

**ANNUAL REPORT
FOR THE HAMLET OF IGLOOLIK, 2018**

YEAR BEING REPORTED: 2018

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water Licence # 3BM –IGL1520 issued to the Hamlet of Igloolik.

- 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 | 4,864,981.40 | Same |
| February | 3,917,995.90 | Same |
| March | 4,679,869.70 | Same |
| April | 4,490,441.30 | Same |
| May | 4,781,640.10 | Same |
| June | 4,297,788.70 | Same |
| July | 4,469,678.60 | Same |
| August | 4,642,763.80 | Same |
| September | 4,665,800.50 | Same |
| October | 3,217,435.60 | Same |
| November | 3,321,713.80 | Same |
| December | 3,698,142.40 | Same |
| ANNUAL TOTAL | 51,048,251.80 | 51,048,251.80 |

Note: The water consumption volume is considered equal to the discharge volume

ANNUAL REPORT FOR THE HAMLET OF IGLOOLIK, 2018

because there is no meter at the end of the discharge pipe.

The construction of the Water Reservoir was completed in 2017. The practical scenario was different in 2017.

The water storage reservoir was expanded during the summer 2017. During construction, the reservoir was made empty. Once the construction was completed, it was filled up. The estimated quantity of water required was about 126,440,000 litres. Also during construction, three Trucks were filled daily directly from the South lake for 30 days and extracted roughly 10,440,000 litres.

Therefore total extracted volume in 2017 from South Lake was estimated about 136,880,000 Litres.

After that the hamlet operation was back to normal. Therefore the water extraction volume in 2018 was recorded 51,048,251.80 litres.

- 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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Yes, Major modifications and Major maintenance works were carried on mainly water supply system and Wastewater Treatment facilities.

Water supply System: The Intake pipe line from the South Lake to the Water storage Reservoir was entirely replaced.

The Existing Water storage Reservoir was expanded to meet the community's future demand.

A brand new Sewage lagoon was built. Also the existing three sewage lagoon cells have been converted and rehabilitated into two.

- v. A list of unauthorized discharges and summary of follow-up action taken;
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Until the rehabilitation of the three existing lagoon cells into two was completed, all the cells of the existing sewage lagoon functioned as exfiltration process. The sewage leaked through the berms and the effluent then partially was treated in the wetland prior to reaching the receiving body. This happened prior to start construction works.

ANNUAL REPORT FOR THE HAMLET OF IGLOOLIK, 2018

- vi. A summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;

Yes, abandonment and restoration works were done as follows:

Water supply system:

The Existing water Truck fill station was abandoned and the new one was commissioned. It is expected to dismantle this facility and remove from the site including the intake pipe line this summer.

The new Intake pipe line was commissioned and the existing pipe line was dismantled and removed from the site. These old pipes were stock-piled next to the water storage reservoir. These pipes might be used by the hamlet as and where required basis mostly for road crossing culvert etc.

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- 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;

The water supply system and the wastewater treatment facility are better shape in the Community. The existing Waste Management facility is the concern for segregation of hazardous materials, Storage , burning etc. A consultant is working on the Feasibility study on the wastes sites. Following this study, design works for the new facility is anticipated to start soon.

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

The improvement of water supply system and wastewater treatment facility were completed in 2018.

The planning is in progress for better management of waste in the Community.

Hamlet is still waiting to install a flow meter and a Fish screen with the intake pipe which is used to extract water from the South Lake in every summer.

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

Yes, the O&M manuals of the Sewage Lagoon and the Water supply system have been upgraded and modified as required to operate these facilities. Currently these facilities were commissioned and tested to see how best they are functioning.

These manuals will be sent to NWB in a USB in 2 to 3 months.

ANNUAL REPORT FOR THE HAMLET OF IGLOOLIK, 2018

x. ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

Hamlet started extended sampling and testing program already. They have segregated wastes and stock piled batteries in the sea can for future disposal to the South.

They are using accredited Lab in Ottawa for Chemical analysis of Water, Wastewater and Leachate.

The new O&M manuals will be made available in next 2 to 3 months. They submit annual report on time.

Hamlet has started planning for renewal their Water licence which will be expired on March 30,2020.

xi. FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

Hamlet is following CIRNAC inspector's advice to operate the water licensed facilities. Fish Lake is considered as the Hamlet's secondary water source and its water quality is monitored at the same time with the South Lake

The new waste management project is being accelerated to address the deficiency of the existing waste site.

Hamlet has an active water licence at present.

The Test Lab Results for 2018 are submitted in a separate document.