspection.
Owner:/Operator: Hamlet of Gjoa Haven	Treatment plant staffed by GN staff

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

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

Comments: During the Inspection of the Water Intake and Pumping Station the Inspector noted the following;

- Hamlet staff were not available to take part in the Inspection (taking sampling training with EXP)
- The GN-CGS retains an employee who lives and works in Gjoa Haven and provides the water treatment services for the community, Mr. Walter Jacque. Mr. Jacque took part in the Inspection and explained the recirculation system between the Lake and pump house and how water is continually traveling between the lake and pump house to keep the lines free of ice. This was the first time this was explained. Initially it was thought that a system of heat traced lines (pyrotenics) kept the line above freezing, not the recirculation and use of water. It is unclear how the GN is keeping track of water used in this manner as it has not installed a meter on the recirculation system.
- The Inspector found small housekeeping issues in the plant building including batteries that were to have been removed last year following the last inspection. However, the plant was found to be well maintained and in good condition overall.
- Mr Jacque also pointed out that improvements and modifications to the pumping system had been completed this past year. Mr. Jacque explained that in order to achieve compliance with the Fisheries Act and our legislation the GN-CGS had recently installed a new de-chlorination process to remove the free chlorine from the treated water. This work was completed earlier this winter and used when the direct discharge of water from the pipeline was on-going in the community. A review of the Nunavut Water Board’s FTP site did not locate any notifications of a change or modification to the process or operations of the building. It is unclear if one was submitted or approved by the Nunavut Water Board. (It is unclear if the total water usage for the Municipality includes this re-



circulated water or not)

- When questioned regarding why this new process had been installed, it came to light that this past winter between February and March of 2012 the pipeline between Swan Lake and the Treatment facility nearly froze up again and the water (which was suppose to have been re-circulated back to the lake) had to be run with a direct discharge outside the plant for that period to prevent freezing and the loss of the water line.
- It was not determined if this discharged water was reported in the total consumption (use) for the Municipality in the annual report.
- Sampling (chlorination monitoring) and treatment records were found in order and up to date in the plant during the period of Inspection.
- Sampling (chlorination monitoring) and treatment records for the trucks were not available at the time of the inspection however it was confirmed by Mr. Evaluk that these are being done and monitored by the GN on a monthly basis.

WASTE DISPOSAL

Sewage: Sewage Treatment System

(Prim./Sec/Ter.): Primary (Lagoon)

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

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

Discharge Quality: U	Decant Structure: None	Erosion: U
Discharge Meas. Device: U	Dyke Inspection: NI	Seepages: U
Dams, Dykes: U -	Freeboard: U	Spills: NI
Construction: None	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 Lagoon(s) the Inspector noted the following;

- The Waste Water Lagoon in the community is under capacity and remains full throughout the year. A second cell has been constructed under the overflow pipe to catch the overflow and channel it into a long ditch that runs down gradient behind the Solid Waste Management Area (SWMA). Run off from the SWMA mixes with the effluent and continues down to the ocean. This is as was identified in previous years and remains unchanged.
- It is noted that construction of a much larger lagoon has begun in the community and was on-going during the period of the Inspection. The Regional Engineer and the Inspector attended the site to see the size and scope of the project.
- During the site visit the Regional Engineer confirmed that the GN-CGS had started construction on the new Lagoon. When questioned about the submission of drawings and the requisite approvals being granted by the NWB prior to construction of new facilities under the authority of the water license, it was clear this had not been done.
- The Nunavut Water Board staff did confirm, following the Inspection, that plans for the new lagoon had been submitted to the NWB one week earlier but that these reports and plans had not been sent out for review by stakeholders or regulators. However work continues without the requisite approval of the Board.
- The grounds around the cells of the existing lagoon are saturated in effluent.
- The Inspector has made note of these issues many times over the last 5 years.
- Lack of Signage/ Warnings also continues to be an issue that the GN-CGS committed to addressing in their Compliance Plans by August 31st of 2013.
- Operations and Maintenance Manuals for the existing Lagoon system have not yet been provided the Board as required to facilitate the renewal application process for the expired Water License as originally identified by the NWB in 2009 to Dillon Consulting and the GN-CGS.
- Sampling has recently been undertaken by the Licensee and training on the proper protocols to be



contravention of the License for failure to provide and obtain approval of an Abandonment and Restoration Plan, as required.

- For the construction of a new lagoon and both the use of water and the deposit of waste without the authority of a license the Inspector finds that the Government of Nunavut has contravened the Nunavut Water and Nunavut Surface Rights Tribunal Act.
- With respect to the Compliance Plan for the Community of Gjoa Haven, submitted to the Inspector and the Nunavut Water Board in response to an Inspectors Direction issued to the Government of Nunavut's Department of Community Government and Services, the Inspector has identified the following issues of Non-conformity with the Plan;
 - o The Government of Nunavut and the Licensee have failed to supply the Nunavut Water Board with the outstanding documents required to process the application for renewal. The Compliance plan indicates the process is underway however no information has been sent to the Nunavut Water Board following the receipt of the April 2010 application package that was subsequently rejected by the NWB.
 - o B-1. The Government of Nunavut committed to providing a report prepared by their consultants following the community visit that was to be held in Gjoa Haven prior to the end of February 2013. This report was to have been submitted to the NWB prior to March 31st 2013. The report has not been submitted.
 - o B-2. The Government of Nunavut committed to providing an Action Plan including QA/QC protocols to the Nunavut Water Board by June 1st, 2013. This report was to have been based on a report prepared by their consultants. As of July 17th, 2013 the day of the Inspection this Plan had not been received by the Board.
 - o B-9. The Government of Nunavut failed to fulfill the commitment to providing a report to the Nunavut Water Board on the status of all outstanding and available reports and plans prior to July 1st 2013.
 - o D-5. The Government of Nunavut has not developed an Abandonment and Restoration Plan for the current (old) Lagoon.
 - o D-8. The Government of Nunavut committed to providing a report by June 1st 2013 identifying the location of each discharge point under the monitoring Program with specific geo-reference locations and a description of the final discharge point for the Municipality to the Nunavut Water Board. This report has not been submitted.
 - o F-5. The Government of Nunavut committed to providing to the NWB the required QA/QC protocols by June 1st, 2013. This has not been completed.
 - o H-2. The Government of Nunavut committed to providing the Municipality a completed Monitoring program by June 1st 2013. The Municipality confirms as of July 17th 2013 that this has not been provided.

The Inspector notes that the contractor (EXP) hired by the Government of Nunavut to address this and the other four communities deficiencies was present in the community on the day of the Inspection, July 17, 2013. Additionally, that the signage has been ordered and that plans to install proper SNP station markers is on-going within the Municipality. The Municipality is encouraged to continue to work and make progress on the issues identified during this and previous inspections.

Further, the Government of Nunavut has not to date fulfilled the majority of their commitments made in the submitted compliance plans and as such are in violation of the Inspectors Direction originally served on Minister Kusugak on the 1st of May 2012.



Failure to comply with an Inspectors Direction constitutes a offence under subsection 90 (1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and entails, upon summary conviction, a fine of \$100,000 or to imprisonment for a term of one year, or both.

Further pursuant to subsection 90 (4) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, each day on which the Inspector's Direction is not complied with shall be considered a separate offence.

A.Keim

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

Inspector's Name

Inspector's Signature

Cc:

Phyllis Beaulieu – Manager Licensing- Nunavut Water Board

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