

## ANNUAL REPORT

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**YEAR BEING REPORTED: 2010**

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water Licence **3BM-KUG0914** issued to **Kugluktuk**.

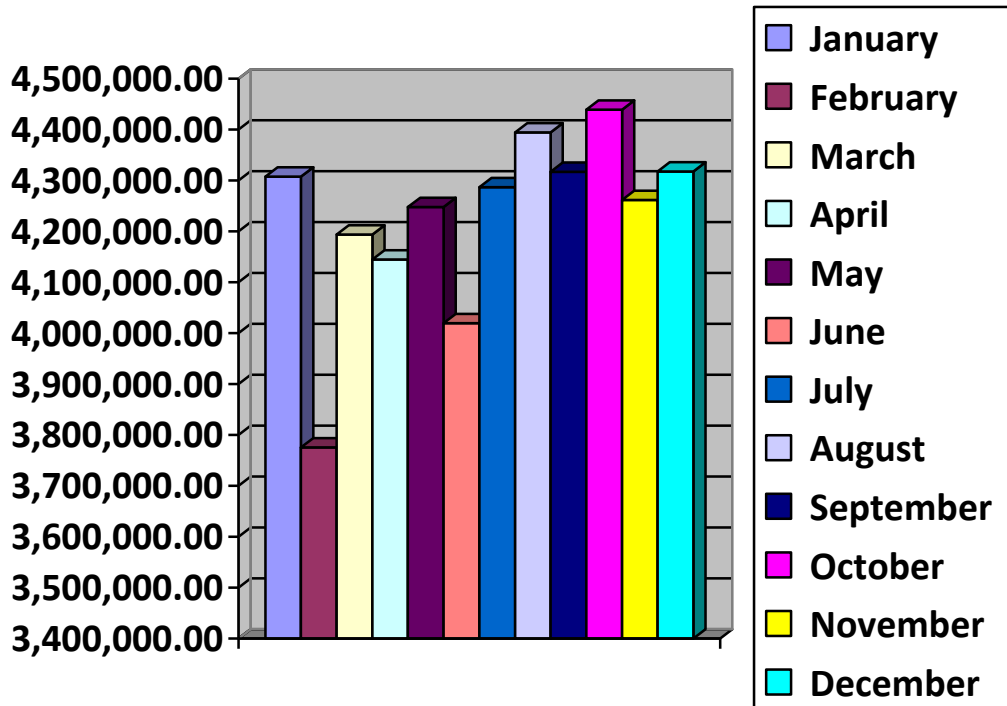
- i) - iii) tabular summaries of all data generated under the “Monitoring Program”; monthly and annual quantities in cubic metres of freshwater obtained from all sources; monthly and annual quantities in cubic metres of each and all wastes discharged;

Attached are quantities of water used as reported in our Fluid Manager 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
January	4,307,312.60	Same
February	3,775,627.50	Same
March	4,193,926.20	Same
April	4,144,509.50	Same
May	4,247,610.80	Same
June	4,019,580.50	Same
July	4,286,948.10	Same
August	4,394,113.30	Same
September	4,317,225.50	Same
October	4,438,990.90	Same
November	4,261,721.00	Same
December	4,317,423.50	Same
<b>ANNUAL TOTAL</b>	<b>50,705,289.40</b>	Same

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Water intake and distribution 2010 (January – December)

X-axis: Month of the year

Y-axis: Quantity of monthly water intake (histogram)

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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;**
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**Water Supply:**

- Construction contract awarded June 21, 2010 for new Intake Pumphouse and intake structure, expected completion March 2012.
- Plan for new Water Treatment Plant phase-II under study

**Sewage Lagoon:**

- New lagoon in operation since Nov 2008 and old lagoon in decommissioning process. Sludge-Soil and water sampling and monitoring to old lagoon continued.

**Waste Disposal Facility:**

- Repair of fence and gate for Solid waste site completed. Improvement to metal dump including reduction in volume by breaking and packing larger items carried.

- v. **a list of unauthorized discharges and summary of follow-up action taken;**
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- No unauthorized water intake or discharge to the source during this period.

- vi. **a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;**
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- Abandonment of existing sewage facility will be expecting in next year.
- Partial diversion to wetland for decanted sewage water and securing run off mixing from old lagoon.

- 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;**
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The new lagoon starts showing some bobbles above the water level resulting from entrap air underside the HDPE liner which pushing up the liner above the water level in some location of the lagoon. The Board and AANDC inspector has requested for effective initiative to find the cause of bubbles and to solve the issue which concerns the capacity of the lagoon and quality of effluent.

- The GN CGS has contacted the consultant and contractor to find the issue, a subject matter expert (SME) has been employed to dissolve the issue, expecting in next year to come to site and implement the plan.

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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**

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- The licensee will keep the Board updated with final design and drawings of new IPH, intake structure and treatment plant as requested in the amendment Licence once ready and available for submission from the consultant.

The new IPH construction expecting starts in summer next year and materials barged in this year.

ix.

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**updates or revisions to the approved Operation and Maintenance Plans**

- The O&M manual of sewage and solid waste facilities remains active since the last revision of 2007. The O&M manual for water intake and treatment remains active from previously approved version; new O&M manual for new IPH will be available sometime after 2012 once construction complete and starts operation.
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**ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:**

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- The licensee is monitoring the berm temperatures from the thermistors and noted remains below freezing point as designed and planned. This monitoring ensuring the berm in stable structural condition and providing containment to sewage water for the whole year until a decanting in place. Annual decanting carries during the period Aug-Sep or earlier when weather and wetland persists to be continued. A decanting pump structure kept standby on site during the summer and fall.

**FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:**

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- The Licensee is continuing the annual sampling of sewage effluent water and runoff during the months July-Sep (when available), with at least one sample in a month. Collected samples are testing at Taiga lab, Yellowknife for contamination parameters to discharge effluent water into ocean or water body in compliance to environmental regulation, CCME guidelines and Federal Fisheries Acts.