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February 22, 2021

File: W2014L3-0002

Graeme Drew
SAO, Community Government of Behchokq
P.O. Box 68
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sent by email

Dzë nezł Graeme,

Reminder: Upcoming Annual Report and SNP Sampling

This is a reminder that the Community of Behchokq's 2020 Annual Report, as required by Part B, condition 1 of Water Licence (W2014L3-0002), is due on March 31, 2021.

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 2020 Surveillance Network Program results. Please let us know by March 15, 2021 if you anticipate not being able to submit the Report on time.

We would also like to set up a teleconference meeting for early April to discuss the community's Surveillance Network Program for 2021 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.

Masi,

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: Treeva Richardson, CGB Assistant SAO; Heather Beck and David-Scott McQuinn, GNWT-ENR Water Resource Officers; Alison Brown, GNWT-MACA Regional Superintendent for the North Slave Region; Anneli Jokela and Jessica Pacunayen, WLWB Staff

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Total volume withdrawn for reporting year (m³):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 Behchokq 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 Behchokq 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 Behchokq 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					EQC for E3	2014-E3					2014-E4				
	June	July	Aug	Sept	Oct		June	July	Aug	Sept	Oct	June	July	Aug	Sept	Oct
Date Sampled																
pH						6-9										
Suspended Solids (mg/L)						35										
Ammonia-Nitrogen (mg/L)																
BOD ₅ (mg/L)						30										
CBOD (mg/L)																
Total Phosphate																
Faecal Coliforms (CFU/100 mL)						1x10 ³										

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:	EQC for E3	Date Sampled:	Date Sampled:
Conductivity (µS/cm)				
Total Phenols (mg/L)				
Oil and Grease (mg/L)		5		
Cadmium (µg/L)				
Calcium (mg/L)				
Chromium (µg/L)				
Copper (µg/L)				
Iron (µg/L)				
Lead (µg/L)				
Magnesium (µg/L)				
Mercury (µg/L)				
Nickel (µg/L)				
Potassium (mg/L)				
Sodium (mg/L)				
Sulphate (mg/L)				
Zinc (µg/L)				

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	EQC for R3	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	6-9								
Suspended Solids (mg/L)	120								
Ammonia-Nitrogen (mg/L)									
BOD ₅ (mg/L)	80								
CBOD (mg/L)									
Total Phosphate (mg/L)									
Faecal Coliforms (CFU/100mL)	2x10 ⁴								

Sampling during decant²

Parameters	EQC for R3	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	6-9								
Suspended Solids (mg/L)	120								
Ammonia-Nitrogen (mg/L)									
BOD ₅ (mg/L)	80								
CBOD (mg/L)									
Total Phosphate (mg/L)									
Faecal Coliforms (CFU/100mL)	2x10 ⁴								

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
	EQC for R3	Date Sampled:	Date Sampled:
Conductivity (µS/cm)			
Total Phenols (mg/L)			
Oil and Grease (mg/L)	5		
Cadmium (µg/L)			
Calcium (mg/L)			
Chromium (µg/L)			
Copper (µg/L)			
Iron (µg/L)			
Lead (µg/L)			
Magnesium (µg/L)			
Mercury (µg/L)			
Nickel (µg/L)			
Potassium (mg/L)			
Sodium (mg/L)			
Sulphate (mg/L)			
Zinc (µg/L)			

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 (mg/L)						
Conductivity (µS/cm)						
Oil and Grease (mg/L)						
BTEX (mg/L)						
TPH (mg/L)						
Total Phenols (mg/L)						
Total Phosphate (mg/L)						
Faecal Coliforms (CFU/100mL)						
Cadmium (µg/L)						
Calcium (mg/L)						
Chromium (µg/L)						
Copper (µg/L)						
Iron (µg/L)						
Lead (µg/L)						
Magnesium (µg/L)						
Total Mercury (µg/L)						
Nickel (µg/L)						
Potassium (mg/L)						
Sodium (mg/L)						
Sulphate (mg/L)						
Zinc (µg/L)						

	Old Waste Disposal Facility		New Solid Waste Disposal Facility			
	2014-R5		2014-R6		2014-R7	
	#1:	#2:	#1:	#2:	#1:	#2:
Benzene (mg/L)						
Ethylbenzene (mg/L)						
Toluene (mg/L)						
Xylenes (mg/L)						
Purgeable Hydrocarbons (mg/L)						
Extractable Hydrocarbons (mg/L)						
F2: C10-C16 (mg/L)						
F3: C16-C34 (mg/L)						
F4: C34-C50 (mg/L)						

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

	Old Waste Disposal Facility		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 (mg/L)						
Conductivity (µS/cm)						
Oil and Grease (mg/L)						
BTEX (mg/L)						
TPH (mg/L)						
Total Phenols (mg/L)						
Total Phosphate (mg/L)						
Faecal Coliforms (CFU/100mL)						
Cadmium (µg/L)						
Calcium (mg/L)						
Chromium (µg/L)						
Copper (µg/L)						
Iron (µg/L)						
Lead (µg/L)						
Magnesium (µg/L)						
Total Mercury (µg/L)						
Nickel (µg/L)						
Potassium (mg/L)						
Sodium (mg/L)						
Sulphate (mg/L)						
Zinc (µg/L)						

	Old Waste Disposal Facility		New Solid Waste Disposal Facility			
	2014-R5		2014-R6		2014-R7	
	#1:	#2:	#1:	#2:	#1:	#2:
Benzene (mg/L)						
Ethylbenzene (mg/L)						
Toluene (mg/L)						
Xylenes (mg/L)						
Purgeable Hydrocarbons (mg/L)						
Extractable Hydrocarbons (mg/L)						
F2: C10-C16 (mg/L)						
F3: C16-C34 (mg/L)						
F4: C34-C50 (mg/L)						

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 Behchokq 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 Behchokq. 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>		

