Water Resources Division Resource Management Directorate Nunavut Regional Office 918 Nunavut Drive Igaluit, NU, X0A 3H0

> Your file - Votre référence 3BM-CLY1924 Our file - Notre référence GCDocs# 135273678

April 9, 2025

Richard Dwyer Manager of Licensing **Nunavut Water Board** P.O. Box 119 Gjoa Haven, NU, X0B 1J0 E-mail: licensing@nwb-oen.ca

Re: Crown-Indigenous Relations and Northern Affairs Canada's Response to Reply on the Review of the Licence Amendment and Renewal Application for the Hamlet of Clyde River, Type B Water Licence No. 3BM-CLY1924

Dear Richard,

Thank you for the April 1, 2025 invitation to review the reply to comments on the referenced licence amendment and renewal application, submitted by the Government of Nunavut Department of Community and Government Services (GN-CGS) on behalf of the Municipality of Clyde River, for Type B Water Licence No. 3BM-CLY1924.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined the application pursuant to its mandated responsibilities under the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Department of Crown-Indigenous Relations and Northern Affairs Act. Please find CIRNAC comments and recommendations in the attached Technical Memorandum.

The Government of Nunavut provided a memorandum attached to this amendment and renewal application dated March 28, 2025. CIRNAC differs to the Nunavut Water Board (NWB) for their recommendation on how to incorporate the memorandum. See comment 16.2 and 16.14 for CIRNAC review of the memo.

If there are any questions or concerns, please contact me at (867) 975-3877 or Joyce.Demers@rcaanc-cirnac.gc.ca or Andrew Keim (867)975-4550 at or Andrew.Keim@rcaanc-cirnac.gc.ca.

Sincerely,

Joyce Demers, B.Sc.,

Technical Review Memorandum

Date: April 9, 2025

To: Richard Dwyer – Manager of Licensing, Nunavut Water Board

From: Joyce Demers – Industrial Coordinator, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada's Response

to Reply on the Review of the Licence Amendment and Renewal Application for the Hamlet of Clyde River, Type B Water Licence No.

3BM-CLY1924

Region: □ Kitikmeot □ Kivalliq ⊠ Qikiqtani

CIRNAC provides the following comments and recommendations pertaining to the application package. A summary of the subjects of recommendations can be found in Table 1. Documents reviewed as part of this submission can be found in Table 2 of Section B. Detailed technical review comments can be found in Section C.

Table 1: Summary of Recommendations

Recommendation Number	Subject	Status
1	Environmental Emergency Contingency Plan	Resolved
2	Location of Spill Kits Not Easily Identifiable and Locked	Not Resolved
3	MSDS Sheets	Resolved
4	Sewage Spill Cleanup - Dilution	Resolved – additional comment
5	QA/QC Sampling Locations GPS Coordinates	Resolved
6	Decanting Process	Resolved
7	OM Plan Sewage Disposal Facility	Resolved
8	OM Plan Solid Waste Disposal Facility	Resolved – waiting NWB decision
9	OM Plan Solid Waste Disposal Facility – Fence	Resolved
10	OM Plan Solid Waste Disposal Facility – Hazardous Materials	Resolved
11	Open Burning	Resolved
12	OM Plan Water Supply Facility Inconsistences	Resolved
13	OM Plan Water Supply Facility – Daily Quantities Missing	Resolved
14	OM Plan Solid Waste Disposal Facility	Resolved once changes made
15	Length of Renewal Application	Resolved
16	Proposed Amendments to the Water Licence	See Table 1B Below

Table 1B: Breakdown Summary of Recommendation 16

Recommendation	Water Licence	Subject	Status
Number	Item #		
16		Proposed Amendments to the Water Licence	
16.1	All Application items	Change term "Hamlet" to "Municipality"	Agrees / no position
16.2	B-1-d	Remove requirement to report daily quantities of sewage and solid waste discharged to monthly and annually	Does not Agree
16.3	B-7	Remove municipal boundaries to "in the areas of the Water Supply or Waste Disposal Facilities" for spills related to Licenced Facilities	Agrees / Resolved
16.4	C-2 and quantity of water use	53,600 cubic metres to 72,000 cubic metres yearly with max 299 cubic meters daily	No longer being requested - Resolved
16.5	C-3	Removal of requiring a hydrological study on Emirtavik Lake during the summer of 2025 to determine the viability of the water sources for future use and submitting the study in the 2025 annual report	Resolved
16.6	D-2	 a. Amend compliance points of CLY-4 and CLY-5 to CLY-6b as CLY-6b is the end point of treatment; b. Amend the parameter BOD5 to cBOD with a 100 mg/L maximum concentration of any grab sample; c. Amend the maximum concentration of any grab sample of 120 mg/L for total suspended solids 	Resolved
16.7	F-1	Remove Plan entitled "Hazardous Waste Segregation, Storage and Transportation Procedure" dated July 2019	Resolved – Additional Comment
16.8	F-2	Amend "Spill Response Plan – Clyde River, Nunavut" dated June 19, 2019 to "Municipality of Clyde River Environmental Emergency Contingency Plan for Municipal Water Licence" dated November 2024	Resolved – Additional Comment
16.9	F-3	Amend "Clyde River Truck-fill Operations and Maintenance Manual" which was submitted in the 2019 annual report to "Municipality of Clyde River Operation & Maintenance Plan for Municipal Water Licence: Water Supply Facilities" dated November 2024	Agrees / Resolved – With Comments
16.10	F-4	Amend "Solid Waste Operation and Maintenance Plan" to "Municipality of Clyde River Operation & Maintenance Plan for Municipal Water Licence: Solid Waste Disposal Facilities" dated November 2024	Resolved – Additional Comment
16.11	F-5	Amend submission timeline for inspections of engineered facilities related to the management of water and waste shall be carried by an Engineer (Civil, Municipal or Geotechnical) before commissioning any facility from 60 days after the inspection to 60 days after receiving the inspection report	Agrees as it is done before commissioning any facility
16.12	F-7-a	Amend "Spill Response Plan - Clyde River, Nunavut" under Part F Item 7a to read the updated plan titled "Municipality of Clyde River Environmental Emergency Contingency Plan for Municipal Water Licence" dated November 2024	Resolved – Additional Comment
16.13	H-1	Remove sampling points CLY-6a, CLY-9, CLY-10, CLY-11, and CLY-12 from monitoring program	Does not Agree
16.14	H-3	Remove requirement to measure and record daily, monthly, and annual quantities in cubic metres of sewage discharged	Does not Agree
16.15	H-4	Remove sampling points CLY-6a from monitoring program	Agrees
16.16	H-8	Amend "Clyde River Wastewater Facility, Clyde River, Nunavut, Operations and Maintenance Manual Volumes 1 and 2" dated July 2012 to "Municipality of Clyde Operation & Maintenance Plan for Municipal Water Licence: Sewage Disposal Facilities" dated November 2024	Resolved – Additional Comment
16.17	H-9	Remove requirement to monitor annually in early to mid-fall, prior to freezing, for the presence of seepage within standpipes at Monitoring Station(s) CLY-11. If seepage is observed, the licensee shall sample and analyze the seepage for the parameters listed in Part H Item 4	Does not Agree
16.18	H-10	Remove requirement to monitor temperature at Monitoring Station(s) CLY-9 and CLY-10, a minimum of twice annually, in early spring and mid to late fall in accordance with the approved Operations and Maintenance Plan entitled "Clyde River Wastewater Facility, Clyde River, Nunavut, Operations and Maintenance Manual Volumes 1 and 2" dated July 2012	Does not Agree
16.19	H-11	Remove requirement to monitor settlement and displacement annually at Monitoring Station(s) CLY-12 in accordance with the approved Operations and Maintenance Plan entitled "Clyde River Wastewater Facility, Clyde River, Nunavut, Operations and 15 NUNAVUT WATER BOARD Licence No. 3BM-CLY1924 Maintenance Manual Volumes 1 and 2" dated July 2012	Does not Agree
16.20	H-12	Remove requirement for monitoring results of settlement stations at Monitoring Stations CLY-9, CLY-10, CLY-11, and CLY-12 in future annual reports	Does not Agree

B. DOCUMENTS REVIEWED AND REFERENCED

The following table (Table 2) provides a list of the documents reviewed under the submission and reference during the review.

Table 2: Documents Reviewed and Referenced

Document Title	Author, File No., Rev., Date
250331 3BM-CLY1924 Monitoring Data-IMLE	Nunavut Water Board, January 6, 2025
250331 3BM-CLY1924 Plan for Compliance 2024-IMLE	Nunavut Water Board, January 6, 2025
250331 3BM-CLY1924 Prior Discussion on Effluent Compliance Point-IMLE	Nunavut Water Board, January 6, 2025
250331 3BM-CLY1924 Recommendations for the Development of Nunavut Municipal Wastewater Management Standards-IMLE	Nunavut Water Board, January 6, 2025
250331 3BM-CLY1924 Response to Comments and Recommendations-IMLE	Nunavut Water Board, January 7, 2025
250331 3BM-CLY1924 Solid Waste Generation Rates in Nunavut-IMLE	Nunavut Water Board, January 7, 2025
250401 3BM-CLY1924 Environmental Emergency Contingency Plan with Appendices-IMLE	Nunavut Water Board, January 7, 2025
250401 3BM-CLY1924 Environmental Monitoring and QA QC Plan with Appendices-IMLE	Nunavut Water Board, January 7, 2025
250401 3BM-CLY1924 OM Plan Sewage Disposal Facility with Appendices-IMLE	Nunavut Water Board, January 7, 2025
250401 3BM-CLY1924 OM Plan Solid Waste Disposal Facility with Appendices-IMLE	Nunavut Water Board, January 7, 2025
250401 3BM-CLY1924 OM Plan Water Supply Facility with Appendices-IMLE	Nunavut Water Board, January 7, 2025
190820 3BM-CLY1924 Renewal Licence-OASE	Nunavut Water Board, August 20, 2019

C. RESULTS OF REVIEW

2. Location of Spill Kits Not Easily Identifiable and Locked

Comment:

Section 6.2 Spill Response Equipment Inventory states that "The spill response kits should be stored in the on-site locker at the Hazardous Waste Storage Area provided for this purpose. Some equipment may be stored in other areas throughout the community.". It is not easily identifiable where the location of the spill kits are. Spill kits should not be locked in the event of a spill they need to be easily assessable to ensure maximum effectiveness of the clean up efforts. Spill kits need to be placed in areas where spills are likely to occur.

Recommendation:

(R-02) CIRNAC recommends that the applicant clarify the location of all spill kits and ensure that they remain unlocked.

Reply from GN-CGS:

"Please see updated Environmental Emergency Spill Contingency Plan.

There is no storage space for the spill response kit at the water supply facility (pumphouse too small), solid waste disposal facility (no enclosed structure), or sewage disposal facility (no enclosed structure). The maintenance garage is accessible to all municipal staff, who would respond to the spill, and is a short drive to all facilities. Once constructed, the new water treatment plant will contain a spill response kit and the Environmental Emergency Spill Contingency Plan will be updated."

Response from CIRNAC:

CIRNAC notes that it would still be possible to have spill kits on the outside of the building(s) which are likely to have spills or would require a spill kit.

4. Sewage Spill Cleanup - Dilution

Comment:

Section 5.4 Mitigative Measures: Sewage states that "A small spill (truck leak or household tank leak) is not a significant environmental issue, site control containment and clean up can be accomplished without significant concerns. Dilution with water is an effective remedy for any residual." The document also states that the mitigative measures to follow a large spill should be to "Dilute with water pumped from local streams". Dilution is not a form of treatment.

The Proponent is reminded that is sewage contamination is a hazardous waste and can persist for weeks or months, posing a health risk to the community at large. Sewage

contains harmful bacteria, viruses, and parasites that can cause a variety of illnesses, including: Gastrointestinal issues (diarrhea, vomiting), children and elders and those with a compromised immune system are especially vulnerable.

The Environmental Guideline for the General Management of Hazardous Waste states that "Hazardous waste must not be mixed or diluted with another substance, or divided into smaller quantities, simply to avoid meeting the definition of a hazardous waste." (Department of Environment Government of Nunavut, 2010).

Recommendation:

(R-04) CIRNAC recommends that the applicant remove dilution as a form of treatment to cleaning up a sewage spill.

Reference:

Department of Environment Government of Nunavut. (2010). *Environmental Guideline for the General Management of Hazardous Waste*. Retrieved January 31, 2025 from https://www.gov.nu.ca/sites/default/files/publications/2022-01/Guideline%20-%20General%20Management%20of%20Hazardous%20Waste%20%28revised%20Oct%202010%29 0.pdf

Reply from GN-CGS:

"Please see updated Environmental Emergency Spill Contingency Plan."

Response from CIRNAC:

CIRNAC notes that the updated mitigative measures for sewage (section 5.4) section does not include a disposal subsection which would be useful for individuals responding to a spill. Please include this section in the next iteration of the plan.

8. OM Plan Solid Waste Disposal Facility

Comment:

- a. List of appendices outlines that an appendix B which has photographs and C listed as other. These were not included in the plan and therefore not sure what they were about. Appendix A was as-built drawings however unsure about the image found in that appendix. The concern is that this may be important information required to the plan.
- b. In section 1.2.1 include: temperatures reaching 50°C in July, and a single cell sewage lagoon instead of two lagoon cells. This is just a small typo observed what should be corrected.
- c. Under section 7.0 Monitoring, Table 1- Requirements should also include a section for quantifying the amount of waste discharged at the solid waste disposal facility as

required by the water licence Part B item d "the daily, monthly and annual quantities in cubic metres of each and all waste discharged; including the hazardous and non-hazardous waste accepted at the Solid Waste Facilities" [Note that the applicant is requesting to remove daily and keep monthly/annual quantities and therefore CIRNAC suggests that the applicant should update and submit the updated plan with the annual report when the water board renders its decision.]

Recommendation:

(R-08) CIRNAC recommends that the applicant include Appendix B and C, fix the temperature error and include a line in table 1 under section 7 including the requirement of the water licence Part B item d [unless it is no longer required by the water licence see comment 16.2, 14].

Reply from GN-CGS:

"Please see updated O&M Plan for the Solid Waste Disposal Facilities:

- Appendix A changed to site layout sketch. No as-builts are available as it is a non-engineered facility. Appendix A will be updated to include as-built drawings for the upgraded solid waste facility upon completion.
- Appendix B and Appendix C have been removed from the Table of Contents.
- Section 1.2.1 corrected temperature typo and removed the number of lagoon cells

The Licensee requests that Part B Item 1-d of the water licence be changed to "the monthly and annual quantities in cubic metres of wastewater discharged; and the annual hazardous and non-hazardous waste accepted at the Solid Waste Facilities" This request has been reflected in Table 1 of the O&M Plan for the Solid Waste Disposal Facilities.

An estimated volume of hazardous and non-hazardous waste disposed annually into the solid waste facility can be provided in the Annual Report based on the standard solid waste generation rates as the uploaded memorandum Solid Waste Generation Rates in Nunavut."

Response from CIRNAC:

Refers to the Nunavut Water Board on the decision for requiring water licence Part B item d "the daily, monthly and annual quantities in cubic metres of each and all waste discharged; including the hazardous and non-hazardous waste accepted at the Solid Waste Facilities" and will leave the potentially required changes to their discretion.

14. OM Plan Solid Waste Disposal Facility

Comment:

Under section 15 it states that household solid wastes such as household waste, small meal waste, tires, electronics, paper wood, etc will be collected from bins and dropped off at the solid waste site. It is unclear if tires and electronics are placed with the regular municipal waste and then burned at the site.

Under section 15 it states that hydrocarbon contaminated soils will be placed into the landfarm however there was no mention of a landfarm in the OM Plan Solid Waste Disposal Facility or any other plan submitted to the Nunavut Water Board.

Recommendation:

(R-14) CIRNAC recommends that the applicant clarify how tires and electronic waste will be disposed of and clarify if Clyde River has a landfarm.

Reply from GN-CGS:

"Please see updated O&M Plan for the Solid Waste Disposal Facilities, for which the following clarifications were made:

- Electronics are segregated from the regular municipal waste and are brought to the hazardous waste area for storage within sea cans.
- Tires are segregated from the regular municipal brought to a dedicated tire disposal area adjacent to the bulk metals waste area.

There is no municipal landfarm in Clyde River. All references to landfarms have been removed. The procedure for the handling of contaminated soils in the Environmental Emergency Contingency Plan has been updated."

Response from CIRNAC:

CIRNAC notes that section 15 refers to the Application for Water Licence Renewal & Amendment form from the Nunavut Water Board. The above changes should also be reflected in the form. CIRNAC considers the comment resolved once changes are also reflected in the renewal form.

16. Proposed Amendments to the Water Licence

16.2 & 16.14 - Reporting Quantities of Sewage and Solid Waste

2	B-1-d	Remove requirement to report daily	Differs to the
		quantities of sewage and solid waste	Nunavut
		discharged to monthly and annually	Water Board
14	H-3	Remove requirement to measure and record	Differs to the
		daily, monthly, and annual quantities in cubic	Nunavut
		metres of sewage discharged	Water Board

Comment:

The concern is that an non-accurate amount of waste will be reported therefore in the event of some kind of spill/mishap it will go underestimated. Larger spills are important to quantify for getting proper funding for clean up operations. CIRNAC differs to the Nunavut Water Board for substantive changes to monitoring requirements under the license.

Recommendation:

(R-16.2, 14) CIRNAC recommends that the applicant ensures that they are capable of an accurate reading of the sewage and solid waste be made monthly and annually and differs to the Nunavut Water Board for substantive changes to monitoring requirements under the license.

Reply from GN-CGS:

"The Board has accepted in the past that sewage disposal volumes be assumed as equal to water withdrawal volumes.

Please see the updated memorandum Solid Waste Generation Rates in Nunavut as the response to the comment regarding solid waste. An accurate reading can only be taken if Solid Waste Disposal Facilities have a full-time attendant and a weighing scale. Facilities for an attendant are not available and there are numerous barriers to weighing scales. They are challenging to install and maintain in arctic and permafrost conditions, and require electricity, which the site does not have."

Response from CIRNAC:

CIRNAC does not agree with this amendment. The memorandum sent out by the Government of Nunavut would suggest that the amount of waste generated will only be estimates. The concern is that without a proper understanding of the amount of waste being generated it is impossible to determine if existing infrastructure will be capable of holding the waste. If the memorandum is followed it could create significant risks of failures within these waste holding facilities. This could in turn lead to contaminants not contained and therefore potentially ending up into nearby water bodies.

16.6 - Compliance Points and Concentration of Samples

6	D-2	 a. Amend compliance points of CLY-4 and CLY-5 to CLY-6b as CLY-6b is the end point of treatment; b. Amend the parameter BOD5 to cBOD with a 100 mg/L maximum concentration 	Agrees to change BOD5 to CBOD5
		of any grab sample; c. Amend the maximum concentration of any grab sample of 120 mg/L for total suspended solids	Agrees

Comment:

CIRNAC agrees that CBOD5 is considered to be better practice than BOD5 readings and has agrees with that change.

CIRNAC does not understand the reasoning for changing compliance points CLY4/5 to CLY-6b nor what is meant by grab sample. *Good Engineering Practice for Northern Water and Sewer Systems*, Government of Northwest Territories (2017) indicates that applicants effluent criteria should be as follows: for CBOD5 25 mg/L and total suspended solids 25 mg/L. It is unclear what the reasoning is for asking BOD5 maximums be 100 mg/L and total suspended solids maximum to be 120 mg/L.

Recommendation:

(R-16.6) CIRNAC recommends that the applicant clarify what is being asked for and the reasoning for the CBOD5 and total suspended solids maximum to be elevated compared the best practices.

Reply from GN-CGS:

"The 25 mg/L cBOD5 and 25 mg/L TSS criteria as indicated in the Good Engineering Practice for Northern Water and Sewer Systems, Government of Northwest Territories (2017) were derived from the Wastewater Systems Effluent Regulations (WSER), which do not apply in Nunavut and the far north.

The Canada-Wide Strategy for the Management of Municipal Wastewater Effluent (2009) recommended Nunavut to complete research to develop performance standards for wastewater treatment facilities, as it was recognized that standardized effluent criteria would not be practical for systems in the Far North and a customized approach may be needed.

The requested effluent quality limits and the compliance point location are based the findings from long-term research of lagoon-wetland systems across Nunavut. Please see Sections 1-7 and 1-8 in the uploaded report Recommendations for the Development of Nunavut Municipal Wastewater Management Standards dated October 2017 prepared by exp Services Inc., which provided the following conclusions and recommendations:

- Natural wetlands are capable of achieving wastewater treatment
- Site specific effluent discharge limitations should be considered
- Technology-based limitations establish a minimum level of effluent quality that is attainable using demonstrated technologies that are economically available
- Achievable limits for lagoon wetland systems:
 - Limits: 100 mg/L cBOD5; 120 mg/L TSS;
 - Systems application: Flows <2,500 m3/day to well flushed marine receiving environments
- The effluent discharge point considers only the location where the effluent enters the receiving waters (marine or fresh)
- Wetland system final discharge points should be monitored and amended as required if flow patterns throughout the wetland are dynamic
- Negligible environmental impacts from wastewater effluent have been observed

The requested effluent criteria 120 mg/L TSS and 100 mg/L cBOD5 is based on treatment from both the lagoon and the wetland.

Multiple meetings were held with stakeholders including the NWB, CIRNAC, ECCC and GN Departments of CGS, Health and Environment to inform discussion on the applicability of the WSER to Nunavut and review the subsequent research conducted on the lagoon-wetland systems. The most recent meeting took place on June 20, 2019 where this research was once again summarized and presented in the form of technology based effluent criteria. Since then, ECCC has not initiated any further discussion on the development of the WESR for Nunavut and the far north.

Furthermore, in 2022, during the technical review for 3AM-ARV2232, it was determined that moving the compliance point to the end of the wetland along with the aforementioned effluent criteria would be appropriate application of this research.

These records are available on the NWB site and were uploaded to the folder for easy access as Prior Discussion on Effluent Compliance Point.

As per the water licence: "Grab Sample" means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected."

Response from CIRNAC:

CIRNAC has no further comments on this.



16.7, 16.8, 16.10, 16.12 & 16.16 - Updated Management Plans

7	F-1	Remove Plan entitled "Hazardous Waste Segregation, Storage and Transportation Procedure" dated July 2019	Does not Agree
8	F-2	Amend "Spill Response Plan – Clyde River, Nunavut" dated June 19, 2019 to "Municipality of Clyde River Environmental Emergency Contingency Plan for Municipal Water Licence" dated November 2024	Does not Agree
10	F-4	Amend "Solid Waste Operation and Maintenance Plan" to "Municipality of Clyde River Operation & Maintenance Plan for Municipal Water Licence: Solid Waste Disposal Facilities" dated November 2024	Does not Agree
12	F-7-a	Amend "Spill Response Plan - Clyde River, Nunavut" under Part F Item 7a to read the updated plan titled "Municipality of Clyde River Environmental Emergency Contingency Plan for Municipal Water Licence" dated November 2024	Does not Agree
16	H-8	Amend "Clyde River Wastewater Facility, Clyde River, Nunavut, Operations and Maintenance Manual Volumes 1 and 2" dated July 2012 to "Municipality of Clyde Operation & Maintenance Plan for Municipal Water Licence: Sewage Disposal Facilities" dated November 2024	Does not Agree

Comment:

CIRNAC notes that some of the 2019 Manuals were more clear then the proposed 2024 Manuals. It was difficult to find what was changed between the two plans as the document control section was not properly filled.

Recommendation:

(R-16.7,8,10,12,16) CIRNAC recommends that the applicant submit the updated plans with the document control section filled to reflect which sections were removed or edited.

Reply from GN-CGS:

"Please see updated Plans."

Response from CIRNAC:

CIRNAC notes that in future iterations of these plans that section numbers be added to ensure that all modifications made are as clear as possible. A suggested table outline is seen below.

Date of Change	Plan Version Number	Section Number	Summary of Changes Made

^{*}Note that it is easier for CIRNAC to review revisions if the changes are also highlighted in some way.

16.9 – Clyde River Truck-fill Operations and Maintenance Manual

9	F-3	Amend "Clyde River Truck-fill Operations and	Does not
		Maintenance Manual" which was submitted in	Agree
		the 2019 annual report to "Municipality of Clyde	
		River Operation & Maintenance Plan for	
		Municipal Water Licence: Water Supply	
		Facilities" dated November 2024	

Comment:

CIRNAC has unable to find the plan in the 2019 annual report as a 2019 annual report was not submitted. The plan is also not included in the 2018 or 2020 annual reports. Without the manual/plan CIRNAC cannot comment.

Recommendation:

(R-16.9) CIRNAC recommends that the applicant submit the Clyde River Truck-fill Operations and Maintenance Manual for review before removing.

Reply from GN-CGS:

"Upon reviewing the records, the Clyde River Truck-fill Operations and Maintenance Manual" was not completed and was never submitted along with the 2019 Annual Report. The Licensee requests that the Plan Municipality of Clyde River Operation & Maintenance Plan for Municipal Water Licence: Water Supply Facilities be accepted as the current plan, which is based on the most recent information."

Response from CIRNAC:

CIRNAC notes that the water licence Part F item 3 states that

"The new information manual shall provide details regarding, at a minimum, the water system, pump-house, intake line and treatment plant."

CIRNAC would be agreeable to removing the 2019 plan in the water licence to this new 2025 Operation & Maintenance Plan for Municipal Water Licence: Water Supply Facilities as it seems that the minimum requirements are covered in this 2025 version of the plan with the above explanation.

16.13, 16.17, 16.18, 16.19& 16.20 - Removal of Sampling Location CLY-6a, CLY-9, CLY-10, CLY-11, and CLY-12 from monitoring program

13	H-1	Remove sampling points CLY-6a, CLY-9, CLY-10, CLY-11, and CLY-12 from monitoring program	Does not Agree
17	H-9	Remove requirement to monitor annually in early to mid-fall, prior to freezing, for the presence of seepage within standpipes at Monitoring Station(s) CLY-11. If seepage is observed, the licensee shall sample and analyze the seepage for the parameters listed in Part H Item 4	Does not Agree
18	H-10	Remove requirement to monitor temperature at Monitoring Station(s) CLY-9 and CLY-10, a minimum of twice annually, in early spring and mid to late fall in accordance with the approved Operations and Maintenance Plan entitled "Clyde River Wastewater Facility, Clyde River, Nunavut, Operations and Maintenance Manual Volumes 1 and 2" dated July 2012	Does not Agree
19	H-11	Remove requirement to monitor settlement and displacement annually at Monitoring Station(s) CLY-12 in accordance with the approved Operations and Maintenance Plan entitled "Clyde River Wastewater Facility, Clyde River, Nunavut, Operations and 15 NUNAVUT WATER BOARD Licence No. 3BM-CLY1924 Maintenance Manual Volumes 1 and 2" dated July 2012	Does not Agree
20	H-12	Remove requirement for monitoring results of settlement stations at Monitoring Stations CLY-9, CLY-10, CLY-11, and CLY-12 in future annual reports	Does not Agree

Comment:

CIRNAC does not agree to remove sampling points CLY-9, CLY-10, CLY-11, and CLY-12 without seeing the justification of removing them. CGS contracted Dillon to conduct a study regarding the frequency of an of an engineer's inspection of the water and waste infrastructure including the Clyde River sewage lagoon which will be provided in the 2024 annual report. Therefore, without evidence stating why these sampling points should be removed CIRNAC does not agree to remove them.

CIRNAC agree with the removal of CLY-6a as a sampling point because it is redundant.

Recommendation:

(R-16.13,17,18,19,20) CIRNAC recommends that the applicant submit an application to remove sampling point CLY-9, CLY-10, CLY-11, and CLY-12 after it has provided the study stating that those points are no longer required.

Reply from GN-CGS:

"Following the dam safety inspection study, the Licensee will provide a response to this comment in the subsequent water licence amendment application."

Response from CIRNAC:

Restates comment and recommendation. CIRNAC cannot make a determination without a study or proof indicating those points are no longer required. Therefore, at this time, CIRNAC does not agree with the applicant.