

File No.: **3BM-GJO1828**

September 30, 2019

Ed Devereaux, SAO Hamlet of Gjoa Haven P.O. Box 200, Gjoa Haven, NU X0B 1J0

Municipal Planning Engineer, GN, C&GS

Bag 200 Cambridge Bay, NU, X0B 0C0

Shah Alam, P. Eng

Email: saogjoa@qiniq.com Email: salam@gov.nu.ca

RE: NWB Technical Review of 2018 Annual Report for the Hamlet of Gjoa Haven; Water Licence No. 3BM-GJO1828

Dear Mr. Devereaux and Mr. Alam:

The Nunavut Water Board (NWB or Board) has completed its technical review of the 2018 Annual Report (Annual Report) for Licence 3BM-GJO1828 (Licence), that was submitted on February 19, 2019, and provided to the Kitikmeot email distribution list for information. No comments have been received to date.

The technical review of the Annual Report found that the information generally addresses the requirements of the Licence. The NWB notes that the Licence was renewed last year on December 19, 2018, and the Board commends the Licensee for its efforts made to maintain compliance and address the Inspectors recommendations.

The NWB notes the following comments for the continued improvement of future reporting:

Waste Disposal

1. Part B, Item 1(d) states that the annual report shall contain:

the monthly and annual quantities in cubic metres of each and all waste discharged;

The Annual Report did not provide any information on the quantities of solid waste deposited at the Solid Waste Facilities. The NWB recommends that the Licensee at a minimum, provide a estimate of the volume of solid waste disposed of at the at the Solid Waste Facilities.

Monitoring

2. Part H, Item 2, states that the:

The Licensee shall maintain	Monitoring	Program	Stations at	the fo	ollowing l	locations:
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Monitoring Program Station Number	Description	Frequency	Status
GJO-1	Raw Water Supply at Swan Lake	Monthly	Active (Volume)
GJO-2	Effluent Final Discharge Point from Solid Waste Disposal Facility	Monthly (May to August)	Active (Quality)
GJO-3	Raw Sewage at truck offload point	Monthly	Active (Volume)
GJO-4	Effluent Final Discharge Point from Sewage Disposal Facility	Monthly (May to August)	Active (Quality)
GJO-5	Solid Waste leachate retention inside berm	Sample collected when decanting requires	Active (Quality)

The Annual Report did not provide monthly sampling results (May to August) for GJO-2 or GJO-4 water. Although it is understood that the ground and water remains frozen for some of this time, no explanation was provided for why this data was not included. It is recommended that the Licensee attempt multiple sampling events each year, to capture freshet as well as the summer season.

The NWB would also like the Licensee to clarify the functional location of Monitoring Station GJO-2, weather it captures "Effluent Final Discharge Point from Solid Waste Disposal Facility" (as per Licence condition PART H, Item 2), or weather it captures "Sewage Discharge on wetland location" (as indicated in the *Monitoring Stations of sewage and solid waste sample collection* Table of the 2018 Annual Report). In the 2019 Annual report the NWB recommends the Licensee submit a map clearly identifying the function and location of all monitoring sites and associated facilities.

3. Part H, Item 3, states that the:

The Licensee shall measure and record, in cubic metres, the daily, monthly and annual quantities of water extracted for all purposes at Monitoring Program Station GJO-1.

The NWB recommends that the Licensee consider investigating means for installing a metre to measure water uptake directly from Swan Lake (the source), as per PART H, Item 3, of the Licence; as opposed to using truck-fill measurements as indicated in the Annual Report. This will more accurately capture water use and importantly, include the quantity of water used

for recirculation throughout the lines to prevent freezing.

4. Part H, Item 11, of the Licence states:

The Licensee shall annually review the QA/QC Plan and modify it as necessary. Revised QA/QC Plans shall be submitted to the Board with a current approval letter from an accredited lab and shall meet the standards set out in Part H, Item 9, and Part H, Item 10, of the Licence.

To date, the NWB has not received a current approval letter from an accredited lab.

Thank you for taking the time to consider these comments for future reporting. Please provide, this information in all future Annual Reports, and if for some reason data or information is not available, include a discussion indicating:

- What information is missing;
- Why it was not provided; and
- Steps being made to provide it in the future.

The NWB recommends that the Licensee continue to address issues identified by the Inspector,¹ or other parties, and provide a brief summary of work done to address any concerns identified during the reporting year.

Should you have any questions, please feel free to contact me, Derek Donald, at (867) 360-6338 (extension 32), at your earliest convenience.

Sincerely,

Derek Donald

Nunavut Water Board, Technical Advisor

Cc: Distribution List – Kitikmeot

¹ Crown-Indigenous Relations and Northern Affairs (CIRNA) Inspection Report, July 13 and 17, 2018.