



Box 32, Wekweètì, NT X0E 1W0
Tel: 867-713-2500 Fax: 867-713-2502

#1-4905 48th Street, Yellowknife, NT X1A 3S3
Tel: 867-765-4592 Fax: 867-765-4593
www.wlwb.ca

March 3, 2020

File: W2014L3-0002

Mr. Larry Baran
SAO, Community Government of Behchokq
P.O. Box 68
Behchokq, NT
X0E 0Y0

sent by email

Dzë nezj Mr. Baran,

Reminder: Upcoming Annual Report and SNP Sampling

This is a reminder that the Community of Behchokq's 2019 Annual Report, as required under Part B, Condition 1 of Water Licence (W2014L3-0002), is due on March 31, 2020.

The Annual Report Template for the Community of Behchokq is attached to this letter for your convenience. The Annual Report Template includes tables to allow for easier data entry of the 2019 Surveillance Network Program results.

We would also like to set up a teleconference meeting for early April to discuss the community's Surveillance Network Program for 2020 and set dates for upcoming sampling training. Please contact us to set up a meeting. A friendly reminder that sampling bottles need to be ordered two weeks in advance of each sampling date.

We are happy to answer any questions regarding your reporting requirements or the template provided; please contact Jessica Pacunayen at (867) 765-4591 or by email jpacunayen@wlwb.ca

Yours sincerely,

A handwritten signature in black ink that reads "Anneli Jokela".

Anneli Jokela
Regulatory Manager

A handwritten signature in black ink that reads "Jessica Pacunayen".

Jessica Pacunayen
Regulatory Specialist

Attached: Annual Report Template

Copy to: Heather Beck, GNWT-ENR Water Resource Officer; Alison Brown, GNWT-MACA Regional Superintendent for the North Slave Region

Municipal Water Licence Annual Report

Community Government of Behchokq

Licence #: W2014L3-0002

Reporting year: _____

Expires: November 25, 2029

= please fill out

The Licensee shall file an Annual Report with the Board not later than March 31st of the year following the calendar year reported which shall contain the following information:

1. Water Usage (Schedule 1, Condition a) (Licensed Water Volume Withdrawal: 300,000 m³)

Total volume withdrawn for reporting year (m³):

Table 1(a): Monthly & Annual withdrawal volumes obtained from the raw water intake at the Edzo Water Supply Facility (SNP 2014-E1)

| Month | Volume from main source (m ³) | Volume from any other source (m ³) | TOTAL Volume (m ³) |
|--|---|--|--------------------------------|
| January | | | |
| February | | | |
| March | | | |
| April | | | |
| May | | | |
| June | | | |
| July | | | |
| August | | | |
| September | | | |
| October | | | |
| November | | | |
| December | | | |
| | | | |
| TOTALS | | | |
| | | | |
| % Increase/decrease from previous year | | | |

Table 1(b): Monthly & Annual withdrawal volumes obtained from the raw water intake at the Rae Water Supply Facility (SNP 2014-R1)

| Month | Volume from main source (m ³) | Volume from any other source (m ³) | TOTAL Volume (m ³) |
|--|---|--|--------------------------------|
| January | | | |
| February | | | |
| March | | | |
| April | | | |
| May | | | |
| June | | | |
| July | | | |
| August | | | |
| September | | | |
| October | | | |
| November | | | |
| December | | | |
| | | | |
| TOTALS | | | |
| | | | |
| % Increase/decrease from previous year | | | |

Reasons for increase/decrease:

Reasons for exceeding licensed withdrawal volumes (if applicable):

General information (e.g. information regarding any modifications to the water withdrawal procedure or facilities should be included here. If necessary, please attach any relevant reports to the end of this document):

2. Solid Waste Disposal

Approximate total yearly volume of solid waste deposited: _____ m³

Table 2: Monthly solid waste disposal volumes

| Month | Volume of solid waste deposited (m ³) |
|--|---|
| January | |
| February | |
| March | |
| April | |
| May | |
| June | |
| July | |
| August | |
| September | |
| October | |
| November | |
| December | |
| | |
| TOTALS | |
| | |
| % Increase/decrease from previous year | |

GNWT – MACA has provided a standard formula for estimating the amount of solid waste deposited into a Solid Waste Facility in the absence of a metered Garbage Truck. The following can be used: Volume per person per day X number of days X population

e.g. 0.015 m³ X 30 days X 860 people = 387 m³ of domestic trash deposited into the Solid Waste Facility in a 30 day month

Reasons for increase/decrease (e.g. an industrial project close to Behchoko or a large influx of people into town):

General information (e.g. information regarding any agreements with outside organizations to be a waste receiving facility should be outlined here along with an estimate of the amount and type of waste to be received):

3. Sewage Deposited to Primary Sewage Cells (Schedule 1, Condition b)

Table 3(a): Monthly sewage waste volumes deposited at Edzo Sewage Disposal Facility

| Month | Volume of sewage waste deposited (m ³) | | | |
|--|--|----------|---------------------------------------|-----------|
| | Pumper Truck | Utilidor | Sludge from the Water Supply Facility | TOTAL |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| TOTALS | | | | |
| Is this an estimated volume? | | | | |
| | | | YES | NO |
| % Increase/decrease from previous year | | | | |

To calculate monthly sewage waste deposited to the Primary Lagoon, please provide the above information if metered information is available. If metered information is not available, please fill in the table using the corresponding TOTAL water volumes from Table 1. This provides estimation only and equals water in/sewage out.

Reasons for increase/decrease (e.g. an industrial project close to Behchoko or a large influx of people into town):

Has any sludge been removed from during this reporting year? If so, what volume of sludge was removed? What testing was completed on the sludge and where it was disposed of? Please provide documentation for testing and GNWT Water Licence Inspector approval of placement. (Schedule 1, Condition f)

Was there any decanting this reporting year? Please provide dates. What was the decant duration and the approximate volume decanted? As this is a Surveillance Network Program (SNP) site, the resulting testing is to be presented as part of the tabular SNP data to be provided as per the Water Licence.

Table 3(b): Monthly sewage waste volumes deposited at Rae Sewage Disposal Facility

| Month | Volume of sewage waste deposited (m ³) | | | |
|--|--|----------|---------------------------------------|-----------|
| | Pumper Truck | Utilidor | Sludge from the Water Supply Facility | TOTAL |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| TOTALS | | | | |
| Is this an estimated volume? | | | | |
| | | | YES | NO |
| % Increase/decrease from previous year | | | | |

To calculate monthly sewage waste deposited to the Primary Lagoon, please provide the above information if metered information is available. If metered information is not available, please fill in the table using the corresponding TOTAL water volumes from Table 1. This provides estimation only and equals water in/sewage out.

Reasons for increase/decrease (e.g. an industrial project close to Behchoko or a large influx of people into town):

Has any sludge been removed from during this reporting year? If so, what volume of sludge was removed? What testing was completed on the sludge and where it was disposed of? Please provide documentation for testing and GNWT Water Licence Inspector approval of placement. *(Schedule 1, Condition f)*

Was there any decanting this reporting year? Please provide dates. What was the decant duration and the approximate volume decanted? As this is a Surveillance Network Program (SNP) site, the resulting testing is to be presented as part of the tabular SNP data to be provided as per the Water Licence.

4. Problems, modifications or repairs completed during the year on water supply and waste disposal facilities *(Schedule 1, Condition c)*

Include any work done to infrastructure for all facilities completed during the year in this section. This includes any changes, repairs and Modifications (as per Part F of the Licence). If any problems occurred during the year, please note them here. If there are no changes, make note of that. If required, please attach any as-built drawings or reports as appendices to this report.

5. Surveillance Network Program Data *(Schedule 1, Condition d)*

Surveillance Network Program (SNP) information is to be submitted in a tabular format and shall indicate date of testing, parameters tested for and any other information requested by the GNWT Water Licence Inspector or the WLWB. [Laboratory results should be summarized. A results table has been provided on the next page for your convenience. Note: it is possible to copy/paste from Excel into Word provided the same number of cells are selected in each table].

Table 5(a): SNP Lab Results Summary – Edzo Sewage Disposal Facility

| | Edzo Sewage Disposal Facility | | | | | | | | | | | | | | |
|-------------------------|--------------------------------------|------|-----|------|-----|---------|------|-----|------|-----|---------|------|-----|------|-----|
| | 2014-E2 | | | | | 2014-E3 | | | | | 2014-E4 | | | | |
| | June | July | Aug | Sept | Oct | June | July | Aug | Sept | Oct | June | July | Aug | Sept | Oct |
| Date Sampled | | | | | | | | | | | | | | | |
| pH | | | | | | | | | | | | | | | |
| Suspended Solids | | | | | | | | | | | | | | | |
| Ammonia-Nitrogen | | | | | | | | | | | | | | | |
| BOD | | | | | | | | | | | | | | | |
| CBOD | | | | | | | | | | | | | | | |
| Total Phosphate | | | | | | | | | | | | | | | |
| Faecal Coliforms | | | | | | | | | | | | | | | |

Table 5(b): SNP Lab Results Summary – Edzo Sewage Disposal Facility

| | 2014-E2 | 2014-E3 | 2014-E4 |
|-----------------------|-------------------------|-------------------------|-------------------------|
| | 1x between June and Oct | 1x between June and Oct | 1x between June and Oct |
| | Date Sampled: | Date Sampled: | Date Sampled: |
| Conductivity | | | |
| Total Phenols | | | |
| Oil and Grease | | | |
| Cadmium | | | |
| Calcium | | | |
| Chromium | | | |
| Copper | | | |
| Iron | | | |
| Lead | | | |
| Magnesium | | | |
| Mercury | | | |
| Nickel | | | |
| Potassium | | | |
| Sodium | | | |
| Sulphate | | | |
| Zinc | | | |

Table 5(c): SNP Lab Results Summary – Rae Sewage Disposal Facility

Date Decant starts: _____

(use one sheet for each decant that occurs during the year)

| Parameters | Two weeks prior to decant | | | One week prior to decant | | Sampling during decant | 1 week following end of decant flow | |
|------------------|---------------------------|---------|---------|--------------------------|---------|---------------------------------|-------------------------------------|---------|
| | 2014-R2 ¹ | 2014-R3 | 2014-R4 | 2014-R3 | 2014-R4 | | 2014-R3 | 2014-R4 |
| pH | | | | | | | | |
| Suspended Solids | | | | | | | | |
| Ammonia-Nitrogen | | | | | | | | |
| BOD | | | | | | | | |
| CBOD | | | | | | | | |
| Total Phosphate | | | | | | | | |
| Faecal Coliforms | | | | | | | | |



Sampling during decant²

| Parameters | 1 st day of decant | | 4 th day of decant | | 7 th day of decant | | Continue as long as necessary | |
|------------------|-------------------------------|---------|-------------------------------|---------|-------------------------------|---------|-------------------------------|---------|
| | 2014-R3 | 2014-R4 | 2014-R3 | 2014-R4 | 2014-R3 | 2014-R4 | 2014-R3 | 2014-R4 |
| pH | | | | | | | | |
| Suspended Solids | | | | | | | | |
| Ammonia-Nitrogen | | | | | | | | |
| BOD | | | | | | | | |
| CBOD | | | | | | | | |
| Total Phosphate | | | | | | | | |
| Faecal Coliforms | | | | | | | | |

¹ Must be at least ten days before decant

² Starting on first day of decant and continuing every three days as long as necessary (until the flow stops)

Table 5(d): SNP Lab Results Summary – Rae Sewage Disposal Facility

| | 2014-R3 | 2014-R4 |
|-----------------------|-------------------------|-------------------------|
| | 1x between June and Oct | 1x between June and Oct |
| | Date Sampled: | Date Sampled: |
| Conductivity | | |
| Total Phenols | | |
| Oil and Grease | | |
| Cadmium | | |
| Calcium | | |
| Chromium | | |
| Copper | | |
| Iron | | |
| Lead | | |
| Magnesium | | |
| Mercury | | |
| Nickel | | |
| Potassium | | |
| Sodium | | |
| Sulphate | | |
| Zinc | | |

Table 5(e): SNP Lab Results Summary – Solid Waste Disposal Facilities

| | Old Waste Disposal Facility | | New Solid Waste Disposal Facility | | | |
|------------------|-----------------------------------|-----|-----------------------------------|-----|-----------------------------------|-----|
| | 2014-R5 | | 2014-R6 | | 2014-R7 | |
| | (2x per year between June & Sept) | | (2x per year between June & Sept) | | (2x per year between June & Sept) | |
| Date Sampled | #1: | #2: | #1: | #2: | #1: | #2: |
| pH | | | | | | |
| Suspended Solids | | | | | | |
| Conductivity | | | | | | |
| Oil and Grease | | | | | | |
| BTEX | | | | | | |
| TPH | | | | | | |
| Total Phenols | | | | | | |
| Total Phosphate | | | | | | |
| Faecal Coliforms | | | | | | |
| Cadmium | | | | | | |
| Calcium | | | | | | |
| Chromium | | | | | | |
| Copper | | | | | | |
| Iron | | | | | | |
| Lead | | | | | | |
| Magnesium | | | | | | |
| Mercury | | | | | | |
| Nickel | | | | | | |
| Potassium | | | | | | |
| Sodium | | | | | | |
| Sulphate | | | | | | |
| Zinc | | | | | | |

Table 5(e): SNP Lab Results Summary – Solid Waste Disposal Facilities (cont'd)

| | New Solid Waste Disposal Facility | | | | | |
|------------------|-----------------------------------|-----|-----------------------------------|-----|-----------------------------------|-----|
| | 2014-R8 | | 2014-R9 | | 2014-R10 | |
| | (2x per year between June & Sept) | | (2x per year between June & Sept) | | (2x per year between June & Sept) | |
| Date Sampled | #1: | #2: | #1: | #2: | #1: | #2: |
| pH | | | | | | |
| Suspended Solids | | | | | | |
| Conductivity | | | | | | |
| Oil and Grease | | | | | | |
| BTEX | | | | | | |
| TPH | | | | | | |
| Total Phenols | | | | | | |
| Total Phosphate | | | | | | |
| Faecal Coliforms | | | | | | |
| Cadmium | | | | | | |
| Calcium | | | | | | |
| Chromium | | | | | | |
| Copper | | | | | | |
| Iron | | | | | | |
| Lead | | | | | | |
| Magnesium | | | | | | |
| Mercury | | | | | | |
| Nickel | | | | | | |
| Potassium | | | | | | |
| Sodium | | | | | | |
| Sulphate | | | | | | |
| Zinc | | | | | | |

6. Unauthorized discharges (Schedule 1, Condition e)

List any unauthorized discharges here including any spills, how and when they were reported, and how they were cleaned up. Please attach copies of spill reports, correspondence with the GNWT Water Licence Inspector or any other pertinent documentation as appendices to this report.

7. Spill Training and Communications Exercises (Schedule 1, Condition g)

List any spill training and communications exercises that have been carried out including courses on spills prevention, waste management, SNP sampling, etc.

8. Closure and Reclamation (Schedule 1, Condition h)

Include any closure and reclamation details here including any work anticipated to be completed during the next year. If required, please attach any as-built drawings or reports as appendices to this report.

9. Studies requested by the Board (Schedule 1, Condition i)

If the Board has requested that specific studies be completed, include details of the plan in this section with a summary of the outcome. Include any attachments with the submission of the Annual Report.

10. Updates or revisions to approved plans (Schedule 1, Condition k)

Details on any changes to approved plans such as the O&M Plan, the Closure and Reclamation Plan, the Spill Contingency Plan, or any other that is specific to this Municipal Water Licence. Please attach documents as appendices to this report.

11. Other Information (Schedule 1, Condition l)

- Any other details on water use, operating procedures, Modifications, maintenance work, or other topics, requested by the Board on or before November 1 of the year being reported.
- Include any other information here that may be valuable to the WLWB or to GNWT.
- Please include any non-compliance items identified in the GNWT Water Licence Inspection report and detail how the Community Government of Behchoko is addressing them.
- If there are any contaminated soil piles currently in use (land farming), please list the details of containment, remediation and progress in this section.
- Please identify any on-going compliance issues for the Community Government of Behchoko. This can facilitate discussions to resolve the issues.

An action plan template for each facility is provided below for the Community's convenience. Please feel free to add more rows as necessary.

| Compliance issues/Future Studies/Upgrades/Work related to | Plan | Timeline |
|---|------|----------|
| <i>Edzo Water Supply Facility</i> | | |
| <i>Rae Water Supply Facility</i> | | |
| <i>Solid Waste Facility</i> | | |
| <i>Edzo Sewage Disposal Facility</i> | | |
| <i>Rae Sewage Disposal Facility</i> | | |
| <i>Other (please specify):</i> | | |
| | | |

