

ANNUAL REPORT FOR THE HAMLET OF RESOLUTE BAY

YEAR BEING REPORTED: 2010

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water Licence # 3BM-RUT1012 issued to the Hamlet of Resolute Bay.

- i) - iii) tabular summaries of all data generated under the "Monitoring Program"; monthly and annual quantities in cubic metres of freshwater obtained from all sources; monthly and annual quantities in cubic metres of each and all wastes discharged;

Attached are quantities of water used as reported in our On Tap Water Delivery System and the estimated discharge of sewage waste based on quantities used.

Month Reported	Quantity of Water Obtained from all sources (litres)	Quantity of Sewage Waste Discharged (Estimated)
January 2010	6,729,480	Same
February 2010	6,078,240	Same
March 2010	6,729,480	Same
April 2010	6,512,400	Same
May 2010	6,729,480	Same
June 2010	6,512,400	Same
July 2010	6,729,480	Same
August 2010	6,729,480	Same
September 2010	6,512,400	Same
October 2010	6,729,480	Same
November 2010	6,512,400	Same
December 2010	6,729,480	Same
ANNUAL TOTAL	79,234,200 =79,234 m ³	Same

Note: The average volume is considered as the total of the actual consumption and the loss and equal for each month.

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There is no meter existing at the discharge pipe. The volume has been estimated roughly equal to the same monthly extracted volume considering bleeding and unaccounted leaks following exp's report 2010. GN- CGS has engaged a contractor to maintain the facility and to monitor the meter reading installed in the pump station to measure the exact volume extracted from the Char Lake water source. Once the facility is optimized, these issues will be automatically resolved.

- iv. a summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures and facilities;

Resolute Bay has an Utilidor system built in 1970's. Since then and until now; maintenance and rehabilitation works were carried out on an as needed basis. Expansion to the system was done during the period of 2005 to 2007 on the southwest end of town. The

Consultant for this project was A.D. Williams Engineering Inc.

The activities that were completed in 2010 are: (1) The cleaning and sterilization of all access vaults within the Hamlet; (2) The installation of 28 backflow preventers on all existing bleeds; (3) Leak detection on the entire watermain system; and (4) CCTV inspection of the sanitary system.

A contractor, Kudlik Construction Ltd, was retained in 2010 to conduct the following:

1. Investigate the status of the Utilidor water and sewer services
2. Provide and install back flow preventers on all access vault bleeds
3. Clean out the access vaults of debris and hazardous substance.

Kudlik subcontracted to Veolia Environmental Services to conduct Closed Circuit Television (CCTV) within the sewers and to Echologics to conduct leak detection Program on the water main. Ecologics identified ten (10) probable water leaks which were varied in size, quantity and confidence levels as per the vibrations reasoning through the pipe, and the instruments used to record them. Out of ten potential Leaks identified, three leaks were found and repaired. There might be the continuing Potential for other leaks that would be substantial within the water system. It is assumed that there is still considerable unaccountable water usage. exp's (Trow's) report in February 2010, assumed that 1/3 of the total water usage was a result of water Bleeds. GN-CGS has retained exp Services Inc. to work on this system replacement Program. In order to keep the system running, cleaning and sterilization of all access Vaults (AVs) within the Hamlet and installation of 28 backflow preventers on all existing Bleeds were completed in 2010.

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- v. a list of unauthorized discharges and summary of follow-up action taken;
The Wastewater is still being discharged into the open sea without any treatment. During Low tide, this discharges into the surface water and during high tide, discharges into the deep water. The total population of this community is 250. The average discharge is roughly 217,000 litres per day. In this case the dilution factor is high.
- vi. a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;
No restoration program has been scheduled yet. This facility is old and already exceeded its life expectancy. The system is uneconomical to operate because O&M expenses are very high. GN has proposed for a complete replacement of the existing system either with a completely new utilidor system or with a trucking system.
- vii. a summary of any studies requested by the Board that relate to waste disposal, water use or reclamation, and a brief description of any future studies planned;
Sewage effluent is being monitored starting in this year 2011. exp Services Inc is conducting studies and is engaged in planning and developing a replacement program of the existing utility. The sewage effluent test results for 2011 are not available right now.
- viii. any other details on water use or waste disposal requested by the Board by November 1st of the year being reported; and
INAC Inspector requests chlorination record, 2010 annual report, sampling results and water usage records in his inspection report dated July 17, 2011.
- ix. updates or revisions to the approved Operation and Maintenance Plans.
O&M manuals were not updated. The facility is still being operated following the existing manuals expecting the new facility will be replaced by 2015. And a new O&M manual will be developed following the design of the new facility and implemented soon after commissioning the facility.

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

The Regulatory body (INAC) advised to develop a Spill Contingency Plan, Quality Assurance and Quality Control Plan (QA/QC Plan), O&M Plan for the Water Supply Facility, O&M Plan for the Utilidor system, and O&M Plan for the Sewage Disposal

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Facility.

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

A Plan for Compliance is being developed. GN-CGS is planning to monitor the meter reading and record the actual volume of water extracted from Char Lake. Once the new facility is operational, the O&M manual for the new facility will consist of the as-built Drawings, Operational Guidelines, QA/QC Plan, Spill Contingency Plan and Monitoring Program.
