Application for Water Licence Amendment

Document Date: April 2013

Application Submission Date: August 28, 2026

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DOCUMENT MANAGEMENT

Original Document Date: April 2010

DOCUMENT AMENDMENTS

	Description	Date
(1)	Updated for public distribution as separate document from NWB Guide 7	June 2010
(2)	Updated NWB logos and reformatted table to allow rows to break across page	May 2011
(3)	New NWB logo; request for background information; and change to Block 24	April 2013
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		

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APPLICATION FOR WATER LICENCE AMENDMENT

The applicant is referred to the NWB's Guide 7: *Licensee Requirements Following the Issuance of a Water Licence* for more information about this application form.

Where possible, provide background information regarding the original licence application or attach previously submitted information.

EXISTING LICENCE NO: 3BM-SAN2025

1. LICENSEE CONTACT INFORMATION

Is the licensee the same as that referred to on the existing licence?

■ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB. **An amendment will only be issued in the name of the current licensee in the absence of assignment of the licence.**

If the licensee is the same, but the name of the licensee has changed, attach a certificate of name change.

Name: **Rob Hedley, SAO - Hamlet of Sanikiluaq**
Address: **P.O. Box 157, Sanikiluaq, NU, X0B 1J0, Canada**
Phone: **867-899-8934**
Fax: **N/A**
e-mail: **sao@sanikiluaq.com**

2. LICENSEE REPRESENTATIVE CONTACT INFORMATION – If different from Block 1.

Name: **Dillon Consulting and Municipal Works Division, Department of Transportation and Infrastructure, Government of Nunavut**
Address: **P.O. Box 1000, Station 700, Iqaluit, Nunavut, X0A 0H0, Canada**
Phone: **867-983-4134, 782-321-9395**
Fax: **N/A**
e-mail: **mcole1@gov.nu.ca**
municipalworks@gov.nu.ca
rkum@gov.nu.ca
kclouter@dillon.ca

(Attach authorization letter.)

3. NAME OF PROJECT

Has the name of the project changed?

☐ Yes ■ No

If Yes, indicate the name of the project including the name of the location: _____

4. LOCATION OF UNDERTAKING

Does the proposed amendment change the location of the amended undertaking?

☐ Yes ■ No

Provide the project extents and camp locations. Identify proposed changes.

Project Extents

56° 32' 00" N 79° 14' 00" W

Camp Location(s)

Camp consumption is accounted for in water taking and disposal. Site drawings have been submitted with this application.

5. MAP

Does the proposed amendment change the locations of any of the main components of the undertaking?

■ Yes ☐ No

A new water treatment facility is being constructed adjacent to the existing facility. The existing facility will be decommissioned and removed once the new facility is commissioned. Site plans are attached.

Attach a topographical map, indicating the main components of the undertaking. Identify proposed changes.

NTS Map Sheet No.: _____ Map Name: _____ Map Scale: _____

Reference Drawing Package: Sanikiluaq New Water Treatment Plant — Issued for Construction (IFC) Drawings (Project No. 24-8525, Dated April 2026, prepared by Dillon Consulting Limited).

6. NATURE OF INTEREST IN THE LAND

Does the proposed amendment change the nature of the interest in the land?

☐ Yes ■ No

If Yes, indicate changes. _____

Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

Sub-surface

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Mineral Lease from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: _____ Date of expiry: _____

Surface

☐ Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Kivalliq Inuit Association (KivIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Qikiqtani Inuit Association (QIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Commissioner's Land Use Authorization
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Other

Date (expected date) of issuance: _____ Date of expiry: _____

Is the name of the entity(s) holding authorizations the same as that considered in the existing water licence?

■ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB.

Name of entity(s) holding authorizations: **Hamlet of Sanikiluaq**

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Indicate the land use planning area in which the existing project is located.

- ☐ North Baffin
- ☐ South Baffin
- ☐ Akunniq
- ☐ Keewatin
- ■ Sanikiluaq
- ☐ West Kitikmeot

Does the proposed amendment change the land use planning area?

☐ Yes ■ No

If yes, indicate the land use planning area in which the amended undertaking is located.

- ☐ North Baffin
- ☐ South Baffin
- ☐ Akunniq
- ☐ Keewatin
- ☐ Sanikiluaq
- ☐ West Kitikmeot

Was a land use plan conformity determination required from NPC prior to the issuance of the existing water licence?

■ Yes ☐ No

If Yes, indicate date issued and attach copy. **November 8, 2019**

Does the proposed amendment change the original NPC conformity determination or the need to obtain one?

■ Yes ☐ No

If Yes, indicate date issued (or expected) and attach a copy. **July 8, 2025**

Please note that previous NIRB and NPC applications proposed daily water taking amounts for the 20-year design horizon. The application has since been amended to a 5-year license rather than a 20-year license.

If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Was a screening determination required from NIRB prior to the issuance of the existing water licence?

☐ Yes ■ No

If Yes, indicate date issued and attach copy. _____

Does the proposed amendment change the original NIRB screening determination or the need to obtain one?

■ Yes ☐ No

If Yes, indicate date issued (or expected) and attach a copy. **NIRB File No: 25WN065 (Application No. 126205). November 27, 2025.**

Please note that previous NIRB and NPC applications proposed daily water taking amounts for the 20-

year design horizon. The application has since been amended to a 5-year license rather than a 20-year license.

If No, provide written confirmation from NIRB confirming that a screening determination is not required.

9. DESCRIPTION OF UNDERTAKING

Does the proposed amendment change the description of the undertaking?

☐ Yes ■ No

List and attach plans and drawings or project proposal. Identify proposed changes.

The Proponent will construct and replace the community's water supply infrastructure with a modern system to meet drinking water demands to the design year 2047. Works include:

1. **Raw Water Intake: Two new intake lines in Sanikiluaq Lake equipped with submersible pumps and DFO-compliant fish screens.**
2. **Water Treatment Plant: A new treatment facility utilizing ultrafiltration and reverse-osmosis (RO) to treat brackish lake water to meet Health Canada's Guidelines for Canadian Drinking Water Quality. Storage tanks include 350 m3 for treated water, 260 m3 for brine, and 337 m3 for WTP process wastewater.**
3. **Reject Water Management: Discharge of RO reject brine via a 10x10 cm buried HDPE pipeline to the lake outlet creek during non-frozen months at 0.24 m/s, and via trucked marine disposal in winter months.**
4. **Site Earthworks: Excavation of 2,921 m3 of earth/rock and placement of 3,770 m3 of granular fill from an existing municipal quarry.**
5. **Spill Prevention & Storage: 31,000 L double-walled diesel storage tank for the backup generator and heating boilers.**

10. OPTIONS

Does the proposed amendment change any of the alternative methods and locations that were considered to carry out the project?

☐ Yes ■ No

Provide a brief explanation of the alternative methods or locations that were considered to carry out the project. Identify proposed changes.

Alternative Water Sources: Windy Lake was previously considered as a secondary source but access was ruled out due to high road maintenance costs and difficult terrain. Sanikiluaq Lake remains the only viable source.

Winter Brine Disposal: Three trucked disposal locations were evaluated. A site west of the community along the landfill road was selected and supported by the Municipality due to the maximum distance from residences (minimizing traffic impact) and existing year-round access.

11. CLASSIFICATION OF PRIMARY UNDERTAKING

Indicate the primary classification of undertaking for the existing licence by checking one of the following boxes:

☐ Industrial ☐ Agricultural

☐ Mining and Milling (includes exploration/drilling/exploration camps)
☐ Conservation
■ Municipal (includes camps/lodges)
☐ Power
☐ Recreational
☐ Miscellaneous (describe below):
_____

Does the proposed amendment change the classification of primary undertaking?

☐ Yes ■ No

If Yes, indicate the primary undertaking of the amendment: _____

Information in accordance with applicable Supplemental Information Guidelines (SIG) must be updated and submitted with an Application for Amendment. Indicate which SIG(s) are applicable to your application.

☐ Hydrostatic Testing
☐ Tannery
☐ Tourist / Remote Camp
☐ Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil
☐ Onshore Oil and Gas Exploration Drilling
☐ Mineral Exploration / Remote Camp
☐ Advanced Exploration
☐ Mine Development
■ Municipal
■ General Water Works
☐ Power

12. WATER USE

Indicate, using the boxes below, the types of water use(s) approved in the existing licence.

■ To obtain water for camp/ municipal purposes
☐ To obtain water for industrial purposes
☐ To cross a watercourse
☐ To alter the flow of, or store water
☐ Other: _____
☐ To divert a watercourse
☐ To modify the bed or bank of a watercourse
☐ Flood control

Does the proposed amendment change the type(s) of water use(s)?

☐ Yes ■ No

If Yes, indicate using the boxes below, the proposed change(s) to the type(s) of water use(s) noting any water use(s) that are to be added, continued, or removed.

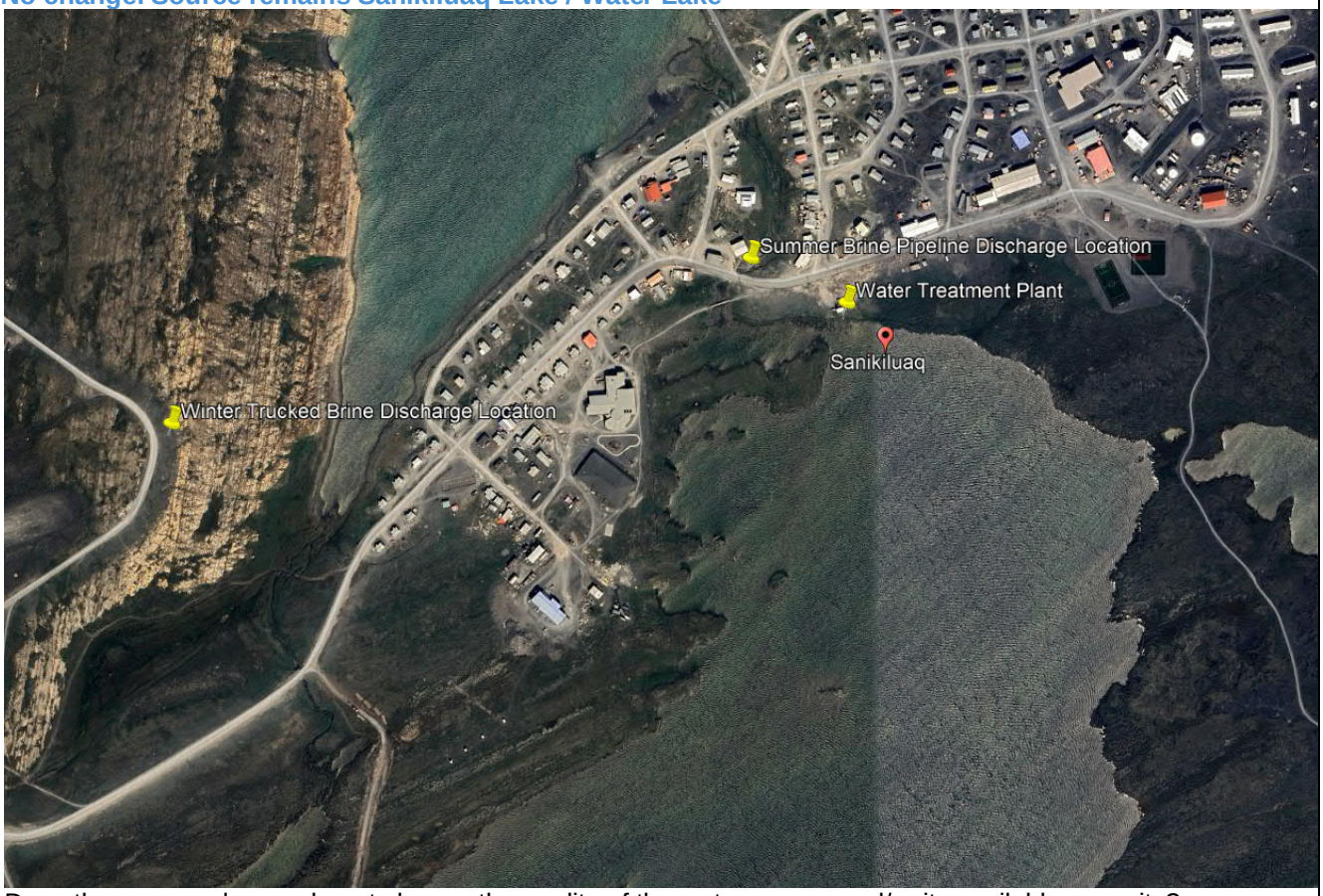
☐ To obtain water for camp/ municipal purposes
☐ To obtain water for industrial purposes
☐ To cross a watercourse
☐ To alter the flow of, or store water
☐ Other: _____
☐ To divert a watercourse
☐ To modify the bed or bank of a watercourse
☐ Flood control

13. QUANTITY OF WATER INVOLVED

Does the proposed amendment change the source of water? ☐ Yes ■ No

Indicate the water source(s). Identify proposed changes.:

No change. Source remains Sanikiluaq Lake / Water Lake



Does the proposed amendment change the quality of the water source and/or its available capacity?

☐ Yes ■ No

Describe the quality of the water source(s) and the available capacity(s). Identify any changes.:
Water balance study shows lake has sufficient recharge capacity.

Does the proposed amendment change the overall quantity of water to be used?

■ Yes ☐ No

Provide the overall estimated quantity to be used. Identify proposed changes.: **299 m3/day, 109,000 m3/year. Please note that proposed license limits are for *peak water taking* calculations at year 5. These numbers are higher than the average daily water taking is expected to be.**

Please note that previous NIRB and NPC applications proposed daily water taking amounts for the 20-year design horizon. The application has since been amended to a 5-year license rather than a 20-year license.

Does the proposed amendment change the quantity of water to be used from each source?

■ Yes ☐ No

Provide the estimated quantity(s) of water to be used from each source. Identify proposed changes.:

- **Current Licensed Limit: 55,000 m3/year (Daily max: 299 m3/day)**
- **Proposed Licensed Limit: 109,000 m3/year (Daily max: 299 m3/day)**

Please note that proposed license limits are for *peak water taking* calculations at year 5. These numbers are higher than the average daily water taking is expected to be.

Does the proposed amendment change the quantity of water to be used for each purpose?

■ Yes ☐ No

Provide the estimated quantities to be used for each purpose (camp, drilling, etc.). Identify proposed changes.:

- **Current Licensed Limit: 55,000 m3/year (Daily max: 299 m3/day)**
- **Proposed Licensed Limit: 109,135 m3/year (Daily max: 299 m3/day)**

Please note that proposed license limits are for *peak water taking* calculations at year 5. These numbers are higher than the average daily water taking is expected to be.

Does the proposed amendment change the method(s) of extraction? ☐ Yes ■ No

Describe the method(s) of extraction. Identify proposed changes. **raw water intake lines with submersible pumps and DFO-compliant fish screens.**

Does the proposed amendment change the quantity(s) of water returned to source(s)?

☐ Yes ■ No

Estimated quantity(s) of water returned to source(s). Identify proposed changes. : **0** m^3/day

Does the proposed amendment change the quality(s) of water returned to source(s)?

☐ Yes ■ No

Describe the quality(s) of water(s) returned to source(s). Identify any changes.: **Water will not be returned to the source.**

14. WASTE

Check the appropriate box(s) to indicate the types of waste(s) approved in the existing licence.

- ■ Sewage
- ■ Solid Waste
- ■ Hazardous
- ■ Bulky Items/Scrap Metal
- ■ Animal Waste
- ☐ Other (describe):
- ■ Waste oil
- ■ Greywater
- ■ Sludges
- ■ Contaminated soil and/or water

Does the proposed amendment change the type(s) of waste(s) to be generated or deposited?

■ Yes ☐ No

If Yes, indicate using the boxes below, the proposed change(s) to the type(s) of waste(s) to be generated

and/or deposited noting the addition, removal or continued generation and/or disposal of waste(s).

☐ Sewage
☐ Solid Waste
☐ Hazardous
☐ Bulky Items/Scrap Metal
☐ Animal Waste
☐ Waste oil
☐ Greywater
☐ Sludges
☐ Contaminated soil and/or water
■ Other (describe): **Reverse Osmosis Reject Water (Brine water) generated as a byproduct of the improved membrane filtration system needed to treat the brackish water source. Composed of concentrated brackish lake water (lower in TDS than receiving marine creek/ocean).**

15. QUANTITY AND QUALITY OF WASTE INVOLVED

Does the proposed amendment change the quantity(s) of the types of wastes involved?

■ Yes ☐ No

Does the proposed amendment change the composition(s) of the types of wastes involved?

■ Yes ☐ No

Does the proposed amendment change the method(s) of treatment for the types of waste involved?

☐ Yes ■ No

Does the proposed amendment change the method(s) of disposal for the types of waste involved?

■ Yes ☐ No

If Yes to any of the above, describe the proposed changes: **Sewage disposal volumes will increase proportionally with water consumption. Treatment process wastewater is generated up to Up to 20,659 m3 for RO reject brine and 34,961 m3 for WTP process wastewater.**

For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
RO Reject Brine	**Concentrated brackish lake water (concentrations lower than ocean)**	**Up to 20,659 m3**	**None (natural dilution in creek mixing zone)**	**Pipeline discharge to lake outlet creek (summer); vacuum truck to ocean discharge chute (winter)**
WTP Process Wastewater	**WTP membrane backwash and rinse water**	**34,961 m3**	**Lagoon settlement & wetland treatment**	**Stored in 337 m3 tank, then hauled by municipal**

				vacuum trucks to municipal sewage lagoon
Sewage (Community)	**Municipal domestic wastewater**	**Up to 109,000 m3**	**Natural lagoon settlement & Wetland Treatment Area**	**Trucked from community to non-engineered sewage lagoon; discharges to Wetland Treatment Area**
Solid Waste	**Construction packaging, crates, wood**	**7 x 40' seacans**		**Municipal solid waste facility**
Hazardous Waste	**Paint, waste oils, solvents**	**Small municipal volumes (approx. 0.012 m3/capita)**		**Sealift/barge offsite to accredited Southern facility**

16. OTHER AUTHORIZATIONS

Does the proposed amendment change the need for other authorizations in addition to the sub-surface and surface land use authorizations provided in Block 6?

■ Yes ☐ No

If Yes, indicate any additional authorizations required, which authorizations are no longer required, and which authorizations continue to be required.

For each provide the following:

Authorization: **Letter of Advice (File 25-HCAA-02290)**

Administering Agency: **Fisheries and Oceans Canada**

Project Activity: **RO Reject Disposal and Culvert Replacement**

Date (expected date) of issuance: **January 13, 2025** Date of expiry: **N/A**

17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES

Does the proposed amendment change the predicted environmental impacts of the undertaking or the mitigation measures?

■ Yes ☐ No

Describe direct, indirect, and cumulative impacts related to water and waste. Identify any changes.
• Riparian Vegetation Loss: Construction of the brine pipe will result in a minor loss of 13.5 m2 of vegetation above High Water Mark.

• Fish Habitat Alteration: Replacement of 5 damaged culverts with a 1.5m x 4.0m pre-cast concrete box culvert will alter 152 m2 of fish habitat. Mitigation includes isolation of work area via cofferdams, pump by-pass, fish salvage, silt curtains, and strict sediment/erosion control during open water.

18. WATER RIGHTS OF EXISTING AND OTHER WATER USERS

Was compensation paid and/or an agreement(s) for compensation been entered into with any existing or other users of water during consideration of the existing licence?

☐ Yes ■ No

If Yes, provide the names, addresses and the nature of water use by those persons or properties.

Does the proposed amendment adversely affect any known persons or property including those that hold licences for water use in precedence to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature?

☐ Yes ■ No

If Yes, provide the names, addresses and the nature of water use of those persons or properties.

Advise the Board if compensation has been paid and/or an agreement(s) for compensation has been reached with any existing or other water users with respect to the proposed amendment.

19. INUIT WATER RIGHTS

Was compensation paid/ or an agreement(s) for compensation been entered into with any Designated Inuit Organization (DIO) during consideration of the existing licence?

☐ Yes ■ No

If Yes, which DIO(s) _____

Does the proposed amendment substantially affect the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL)?

☐ Yes ■ No

If Yes, advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more DIO(s) with respect to the proposed amendment.

20. CONSULTATION - Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.

Consultation Sessions: Held with Robert Hedley (SAO) and the Municipal Council of Sanikiluaq on October 10, 2024, and May 29, 2025.

21. SECURITY INFORMATION

Does the proposed amendment change the financial security assessment?

☐ Yes ■ No

Does the proposed amendment change the estimate of the total financial security for final reclamation?

☐ Yes ■ No

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third-party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken. Identify any changes in the financial security assessment resulting from the proposed amendment.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut,* Indian and Northern Affairs Canada, 2002.

22. FINANCIAL INFORMATION

Is the statement of financial security the same as that considered in the existing water licence?

■ Yes ☐ No

Provide an updated statement of financial security.

If the applicant is a business entity please answer the questions below:

Is the list of the officers of the company the same as those considered in the existing water licence?

■ Yes ☐ No

Provide a list of the officers of the company. **Senior Administrative Officer – Robert Hedley**

Is the Certificate of Incorporation or evidence of registration of the company name the same?

■ Yes ☐ No

Attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

23. STUDIES UNDERTAKEN TO DATE

List and attach updated studies, reports, research etc.

1. **Creek Technical Assessment Memo: Hydrology, Fish Habitat, and Culvert Upgrade Recommendation (Dillon, May 2026)**
2. **Archaeological Impact Assessment: Confirms no archaeological or paleontological value at development sites (Dillon, 2025)**
3. **Source Water Capacity Assessment: Lake Hydrology and Water Balance Study (2021)**

Provide a compliance assessment and status report including a response to any inspector's reports. The licensee must contact the NWB for licence specific direction in completing the assessment and report.

If in non-compliance, a licence may not be issued until compliance is achieved. If in non-compliance, attach plans/reports for consideration. Application will not be processed if significant issues of non-compliance exist.

24. PROPOSED TIME SCHEDULE

When are proposed amendments scheduled to be undertaken: **September 2026**

Does the proposed amendment change the time schedule considered in the existing licence for any phase of development?

☐ Yes ■ No

Indicate the start and completion dates for each applicable phase of development (construction, operation, closure, and post closure). Identify proposed changes.

Construction
Proposed Start Date: **September 2026** Proposed Completion Date: **September 2027**

Operation
Proposed Start Date: **September 2027** Proposed Completion Date: **Ongoing**

Closure
Proposed Start Date: **N/A** Proposed Completion Date: **N/A**

Post - Closure
Proposed Start Date: **N/A** Proposed Completion Date:_**N/A**

For each applicable phase of development indicate which season(s) activities occur.

Construction
☐ Winter ☐ Spring ■ Summer ■ Fall ☐ All season

Operation
☐ Winter ☐ Spring ☐ Summer ☐ Fall ■ All season

Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Post - Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

25. PROPOSED TERM OF LICENCE

On what date does the existing licence expire? June 10, 2025

Is the Licensee applying for a combined renewal and amendment of the existing licence?

■ Yes ☐ No

If Yes, indicate the proposed term of the renewal (maximum of 25 years): **5 years**

Requested date of renewal issuance: **September 2026** Requested Expiry Date: **September 2031**

(The requested date of renewal issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: Processing Water Licence Applications* for more information)

26. ANNUAL REPORTING

Will the proposed amendment change the content of annual reports or the annual report template?

☐ Yes ■ No

If Yes, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

27. CHECKLIST

The following must be included with the application for Amendment for the water licensing process to begin.

Completed Application for Water Licence Amendment form.

■ Yes ☐ No If no, date expected _____

Information addressing Supplement Information Guideline (SIG), where applicable (see Block 11)

☐ Yes ■ No If no, date expected _____

Compliance Assessment / Status Report (see Block 23).

■ Yes ☐ No If no, date expected _____

Indication of Renewal Requirement (see Block 26)

■ Yes ☐ No If no, date expected _____

English Summary of Amendment Application.

■ Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Amendment Application.

■ Yes ☐ No If no, date expected _____

Application fee of $30.00 CDN (Payee Receiver General for Canada).

☐ Yes ■ No If no, date expected _____

Water Use Fee Deposit of $30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence.

☐ Yes ■ No If no, date expected _____

28. SIGNATURE

Name (Print)	Title (Print)	Signature	Date