

## REVIEW COMMENT TABLE

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### S18L3-003 - 2019 Annual Water Licence Report - Town of Norman Wells (SLWB)

**File(s):** [S18L3-003](#)

**Proponent:** Town of Norman Wells

**Reviewer Comments Due By:** Sep 10, 2020

**Proponent Responses Due By:** Sep 17, 2020

**Documents:** [S18L3-003 - 2019 Annual Report - Town of Norman Wells - Jul 30 20.pdf](#) 249.27 KB  
[S18L3-003 - 2019 Annual Report - Appendix A - Spill Report - Jun 15 20.pdf](#) 417.26 KB  
[S18L3-003 - 2019 Annual Report - Appendix B - SNP Site Map - Jun 15 20.pdf](#) 301.29 KB  
[S18L3-003 - 2019 Annual Report - Appendix C - 2019 Taiga Reports - Jun 15 20.pdf](#) 8 MB  
[S18L3-003 - 2019 Annual Report - Appendix D - Biosolids Management Study - Jun 15 20.pdf](#) 1.5 MB

**Item For Review Distributed On** Aug 12 at 17:43 [Distribution List](#)

#### Item Description

Town of Norman Wells submitted their 2019 Annual Report on July 30, 2020. This Report is required by Water Licence S18L3-003, Part B Condition 21 and Schedule 1. Although formal approval of this Report is not required under the Licence, the Board must be satisfied that the Licensee has met the requirements of the Licence. Therefore reviewers are invited to submit comments and recommendations using the online review system (ORS) by the review comment deadline specified below. If reviewers seek clarification on the submission, they are encouraged to correspond directly with the Licensee prior to submitting comments and recommendations.

#### General Reviewer Information

All documents that have been uploaded to this review are also available on our Public Registry. If you have any questions or comments about the ORS or this review, please contact Board staff indicated below.

Aswathy Mary Varghese: 867-598-2413 ext.223; ash.varghese@slwb.com

#### Contact Information

Aswathy Varghese 8675982413

#### Comment Summary

Environment and Climate Change Canada: Yee Ting Choy				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
5	General File	<b>Comment</b>  ECCC Cover Letter <b>Recommendation</b>		
1	Appendix D - Biosolids Management Study - Table 1.3, Cell #1 and Cell #2: Sludge Characterization Data	<b>Comment</b> It is not clear whether results presented represent wet weight or dry weight measurements. <b>Recommendation</b> ECCC recommends that the Proponent clarify if the results presented represent wet weight or dry weight measurements.	<b>Oct 13:</b> The town will investigate whether dry or wet weight was used in this section.	Response is acceptable. Please clarify whether the weight measurements are wet or dry and revise the report accordingly.
2	Appendix D - Biosolids Management Study - Section 2.4 - Human Resources	<b>Comment</b> This section does not identify the total population and only describes the indigenous population of Norman Wells. This does not capture the human resource capacity and total population (809 in 2018) that will rely on the system. <b>Recommendation</b> ECCC recommends that the Proponent revise Section 2.4 to reflect total population as relevant to wastewater management and sludge production.	<b>Oct 13:</b> The town will update this section of the biosolids management study with the total population of the Town of Norman Wells.	The response is acceptable.
3	Appendix D - Biosolids	<b>Comment</b> Step #3 of Geotube operation is dewatering; in this phase, excess water drains	<b>Oct 13:</b> No response at this time.	The information requested by ECCC may be

	Management Study - Section 2.6.1 - Geotubes; Section 2.6 - Biosolids Processing Options	by gravity from the Geotube container. The report states, "this filtrate will be re-directed to the long-term storage cell for further treatment" (p. 18). Given the sludge quality presented in Table 3.1, it is not clear to ECCC what treatment the filtrate will need. <b>Recommendation</b> ECCC recommends that the Proponent clarify if the storage cell will be an existing lagoon cell, or if the Proponent will construct a new cell. The Proponent should also identify the treatment for filtrate.		provided and the Biosolids management Study must be updated accordingly.
4	Appendix D - Biosolids Management Study - Section 6.4 - Recommended Scope of Work	<b>Comment</b> ECCC commends progress on sludge management, and supports the suggestion of further analysis. The Proponent can also improve the scope of work by further development. For example, how will geotubes be disposed of? There may also be considerations around pumping of sludge such that the pumping does not compromise lagoon clay liners. <b>Recommendation</b> ECCC recommends that the Proponent identify next steps for sludge management, including a timeline.	<b>Oct 13:</b> No response at this time.	The information requested by ECCC must be updated before the town plans for the next desludging.

**GNWT - ENR - EAM (Environmental Assessment and Monitoring): Central Email GNWT**

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
3	General File	<b>Comment</b>  ENR Letter with Comments and Recommendations <b>Recommendation</b>		
1	Topic: SNP Monitoring Stations - Sewage Disposal Facility Discharges	<b>Comment</b> Norman Wells' natural lake sewage lagoon has a large volume and capacity. As such, decanting is not required to occur every year, and as specified in the 2019 Annual Report did not occur in 2019. Nevertheless, one sampling event was conducted in the fall for the S07L3-002-(1) compliance point, and results submitted in the current Annual Report, as per Part B Item 4 of the Water Licence. The Surveillance Network Program (SNP) includes two other SNP stations as well, S07L3-002-(2) and S07L3-002-(3). The purpose of the two stations is to determine the effectiveness of wetland treatment before final discharge to the Mackenzie River. The sampling frequency for the two stations is monthly during period of flow, where flow is understood to be the flow from the Sewage Disposal Facilities to the environment. Although no decant was performed in 2019, samples were collected monthly for the two stations and submitted for May, June, July & August 2019. While the results may be informative, they are not required under the Water Licence during years when no decant is occurring. The Board may decide to modify the sampling frequency section of the Water Licence to further clarify the sampling regime at the discussed locations. As such, should no monitoring be required during 'no decant' years, administrative updates to the SNP may include 'during period years of decant flow only', or updated as deemed appropriate by the Board. <b>Recommendation</b> 1) While the compliance point S07L3-002-(1) is required to be monitored yearly in the fall even during years of 'no decant', ENR suggests that monitoring of SNP S07L3-002-(2) and S07L3-002-(3) may not be required during years when no decant is performed. ENR recommends this be addressed by the Board in order to clarify and confirm reporting requirements for the discussed SNP stations.	<b>Oct 13:</b> We will wait for the Sahtu Land and Water Board's clarification of this section of the water license.	Comment and response acceptable. SLWB will consider the amendment of water licence to modify the SNP sampling requirements at another time.

2	Topic: Annual Reporting Requirements – Reporting Template Revision	<p><b>Comment</b> ENR notes that while important information was provided as part of the Annual Report, the information provided may not exactly align with the components required, or the order in which they are enumerated in the Water Licence; furthermore, new 'Reporting Requirements' as described under Part A Item 2, which are required to be reported yearly beginning March 31 2019, were not included in the Town's 2019 Annual Report.</p> <p><b>Recommendation</b> 1) ENR recommends that the Annual Report template used by the Town be updated to include all reporting requirements required in the new Water Licence, and in the same order they are presented in the Water Licence. Additionally, the use of letters a), b), c), d), etc. to align with Part B Item 1, and Part A Item 2 reporting requirements would provide more clarity when being referenced.</p>	<b>Oct 13:</b> This report was prepared using the Sahtu Land and Water Board's updated template.	The Annual Report Template has no issues.
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Environmental Protection Operations Directorate  
Prairie & Northern Region  
5019 52<sup>nd</sup> Street, 4<sup>th</sup> Floor  
P.O. Box 2310  
Yellowknife, NT X1A 2P7

ECCC File: 5200 000 011/003  
SLWB File: S18L3-003



September 8, 2020

via online review system

Aswathy Mary Varghese  
Regulatory Specialist  
Sahtu Land and Water Board  
Box 1  
Fort Good Hope, NT X0E 0H0

Dear Aswathy Varghese:

**RE: S18L3-003 – Town of Norman Wells – 2019 Annual Water Licence Report**

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Sahtu Land and Water Board (SLWB) regarding the above mentioned 2019 Annual Water Licence Report. You will find our comments, attached.

If you need more information, please contact Yee Ting Choy at (236) 427-6395 or [YeeTing.Choy@Canada.ca](mailto:YeeTing.Choy@Canada.ca).

Sincerely,

*[original signed by]*

Yee Ting Choy  
Environmental Assessment Officer

Attachment(s): S18L3-003 - Town of Norman Wells – 2019 Annual Water Licence Report -  
ECCC Comments - Excel Table

cc: Jody Small, Acting Head, Environmental Assessment North (NT and NU)





September 10, 2020

Ashwathy Varghese  
Regulatory Specialist  
Sahtu Land and Water Board  
Box 1, Fort Good Hope  
Northwest Territories  
X0E 0H0

Dear Ms. Varghese,

**Re:**

**Town of Norman Wells  
Water Licence – S18L3-003  
2019 Annual Water Licence Report  
Request for Review and Comments**

The Department of Environment and Natural Resources (ENR), Government of the Northwest Territories has reviewed the report at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Species at Risk (NWT) Act*, the *Waters Act* and the *Wildlife Act* and provides the following comments and recommendations for the consideration of the Board.

**Topic 1: SNP Monitoring Stations - Sewage Disposal Facility Discharges**

Norman Wells' natural lake sewage lagoon has a large volume and capacity. As such, decanting is not required to occur every year, and as specified in the 2019 Annual Report did not occur in 2019. Nevertheless, one sampling event was conducted in the fall for the S07L3-002-(1) compliance point, and results submitted in the current Annual Report, as per Part B Item 4 of the Water Licence.

The Surveillance Network Program (SNP) includes two other SNP stations as well, S07L3-002-(2) and S07L3-002-(3). The purpose of the two stations is to determine the effectiveness of wetland treatment before final discharge to the Mackenzie River. The sampling frequency for the two stations is monthly *during period of flow*, where flow is understood to be the flow from the Sewage Disposal Facilities to the environment.

Although no decant was performed in 2019, samples were collected monthly for the two stations and submitted for May, June, July & August 2019. While the results may be informative, they are not required under the Water Licence during years when no decant is occurring.

The Board may decide to modify the sampling frequency section of the Water Licence to further clarify the sampling regime at the discussed locations. As such, should no monitoring be required during 'no decant' years, administrative updates to the SNP may include 'during ~~period~~ years of *decant flow only*', or updated as deemed appropriate by the Board.

**Recommendation:**

- 1) While the compliance point S07L3-002-(1) is required to be monitored yearly in the fall even during years of 'no decant', ENR suggests that monitoring of SNP S07L3-002-(2) and S07L3-002-(3) may not be required during years when no decant is performed. ENR recommends this be addressed by the Board in order to clarify and confirm reporting requirements for the discussed SNP stations.

**Topic 2: Annual Reporting Requirements – Reporting Template Revision**

ENR notes that while important information was provided as part of the Annual Report, the information provided may not exactly align with the components required, or the order in which they are enumerated in the Water Licence; furthermore, new 'Reporting Requirements' as described under Part A Item 2, which are required to be reported yearly beginning March 31 2019, were not included in the Town's 2019 Annual Report.

**Recommendation:**

- 1) ENR recommends that the Annual Report template used by the Town be updated to include all reporting requirements required in the new Water Licence, and in the same order they are presented in the Water Licence. Additionally, the use of letters a), b), c), d), etc. to align with Part B Item 1, and Part A Item 2 reporting requirements would provide more clarity when being referenced.

Comments and recommendations were provided by ENR technical experts in the Water Management and Monitoring Division and the Sahtu Region and were coordinated and collated by the Environmental Assessment and Monitoring Section (EAM), Environmental Stewardship and Climate Change Division.

Should you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at (867) 767-9233 Ext: 53096 or email [patrick.clancy@gov.nt.ca](mailto:patrick.clancy@gov.nt.ca).

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Clancy', written in a cursive style.

Patrick Clancy  
Environmental Regulatory Analyst  
Environmental Assessment and Monitoring Section  
Environmental Stewardship and Climate Change Division  
Department of Environment and Natural Resources  
Government of the Northwest Territories