

**ANNUAL REPORT
FOR THE HAMLET OF RESOLUTE UTILIDOR SYSTEM, 2015**

YEAR BEING REPORTED: 2015

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 2015	49,012,161	Same
February 2015	44,362,424	Same
March 2015	45,267,467	Same
April 2015	33,651,998	Same
May 2015	35,187,138	Same
June 2015	40,515,137	Same
July 2015	32,087,939	Same
August 2015	26,896,263	Same
September 2015	30,947,941	Same
October 2015	28,263,885	Same
November 2015	27,489,295	Same
December 2015	30,580,858	Same
ANNUAL TOTAL	424,262,506	424,262,506

Note: The truck delivery amount was 4,210,285 litres. It means $(424,262,506 + 4,210,285) = 428,472,791$ litres total water extraction volume in 2015. 424,262,506 litres is considered equal to the total sewage discharge volume annually because there is no meter in the sewage discharge pipe.

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- 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;

This licence covers Char lake pump station, Signal hill water treatment plant, 500m intake service line from pump station to water treatment plant, water distribution system, sewer collection and disposal system.

A major replacement work is in progress on the Utilidor water supply line and sewer connection and disposal system. Almost 50% was complete last summer in the vicinity of the lower part of the town. The total upgrade will be complete this summer.

- v. a list of unauthorized discharges and summary of follow-up action taken;

There is no wastewater treatment plant in this system. Sewage is diluted significantly prior to open discharge into the sea all the time everyday throughout the year. The water line is broken at the upper part of the town. Water is draining through the leak and flooding the lower part of the town. The total extraction volume of water from the Char Lake was recorded and it is too 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;

50% Utilidor system was replaced in last summer. The remaining part will be done this summer. The Community is expecting a brand new buried Utilidor system at the end of 2016. The old pipes extracted from underground are stored at the designated area within the community metal dump.

- 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;

A hydrology study of the Char Lake was conducted. Sewage effluent was sampled from the end of sewer pipe and tested. Since the construction to replace the utilidor pipes in the lower area of the town was under way last summer, sewage effluent samples were not representative. Dilution was too high. Once the entire replacement of the utilidor pipes is complete at the end of 2016, several sewage effluent samples from the end of the sewer line will be taken and tested.

Following the lab results, an average E-coli value will be determined as per the requirement of the Water licence.

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- viii. any other details on water use or waste disposal requested by the Board by November 1st of the year being reported; and

Wastewater treatment is the major concern to NWB and INAC. Unauthorized discharge of untreated sewage is questionable. The construction of the WWTP is delayed.

- ix. Updates or revisions to the approved Operation and Maintenance Plans.

The O&M manuals for the total Utilidor system will be revised and updated once the entire construction is complete.

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

CGS is working with NWB for water licence compliancy. CGS has hired the contractor ATCO for maintaining extended sampling and testing program in order to meet the requirements of the monitoring program established in the Licence. CGS is planning to maintain the report card in 2016 to effectively manage and operate the entire system.

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

CGS is the licensee of the Utilidor system. CGS is working closely with the Water Licence Compliance Group (WLCG) to deal with inspector's concerns of the water licence compliancy. CGS has planned to redirect the entire truck sewage into the WWTP once it is built. Currently CGS is conducting a study to redirect the winter truck sewage into the utilidor sewer line in order to stop over flowing of the Airport sewage lagoon.

Lab Test Results for Chemical analysis of water and wastewater in 2015 are submitted in the separate document.



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