

Land and Water Boards of the Mackenzie Valley



Type B Water Licence S23L3-002

Behdzi Ahda' First Nation – K'áhbamjútúé (Colville Lake) – Municipal

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Part A: Scope and Defined Terms

Scope:	Condition Title
<p>1. This Licence entitles the Licensee to use Water and deposit Waste for municipal purposes at K'áhbamítúé (Colville Lake), Northwest Territories. The scope of this Licence includes the following:</p> <ul style="list-style-type: none"> a) Withdrawal of Water for municipal purposes; b) Deposit of Waste to the Sewage Disposal Facilities; c) Deposit of Waste to the Solid Waste Disposal Facilities; d) Construction, operation, and maintenance of the Sewage Disposal Facilities; e) Construction, operation, and maintenance of the Solid Waste Disposal Facilities; f) Construction, operation, and maintenance of the Water Treatment Facilities; and g) Progressive Reclamation and associated Closure and Reclamation activities. 	SCOPE
<p>2. The scope of the Project is as described in the Preliminary Screening Determination for S23L3-002, month-day-year</p>	SCOPE – PRELIMINARY SCREENING
<p>3. This Licence is issued subject to the conditions contained herein with respect to the use of Water and the Deposit of Waste in any Waters or in any place under any conditions where such Waste or any other Waste that results from the Deposit of such Waste may enter any Waters. Any change made to the <i>Waters Act</i> and/or Waters Regulations that affects licence conditions and defined terms will be deemed to have amended this Licence.</p>	LEGISLATION SUBJECT TO CHANGE
<p>4. Compliance with this Licence does not relieve the Licensee from responsibility for compliance with the requirements of any applicable federal, territorial, or municipal legislation.</p>	LEGISLATIVE COMPLIANCE

Defined Terms:¹

Board – the Sahtu Land and Water Board established under Part 3 of the *Mackenzie Valley Resource Management Act*.

Closure and Reclamation – the process and activities that facilitate the return of areas affected by the Project to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and human activities.

Closure and Reclamation Plan (CRP) – a document, developed in accordance with this Licence, that clearly describes the Closure and Reclamation for the Project.

Component-Specific Closure and Reclamation Plan (Component-Specific CRP) – a document, developed in accordance with this Licence, that clearly describes the Closure and Reclamation for a component of the Project.

Construction – any activities undertaken during any phase of the Project to construct, build, upgrade, or replace any structures, facilities, or components of, or associated with, the Project.

Deposit of Waste – a Deposit of Waste in any Water or in any other place under conditions in which the Waste, or any other Waste that results from the deposit of that Waste, may enter any Waters.

Discharge – a direct or indirect deposit or release of any Water or Wastewater to Water in the Receiving Environment.

Effluent – a Wastewater Discharge.

Engineered Structure – any structure or Facilities related to Water Use or the disposal or Deposit of Waste that is designed by a Professional Engineer, including but not limited to the Water Treatment Plant (WTP), the Sewage Disposal Facilities (SDF), and the Solid Waste Disposal Facilities (SWDF), associated with the Project.

Freeboard – the vertical distance between the still Water or Wastewater line and the lowest elevation of the effective Water or Wastewater containment crest on the upstream slope of a containment structure.

¹ Defined terms are capitalized throughout the License, including when used in other definitions.

Defined Terms:¹

Greywater – all liquid Waste from showers, baths, sinks, kitchens, and domestic washing facilities, but does not include Toilet Waste.

Groundwater – as defined in section 1 of the Waters Regulations: all water in a zone of saturation below the land surface, regardless of its origin.

Hazardous Waste - a Waste which, because of its quantity, concentration, or characteristics, may be harmful to human health or the environment when improperly treated, stored, transported, or disposed of.

Inspector – an Inspector designated by the Minister under subsection 65(1) of the *Waters Act*.

Licensee – the holder of this Licence.

Minister – the Minister of the Government of the Northwest Territories (GNWT) – Environment and Natural Resources.

Professional Engineer – a person registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists to practice as a Professional Engineer in the Northwest Territories as per the territorial *Engineering and Geoscience Professions Act* and whose professional field of specialization is appropriate to address the components of the Project at hand.

Professional Geoscientist – a person registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists to practice as a Professional Geoscientist in the Northwest Territories as per the territorial *Engineering and Geoscience Professions Act* and whose professional field of specialization is appropriate to address the components of the Project at hand.

Progressive Reclamation – Closure and Reclamation activities conducted during the operating phase of the Project.

Project – the undertaking described in Part A, Conditions 1 and 2.

Receiving Environment – the natural environment that, directly or indirectly, receives any Waste from the Project.

Remediation – the removal, reduction, or neutralization of substances, Wastes, or hazardous materials from a site in order to prevent or minimize any adverse effects on the environment and public safety, now or in the future.

Runoff – the overland flow of Water or Wastewater that occurs when precipitation, meltwater, or other Water is not absorbed by the land.

Defined Terms:¹

Seepage – any Water or Waste that drains, passes through, or escapes from any structure designed to contain, withhold, divert, or retain Water or Waste.

Sewage – all Toilet Wastes and Greywater.

Sewage Disposal Facilities – the area(s) and structures designated to contain and treat Sewage.

Solid Waste Disposal Facilities – the area(s) and structures designated to contain solid Waste.

Spill Contingency Plan (SCP) – a document developed for the Project in accordance with INAC's *Guidelines for Spill Contingency Planning*.

Surveillance Network Program (SNP) – a monitoring program required by this Licence and detailed in Schedule 1.

Toilet Wastes – all human excreta and associated products, not including Greywater.

Traditional Knowledge – the cumulative, collective body of knowledge, experience and values built up by a group of people through generations of living in close contact with nature. It builds upon the historic experiences of a people and adapts to social, economic, environmental, spiritual, and political change.

Unauthorized Release – a release to the Receiving Environment of any Water or Waste not authorized under this Licence.

Waste – as defined in section 1 of the *Waters Act*:

- a) a substance that, if added to water, would degrade or alter or form part of a process of degradation or alteration of the quality of the water to an extent that is detrimental to its use by people or by an animal, fish or plant, or
- b) water that contains a substance in such a quantity or concentration, or that has been so treated, processed or changed, by heat or other means, that it would, if added to other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water to the extent described in paragraph (a), and includes
- c) a substance or water that, for the purposes of the *Canada Water Act*, is deemed to be Waste,
- d) a substance or class of substances prescribed by regulations made under subparagraph 63(1)(b)(i),

Defined Terms:¹

- e) Water that contains a substance or class of substances in a quantity or concentration that is equal to or greater than a quantity or concentration prescribed in respect of that substance or class of substances by regulations made under subparagraph 63(1)(b)(ii), and
- f) Water that has been subjected to a treatment, process or change prescribed by regulations made under subparagraph 63(1)(b)(iii).

Waste Disposal Facilities – the area(s) and structures designated for the disposal of Waste, including, but not limited to, the Sewage Disposal Facilities and Solid Waste Disposal Facilities.

Wastewater – any Water that is generated by Project activities or originates on-site, and which contains Waste, and may include, but is not limited to, Runoff, Seepage, Sewage, Minewater, and Effluent.

Wastewater Treatment Facilities – the area(s) and structures designated for the treatment of Wastewater.

Water – as defined in section 1 of the *Waters Act*: water under the administration and control of the Commissioner, whether in a liquid or frozen state, on or below the surface of land.

Waters Regulations – the regulations proclaimed pursuant to section 63 of the *Waters Act*.

Water Supply Facilities – the area(s) and structures designed to collect, treat, and supply Water for the Project.

Water Use – as defined in section 1 of the *Waters Act*: a direct or indirect use of any kind, including, but not limited to,

- a) a diversion or obstruction of Waters,
- b) an alteration of the flow of Waters, and
- c) an alteration of the bed or banks of a river, stream, lake or other body of Water, whether or not the body of Water is seasonal, but does not include a use connected with shipping activities that are governed by the *Canada Shipping Act, 2001*.

Condition	Condition Title
Part B: General Conditions	
1. The Licensee shall ensure a copy of this Licence is maintained at the Behdzi Adha' First Nation Office at all times.	COPY OF LICENCE
2. The Licensee shall take every reasonable precaution to protect the environment.	PRECAUTION TO PROTECT ENVIRONMENT
3. In conducting its activities under this Licence, the Licensee shall make every reasonable effort to consider and incorporate any scientific information and Traditional Knowledge that is made available to the Licensee.	INCORPORATE SCIENTIFIC INFORMATION AND TRADITIONAL KNOWLEDGE
4. All references to policies, guidelines, codes of practice, statutes, regulations, or other authorities shall be read as a reference to the most recent versions, unless otherwise noted.	REFERENCES
5. The Licensee shall ensure all submissions to the Board: a) Are in accordance with the LWB <i>Document Submission Standards</i> and, if applicable, <i>Geospatial Data Submissions Standards</i> ; and b) Include any additional information requested by the Board.	SUBMISSION FORMAT
6. The Licensee shall comply with all plans, programs, manuals, and studies, including revisions, approved pursuant to the conditions of this Licence.	COMPLY WITH SUBMISSIONS AND REVISIONS
7. The Licensee shall conduct an annual review of all plans, programs, manuals, and studies and make any revisions necessary to reflect changes in operations, contact information, or other details. No later than [insert date] each year, the Licensee shall send a notification letter to the Board, listing the documents that have been reviewed and do not require revisions.	ANNUAL REVIEW

Commented [NL1]: SLWB requests feedback from Proponent on preferred date.

Condition	Condition Title
8. The Licensee may propose changes at any time by submitting revised plans, programs, manuals, or studies that require Board approval to the Board, for approval, a minimum of 90 days prior to the proposed implementation date for the changes. The Licensee shall not implement the changes until approved by the Board.	REVISIONS
9. The Licensee shall revise any submission and submit it as per the Board's directive.	REVISE AND SUBMIT
10. If any date for any submission falls on a weekend or holiday, the Licensee may submit the item on the following business day.	SUBMISSION DATE
11. The Licensee shall comply with the Schedules , which form part of this Licence, and any updates to the Schedules as may be made by the Board.	COMPLY WITH SCHEDULE(S)
12. The Licensee shall comply with the Surveillance Network Program set out in Schedule 1, and any updates to the Surveillance Network Program as may be made by the Board.	COMPLY WITH SURVEILLANCE NETWORK PROGRAM
13. The Schedules and any compliance dates specified in this Licence may be updated at the discretion of the Board.	UPDATES TO SCHEDULES AND COMPLIANCE DATE(S)
14. The Licensee shall comply with all directives issued by the Board in respect of the implementation of the conditions of this Licence.	COMPLY WITH BOARD DIRECTIVES
15. The Licensee shall ensure signs are posted for all active Surveillance Network Program stations. All sign(s) shall be located and maintained to the satisfaction of an Inspector.	POST SURVEILLANCE NETWORK PROGRAM SIGN(S)
16. The Licensee shall install, operate, and maintain meters, devices, or other such methods for measuring the volumes of Water used and Waste disposed of to the satisfaction of an Inspector.	MEASURE WATER USE AND WASTE DISCHARGED

Condition	Condition Title
17. Beginning March 31, 2025 and no later than every March 31 thereafter, the Licensee shall submit an Annual Water Licence Report to the Board and an Inspector. The Report shall be in accordance with the requirements of Schedule 2, Condition 1.	ANNUAL WATER LICENCE REPORT
18. The Licensee shall immediately provide written notification to the Board and an Inspector of any non-compliance with the conditions of this Licence.	NOTIFICATION – NON-COMPLIANCE WITH CONDITIONS
19. The Licensee shall immediately provide written notification to the Board of any non-compliance with a Board directive issued in respect of the implementation of the conditions of this Licence.	NOTIFICATION – NON-COMPLIANCE WITH DIRECTIVES
20. The Licensee shall ensure that a copy of any written authorization issued to the Licensee by an Inspector is provided to the Board.	COPY – WRITTEN AUTHORIZATION

Commented [NL2]: SLWB requests feedback from Proponent for preferred date. Typically It is March 31.

Part C: Security

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Part D: Water Use

1. The Licensee shall obtain Water for the Project from K'áhbamjtúé (Colville Lake). The Licensee may withdraw up to 37, 500 m ³ /year of Water from this source.	WATER SOURCE AND MAXIMUM VOLUME
2. The Licensee shall only withdraw Water using the Water Supply Facilities, unless otherwise authorized temporarily in writing by an Inspector.	WATER WITHDRAWAL – FACILITIES
3. Prior to withdrawing Water from an approved Water source, the Licensee shall post sign(s) to identify the intake for the Water Supply Facilities. All sign(s) shall be located and maintained to the satisfaction of an Inspector.	POST WATER INTAKE SIGN(S)
4. The Licensee shall construct and maintain the Water intake(s) with a screen designed to prevent impingement or entrainment of fish. The screen shall be in accordance with the best practices outlined in Fisheries and Oceans	WATER INTAKE SCREEN

Condition	Condition Title
Canada's Interim Code of Practice: End-of-Pipe Fish Protection Screens for Small Water Intakes in Freshwater and Fish Screen Design Criteria for Flood and Water Truck Pumps.	

Part E: Construction

1. The Licensee shall ensure that all structures intended to contain, withhold, divert, or retain Water or Waste are designed, constructed, and maintained to minimize the escape of Waste to the Receiving Environment.	OBJECTIVE – CONSTRUCTION
2. The Licensee shall ensure that all Engineered Structures are constructed and maintained in accordance with the recommendations of the Professional Engineer responsible for the design, including, but not limited to, recommendations regarding field supervision and inspection requirements.	ENGINEERED STRUCTURES – GENERAL
3. The Licensee shall only use material that is clean and free of contaminants and has been authorized in writing by an Inspector.	CONSTRUCTION MATERIAL – SOURCE(S)
4. The Licensee shall maintain records of Construction materials for all structures and make them available at the request of the Board or an Inspector.	CONSTRUCTION RECORDS
5. A minimum of 90 days prior to the commencement of Construction of any Engineered Structures, the Licensee shall submit to the Board, for approval, a Design and Construction Plan . The Plan shall be in accordance with the requirements of Schedule 3, Condition 1. The Licensee shall not commence Construction of the Engineered Structure(s) prior to Board approval of the Plan.	DESIGN AND CONSTRUCTION PLAN
6. A minimum of 90 days prior to the commencement of Construction of any Engineered Structures, the Licensee shall submit to the Board, Design Drawings stamped and signed by a Professional Engineer. A minimum of 90 days prior to implementing any proposed changes to the Design Drawings, the Licensee shall submit revised Design Drawings to the Board.	DESIGN DRAWINGS
7. A minimum of ten days prior to the commencement of Construction of any Engineered Structure(s), the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the Construction commencement date, and the name and contact information for the individual responsible for overseeing Construction. Written notification shall be provided to the Board and an Inspector if any changes occur.	NOTIFICATION – CONSTRUCTION – ENGINEERED STRUCTURES

Condition	Condition Title
8. A minimum of ten days prior to the commencement of Construction of any structure(s) intended to contain, withhold, divert, or retain Water or Wastes, the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the Construction commencement date, and the name and contact information for the individual responsible for overseeing the Construction. Written notification shall be provided to the Board and an Inspector if any changes occur.	NOTIFICATION – CONSTRUCTION
9. The Licensee shall ensure that all Engineered Structures are constructed in accordance with the Design Drawings and approved Design and Construction Plan(s) .	CONSTRUCT AS DESIGNED – ENGINEERED STRUCTURE(S)
10. Within 180 days of the completion of the Construction of each Engineered Structure, the Licensee shall submit to the Board, an As-Built Report stamped and signed by a Professional Engineer, which shall include, but not be limited to, the following information: a) final as-built drawings of the Engineered Structure(s), stamped and signed by a Professional Engineer; b) documentation, with rationale, of field decisions that deviate from the Design and Construction Plans and Design Drawings ; and c) any data used to support these decisions.	AS-BUILT REPORT – ENGINEERED STRUCTURE(S)

Part F: Waste and Water Management

1. The Licensee shall manage Waste and Water with the objective of minimizing the impacts of the Project on the quantity and quality of Water in the Receiving Environment through the use of appropriate mitigation measures, monitoring, and follow-up actions.	OBJECTIVE – WASTE AND WATER MANAGEMENT
2. The Licensee shall minimize erosion by implementing suitable erosion control measures that shall be located and maintained to the satisfaction of an Inspector.	EROSION CONTROL
3. The Licensee shall operate and maintain the Waste Disposal Facilities to prevent structural failure.	PREVENT STRUCTURAL FAILURE

Condition	Condition Title
4. The Licensee shall operate and maintain the Waste Disposal Facilities to the satisfaction of an Inspector.	WASTE DISPOSAL FACILITIES - INSPECTOR SATISFACTION
5. The Licensee shall not accept Sewage and solid Wastes generated by industrial, commercial, and institutional operators working outside of the community of K'áhbamítúé (Colville Lake) unless authorized in writing by an Inspector.	SEWAGE AND SOLID WASTES – MUNICIPAL
6. The Licensee shall not accept Hazardous Wastes generated by commercial, industrial, and institutional operators, at the Waste Disposal Facilities.	HAZARDOUS WASTES – MUNICIPAL
7. The Licensee shall not accept Contaminated soil from industrial, commercial, and institutional operators at the Waste Disposal Facilities, unless otherwise authorized in writing by an Inspector.	CONTAMINATED SOIL - MUNICIPAL

Water

8. The Licensee shall comply with the Water Treatment Plant Operation and Maintenance Plan , once approved.	WATER TREATMENT PLANT OPERATION AND MAINTENANCE PLAN
9. Within 12 months following the effective date of this Licence, the Licensee shall submit to the Board, for approval, a revised Water Treatment Plant Operation and Maintenance Plan .	WATER TREATMENT PLANT OPERATION AND MAINTENANCE PLAN - REVISED

Sewage

10. The Licensee shall comply with the Sewage Disposal Facilities Operation and Maintenance Plan , once approved.	SEWAGE DISPOSAL FACILITIES OPERATION AND MAINTENANCE PLAN
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Commented [NL3]: Pending outcome of Board decisions, condition will cover off for either Original plan or Revised plan for Water Treatment, SDF, and SWDF O+M Plans.

Condition	Condition Title
11. Within 12 months following the effective date of this Licence, the Licensee shall submit to the Board, for approval, a revised Sewage Disposal Facilities Operation and Maintenance Plan .	SEWAGE DISPOSAL FACILITIES OPERATION AND MAINTENANCE PLAN – REVISED
12. The Licensee shall construct, operate, and maintain the Sewage Disposal Facilities to the design specifications and engineering standards, such that: a) Any constructed structures/facilities are maintained and operated so as to prevent structural failure; and b) Any deterioration or erosion of constructed structures/facilities that requires repair shall be reported to an Inspector and the Board, and repaired immediately.	SEWAGE DISPOSAL FACILITIES
13. The Licensee shall maintain a Freeboard limit of one metre at the Sewage Disposal Facilities, or as recommended by a Professional Engineer and as approved by the Board.	SEWAGE DISPOSAL FACILITIES – FREEBOARD
14. The Licensee shall dispose of all piped and pumped Sewage to the Sewage Disposal Facilities, or as otherwise approved by the Board. Discharge from the Sewage Disposal Facilities will be to the adjacent natural wetland.	SEWAGE - SEWAGE DISPOSAL FACILITIES
Solid Waste	
15. The Licensee shall comply with the Solid Waste Disposal Facilities Operation and Maintenance Plan , once approved.	SOLID WASTE DISPOSAL FACILITIES OPERATION AND MAINTENANCE PLAN
16. Within 12 months following the effective date of this Licence, the Licensee shall submit to the Board, for approval, a revised Solid Waste Disposal Facilities Operation and Maintenance Plan .	SOLID WASTE DISPOSAL FACILITIES OPERATION AND MAINTENANCE PLAN

Condition	Condition Title
	– REVISED
17. The Licensee shall construct, operate, and maintain the Solid Waste Disposal Facilities to the design specifications and engineering standards, such that: <ul style="list-style-type: none"> a) Any constructed structures/facilities are maintained and operated so as to prevent structural failure; and b) Any deterioration or erosion of constructed structures/facilities that requires repair shall be reported to an Inspector and the Board, and repaired immediately. 	SOLID WASTE DISPOSAL FACILITIES
18. The Licensee shall dispose of all solid Waste to the Solid Waste Disposal Facilities, as described in the approved Solid Waste Disposal Facilities Operation and Maintenance Plan .	SOLID WASTE – SOLID WASTE DISPOSAL FACILITIES
19. The Licensee shall act in accordance with the best practices outlined in Environment and Climate Change Canada’s <i>Solid Waste Management for Northern and Remote Communities: Planning and Technical Guidance Document</i> .	SOLID WASTE – GUIDANCE DOCUMENT
20. Within 12 months following the effective date of this Licence, the Licensee shall maintain a Waste segregation area for household/municipal Hazardous Waste to the satisfaction of an Inspector.	SOLID WASTE – SEGREGATION
21. The Licensee is prohibited from incinerating materials at the Solid Waste Disposal Facilities, unless otherwise authorized in writing by an Inspector.	SOLID WASTE – NO INCINERATION

Part G: Aquatic Effect Monitoring Program

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Part H: Spill Contingency Planning

1. The Licensee shall ensure that Unauthorized Releases associated with the Project do not enter any Water.	OBJECTIVE – PREVENT WASTE INTO WATER
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Condition	Condition Title
2. The Licensee shall comply with the Spill Contingency Plan , once approved.	SPILL CONTINGENCY PLAN
3. Within 90 days following the effective date of this Licence, the Licensee shall submit to the Board, for approval, a revised Spill Contingency Plan .	SPILL CONTINGENCY PLAN – REVISED
4. If a spill or an Unauthorized Release occurs or is foreseeable, the Licensee shall: <ul style="list-style-type: none"> a) Implement the approved Spill Contingency Plan referred to in Part H, Condition 2; b) Report it immediately using the NU-NT Spill Report Form by one of the following methods: <ul style="list-style-type: none"> <input type="checkbox"/> Telephone: (867) 920-8130 <input type="checkbox"/> Fax: (867) 873-6924 <input type="checkbox"/> E-mail: spills@gov.nt.ca <input type="checkbox"/> Online: Spill Reporting and Tracking Database c) Notify the Board and an Inspector immediately; and d) Within 30 days of initially reporting the incident, or within a timeframe authorized by an Inspector, submit a detailed report to the Board and an Inspector, including descriptions of causes, response actions, and any changes to procedures to prevent similar occurrences in the future. Written notification shall be provided to the Board and an Inspector if any changes occur. 	REPORT SPILLS
5. The Licensee shall ensure that spill prevention infrastructure and spill response equipment is in place prior to commencement of the Project.	SPILL PREVENTION AND RESPONSE EQUIPMENT
6. The Licensee shall restore all areas affected by spills and Unauthorized Releases to the satisfaction of an Inspector.	CLEAN UP SPILLS

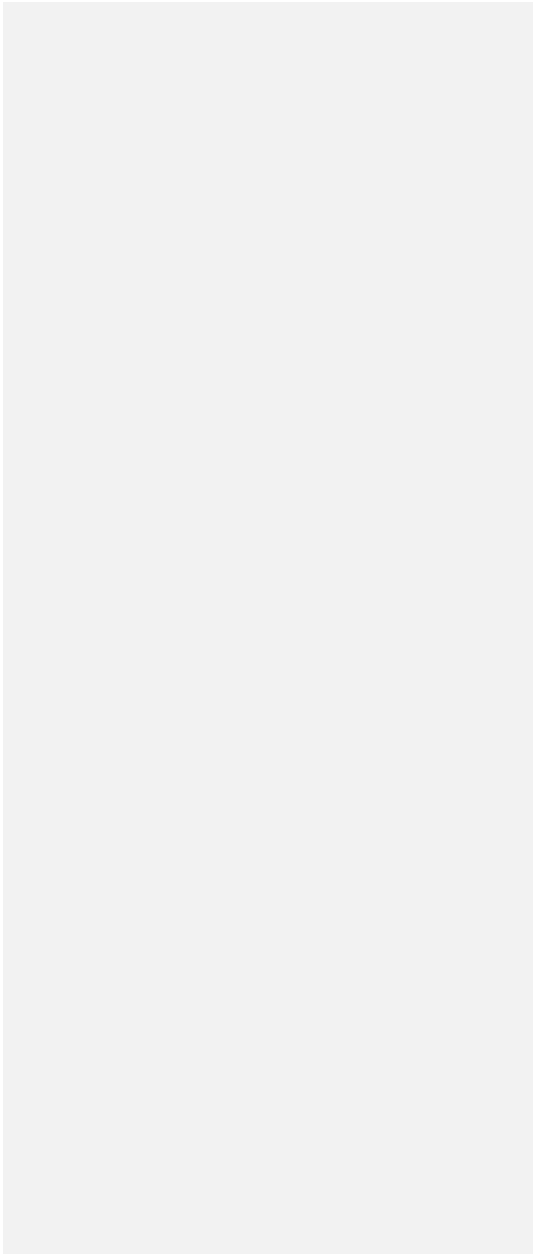
Commented [NL4]: SLWB requests feedback from Proponent on preferred timeline for Spill Contingency Plan - Revised

Part I: Closure and Reclamation

1. One year prior to Progressive Reclamation of any specific component of the Project, the Licensee shall submit to the Board, for approval, a Component-Specific Closure and Reclamation Plan . The Plan shall be in accordance with the requirements of Schedule 4, Conditions 1,2. The Licensee shall not commence activities described in the Plan prior to Board approval.	COMPONENT-SPECIFIC CLOSURE AND RECLAMATION PLAN
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Condition	Condition Title
2. The Licensee shall endeavor to carry out approved Progressive Reclamation as soon as is reasonably practicable.	PROGRESSIVE RECLAMATION
3. The Licensee shall not conduct Progressive Reclamation except as approved by the Board.	PROGRESSIVE RECLAMATION – CARRY OUT AS APPROVED



Schedule 1: Surveillance Network Program (SNP)

Reporting Requirements

1. The effective date of this Surveillance Network Program is **month-day-year**
2. The Licensee shall include all of the data and information required in Schedule 2 in the Annual Water Licence Report, as specified in Part B, Condition 17 of this Licence
3. The Licensee shall also provide SNP data at other times, if requested by an Inspector or the Board

Surveillance Network Station Descriptions and Sampling Requirements

4. SNP Station information is set out below. The location of each Station is approximate and subject to approval from an Inspector.

SNP Station Quick Reference Guide

Station #	Description	Status
SNP-1	Monitoring well southwest of SWDF	Active
SNP-2	Monitoring well south of SWDF	Active
SNP-3	Monitoring well northwest of SWDF	Active
SNP-4	Monitoring well north of SWDF	Active
SNP-E	A proposed SNP monitoring well downgradient of the SDF	Proposed
SNP-C	A proposed SNP monitoring well downgradient of the SDF	Proposed
SNP-W	A proposed SNP monitoring well downgradient of the SDF	Proposed
SNP-L	A proposed SNP raw Water sample from Colville Lake	Proposed

Commented [NL5]: SLWB note the proposed groundwater monitoring stations SNP-E, -C and -W and are seeking input on:
 1. Convert these (3) to surface water monitoring SNP locations instead of groundwater monitoring wells.
 2. Move at least 2 SNP locations closer to adjacent water body to the SDF.

SNP Stations

Description:	SNP-1
Location:	67.017908, -126.065683
Sampling Frequency:	Twice annually, once in spring and once in fall
Sampling Parameters:	Field parameters ¹ , Major Ions ² , Metals ^{3a} , Nitrate - as Nitrogen, Nitrite - as Nitrogen, Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Total Petroleum Hydrocarbon Fractions F1 and F2, Oil and Grease, Total Phenols, Methyl <i>tert</i> -butyl ether, Dissolved Organic Carbon (DOC), Water Level (masl)
Rationale:	Monitor Groundwater quality on perimeter of SWDF
Status:	Active

Description:	SNP-2
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Location:	67.017695, -126.063687
Sampling Frequency:	Twice annually, once in spring and once in fall
Sampling Parameters:	Field parameters ¹ , Major Ions ² , Metals ^{3a} , Nitrate - as Nitrogen, Nitrite - as Nitrogen, Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Total Petroleum Hydrocarbon Fractions F1 and F2, Oil and Grease, Total Phenols, Methyl <i>tert</i> -butyl ether, Dissolved Organic Carbon (DOC), Water Level (masl)
Rationale:	Monitor Groundwater quality on perimeter of SWDF
Status:	Active

Description:	SNP-3
Location:	67.018608, - 126.064487
Sampling Frequency:	Twice annually, once in spring and once in fall
Sampling Parameters:	Field parameters ¹ , Major Ions ² , Metals ^{3a} , Nitrate - as Nitrogen, Nitrite - as Nitrogen, Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Total Petroleum Hydrocarbon Fractions F1 and F2, Oil and Grease, Total Phenols, Methyl <i>tert</i> -butyl ether, Dissolved Organic Carbon (DOC), Water Level (masl)
Rationale:	Monitor Groundwater quality on perimeter of SWDF
Status:	Active

Description:	SNP-4
Location:	67.018935, -126.062735
Sampling Frequency:	Twice annually, once in spring and once in fall
Sampling Parameters:	Field parameters ¹ , Major Ions ² , Metals ^{3a} , Nitrate - as Nitrogen, Nitrite - as Nitrogen, Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Total Petroleum Hydrocarbon Fractions F1 and F2, Oil and Grease, Total Phenols, Methyl <i>tert</i> -butyl ether, Dissolved Organic Carbon (DOC), Water Level (masl)
Rationale:	Monitor Groundwater quality on perimeter of SWDF
Status:	Active

Description:	SNP-E
Location:	67.020962, - 126.056166
Sampling Frequency:	Monthly during periods of flow (lagoon Discharge); if no flow – once per year
Sampling Parameters:	Field parameters ¹ , Major Ions ² , Metals ^{3b} , Nutrients ⁴ , Faecal Coliforms, Total Suspended Solids, Oil and Grease, Carbonaceous Biochemical Oxygen Demand (CBOD)
Rationale:	Monitoring Water downgradient of SDF
Status:	Proposed location

Description:	SNP-C
Location:	67.020985, -126.056617
Sampling Frequency:	Monthly during periods of flow (lagoon Discharge); if no flow – once per year
Sampling Parameters:	Field parameters ¹ , Major Ions ² , Metals ^{3b} , Nutrients ⁴ , Faecal Coliforms, Total Suspended Solids, Oil and Grease, Carbonaceous Biochemical Oxygen Demand (CBOD)
Rationale:	Monitoring Water downgradient of SDF
Status:	Proposed location

Description:	SNP-W
Location:	67.020782, -126.057033
Sampling Frequency:	Monthly during periods of flow (lagoon Discharge); if no flow – once per year
Sampling Parameters:	Field parameters ¹ , Major Ions ² , Metals ^{3b} , Nutrients ⁴ , Faecal Coliforms, Total Suspended Solids, Oil and Grease, Carbonaceous Biochemical Oxygen Demand (CBOD)
Rationale:	Monitoring Water downgradient of SDF
Status:	Proposed location

Description:	SNP-L
Location:	Colville Lake intake
Sampling Frequency:	Continuous
Sampling Parameters:	Volume (m ³)
Rationale:	To determine the quantity of Water withdrawn from Colville Lake for municipal purposes.
Status:	Active

¹ Field parameters shall include the following measurements:

<u>pH</u>
<u>Electrical Conductivity (EC)</u>
<u>Temperature</u>
<u>Dissolved Oxygen (DO)</u>

² Major ions shall include the following parameters:

<u>Calcium (Ca)</u>	<u>Magnesium (Mg)</u>
<u>Chloride (Cl)</u>	<u>Sodium (Na)</u>
<u>Total Alkalinity (as CaCO₃)</u>	<u>Potassium (K)</u>

Total Dissolved Solids (TDS)	Total Hardness (as CaCO ₃)
Sulphate (SO ₄)	

^{3a} ICP-MS Metals Scan (for Groundwater SNPs) shall include, at a minimum, the following parameters:

Aluminum (Al) - dissolved	Chromium (Cr) – Hexavalent (VI)	Nickel (Ni) - dissolved
Antimony (Sb) – dissolved	Cobalt (Co) - dissolved	Selenium (Se) - dissolved
Arsenic (As) – dissolved	Copper (Cu) - dissolved	Silver (Ag) - dissolved
Barium (Ba) – dissolved	Iron (Fe) - dissolved	Strontium (Sr) - dissolved
Beryllium (Be) – dissolved	Lead (Pb) - dissolved	Uranium (U) - dissolved
Boron (B) – dissolved	Manganese (Mn) - dissolved	Vanadium (V) - dissolved
Cadmium (Cd) - dissolved	Mercury (Hg) - total	Zinc (Zn) - dissolved
Chromium (Cr) – Trivalent (III)	Molybdenum (Mo) - dissolved	

^{3b} ICP-MS Metals Scan (for Surface Waters SNPs) shall include, at a minimum, the following parameters:

Aluminum (Al) – dissolved	Cobalt (Co) - total	Selenium (Se) – total
Iron (Fe) - dissolved	Copper (Cu) - total	Silver (Ag) - total
Arsenic (As) - total	Lead (Pb) - total	Thallium (Tl) - total
Beryllium (Be) - total	Manganese (Mn)- total	Uranium (U) – total
Boron (B) - total	Mercury (Hg) - total	Vanadium (V) – total
Cadmium (Cd) - total	Molybdenum (Mo) - total	Zinc (Zn) - total
Chromium (Cr) – Trivalent (III)	Nickel (Ni) - total	
Chromium (Cr) – Hexavalent (VI)		

⁴ Nutrients shall include, at a minimum, the following parameters:

Ammonia – as Nitrogen (NH ₃ –as N) (un-ionized)	Phosphorus (P) - total
Ammonia – as Nitrogen (NH ₃ –as N) (total)	Phosphorus (P) - dissolved
Nitrate - as Nitrogen (NO ₃ -as N)	Ortho-phosphorus
Nitrite - as Nitrogen (NO ₂ -as N)	Total Organic Carbon (TOC)
Total Kjeldahl Nitrogen (TKN)	

Other Monitoring Requirements

5. N/A

Meteorological Monitoring Requirements

6. N/A

Schedule 2: Annual Water Licence Report

	Condition
1. The Annual Water Licence Report referred to in Part B, Condition 17 of this Licence shall include, but not be limited to, the following information about activities conducted during the previous calendar year OR from X to Y of the preceding year of operations : <ul style="list-style-type: none">a) The monthly and annual quantities in cubic metres of fresh Water obtained from all sources, as required in Part B, Condition 16 of this Licence;b) Tabular summaries of all data generated under the Surveillance Network Program (SNP) referred to in Part B, item 12 of this Licence;c) Laboratory reports for all samples collected for the Surveillance Network Program (SNP), attached as an appendix;d) A summary of Construction activities conducted, in accordance with this Licence;e) A summary of major maintenance activities conducted, in accordance with this Licence;f) A summary of activities conducted in accordance with the approved Water Treatment Plant Operation and Maintenance Plan, referred to in Part F, Condition 8 of this Licence, including:<ul style="list-style-type: none">i. A summary of approved updates or changes to the process or facilities required for the management of Waterii. Monthly and annual quantities/volumes by location of Water managed under the Plan;iii. Tabular summaries of all data generated under the SNP in Schedule 1 pertaining to the Water Treatment Facilities;iv. Laboratory reports for all samples collected for the Surveillance Network Program (SNP), attached as an appendix; andv. A summary and interpretation of any monitoring results.g) A summary of activities conducted in accordance with the approved Sewage Disposal Facilities Operations and Maintenance Plan referred to in Part F, Condition 10 of this Licence, including:<ul style="list-style-type: none">i. A summary of approved updates or changes to the process or facilities required for the management of Wastewater;ii. Monthly and annual quantities, in cubic metres, of Wastewater disposed of at the Sewage Disposal Facilities;iii. Monthly and annual quantities, in cubic metres, of Waste disposed of at the Sewage Disposal Facilities from the Solid Waste Disposal Facilities, identified by source and type of Waste;	

Commented [NL6]: SLWB requests feedback from Proponent on preferred time.

Condition

- iv. Monthly and annual quantities, in cubic metres, of Waste disposed of at the Sewage Disposal Facilities from the Water Treatment Facilities, identified by source and type of Waste, if applicable;
 - v. Monthly and annual quantities, in cubic metres, of Waste disposed of at the Sewage Disposal Facilities from operators outside of the community of K'áhbamjtúé (Colville Lake);
 - vi. Monthly and annual quantities, in cubic metres, of all Wastewater Discharges, identified by Discharge location;
 - vii. Tabular summaries of all data generated under the SNP in Schedule 1 pertaining to the Sewage Disposal Facilities;
 - viii. Laboratory reports for all samples collected for the Surveillance Network Program (SNP), attached as an appendix; and
 - ix. A summary and interpretation of any monitoring results.
- h) A summary of activities conducted in accordance with the approved **Solid Waste Disposal Facilities Operations and Maintenance Plan**, referred to in Part F, **Condition 15** of this Licence, including:
- i. A summary of approved updates or changes to the process or facilities required for the management of Waste under the Plan;
 - ii. Monthly and annual quantities of Waste disposed of at the Solid Waste Disposal Facilities;
 - iii. Monthly and annual quantities of Waste removed from the Solid Waste Disposal Facilities;
 - iv. Monthly and annual quantities, in cubic metres, of Waste disposed of at the Solid Waste Disposal Facilities from operators outside of the community of K'áhbamjtúé (Colville Lake);
 - v. Tabular summaries of all data generated under the SNP in Schedule 1 pertaining to the Solid Waste Disposal Facilities;
 - vi. Laboratory reports for all samples collected for the Surveillance Network Program (SNP), attached as an appendix;
 - vii. A summary and interpretation of any monitoring results.
- i) A summary of sludge management activities conducted in accordance with the approved **Sewage Disposal Facilities Operations and Maintenance Plan** referred to in Part F, **Condition 10** of this Licence, including, but not limited to:
- i. A summary of sludge management activities, including any approved updates or changes to sludge management practices or facilities;
 - ii. A summary of all sludge depth and volume measurements;
 - iii. A summary of any trends in sludge accumulation, if noted, and any future plans for sludge management;
 - iv. A summary of any sludge quality analyses;
 - v. The volume of any sludge removed from the Sewage Disposal Facilities; and
 - vi. A summary of sludge management, treatment, re-use and/or disposal activities, specifying any final location(s) of sludge.
- j) A summary of activities conducted in accordance with the approved **Spill Contingency Plan**, referred to in Part H, Condition 2 of this Licence, including:

Condition

- i. A list and description for all Spills and Unauthorized Releases, including the date, NWT spill number, volume, location, summary of the circumstances and follow-up actions taken, and status (i.e., open or closed), in accordance with the reporting requirements in Part H, Condition 4 of this Licence; and
- ii. An outline of any spill training and communications exercises carried out.

- k) A summary of any Component-Specific Closure and Reclamation work completed during the year and an outline of any work anticipated for the next year;

- l) A list of any non-compliance(s) with the conditions of this Licence or any directive from the Board pursuant to the conditions of this Licence;

- m) A summary of actions taken to address concerns, non-conformances, or deficiencies in any reports filed by an Inspector; and

- n) Any other details requested by the Board by March 31 of the year being reported

Commented [NL7]: SLWB requests feedback from proponent on preferred date.

Schedule 3: Conditions Applying to Construction

Condition

1. The **Design and Construction Plans** referred to in Condition DESIGN AND CONSTRUCTION PLAN shall include, but not be limited to, the following:
 - a) Information regarding the design of the facilities:
 - i. A description of the facilities to be constructed, including proposed locations with GPS coordinates and a map to scale;
 - ii. Relevant background information for the area beneath the footprint of the facilities, as deemed adequate by the Professional Engineer responsible for the design, which may include:
 - the results and data from geotechnical and geochemical investigations; hydrogeological investigations; and programs to characterize soil, rock, Groundwater, ground ice, and ground temperature conditions to the depth expected to be affected by the facilities;
 - population projections; constraint mapping including areas of local importance; drainage patterns, climate; and
 - any other relevant information.
 - iii. A description of any instrumentation that will be installed as part of the facilities, including locations and rationale; and
 - iv. A description of any operations and maintenance requirements associated with the design of the facilities.
 - b) Information regarding the Construction of the facilities:
 - i. A Construction schedule, including timing, and sequencing information;
 - ii. A description of the materials required for Construction, including, but not limited to:
 - a. sources;
 - b. quantities;
 - c. physical characteristics; and
 - d. geochemical characteristics.
 - iii. A description of any potential effects on the Receiving Environment associated with Construction of the facilities; and
 - iv. A description of any mitigation measures that will be undertaken to minimize the potential impacts identified above.

Schedule 4: Conditions Applying to Closure and Reclamation

Condition

1. With regard to Sewage Disposal Facilities being closed, the **Component-Specific Closure and Reclamation Plan** referred to in Part I, Condition 1 shall include, but not be limited to:
 - a) Logistical and financial considerations;
 - b) Intended future use of the land after closure;
 - c) Remediation of contaminated material;
 - d) For the Project component being closed, a description of Component-Specific Closure and Reclamation plans, including, but not limited to:
 - i. Closure Objectives and Criteria;
 - ii. Closure and Reclamation options and selected closure activity;
 - iii. Remediation of contaminated material;
 - iv. As-built drawings of the entire Sewage Disposal Facilities, including accurate plot plan;
 - v. Geographic positioning systems coordinates, and permanent location markers;
 - vi. Soil testing results from lagoon and wetland areas;
 - vii. Contaminated site Remediation, if required, such as removal of contaminated soil from beneath the lined lagoon and/or the wetland;
 - viii. Removal of equipment and structures that will not be used during the closure phase;
 - ix. Consideration for altered drainage patterns;
 - x. Choice of capping material, and availability;
 - xi. Cover monitoring for stability, erosion, and settlement;
 - xii. Design and as-built drawings, signed and stamped by a Professional Engineer, for any Engineered Structures;
 - xiii. Water management and restoration of natural drainage;
 - xiv. Predicted environmental effects during and after Closure and Reclamation activities;
 - xv. Post-closure monitoring, maintenance, and reporting for sludges, sediments, surface water, Groundwater, and erosion to ensure that the site does not pose unacceptable risks to human or environmental health;
 - xvi. Environmental management systems (if necessary) for leachate, Groundwater, and surface water;
 - xvii. Signage installation indicating closure in progress, and Facilities no longer in operation; and
 - xviii. Climate change considerations.

Condition

2. With regard to Solid Waste Disposal Facilities being closed, the **Component-Specific Closure and Reclamation Plan** referred to in Part I, Condition 1 shall include, but not be limited to, the applicable contents of Tables 8.1 and 8.2 of Environment and Climate Change Canada's *Solid Waste Management for Northern and Remote Communities: Planning and Technical Guidance Document*.
3. With regard to the Water Treatment Plant being closed, the **Component-Specific Closure and Reclamation Plan** referred to in Part I, Condition 1 shall include, but not be limited to:
 - a) Logistical and financial considerations;
 - b) Intended future use of the land after closure;
 - c) For the Project component being closed, a description of Component-Specific Closure and Reclamation plans, including, but not limited to:
 - i. Closure Objectives and Criteria;
 - ii. Closure and Reclamation options and selected closure activity;
 - iii. Geographic positioning systems coordinates, and permanent location markers;
 - iv. Soil testing results, if required
 - v. Contaminated site Remediation, if required, such as removal of contaminated soil from beneath the building pad
 - vi. Removal of equipment and structures that will not be used during the closure phase;
 - vii. Consideration for altered drainage patterns;
 - viii. Cover monitoring for stability, erosion, and settlement;
 - ix. Design and as-built drawings of the Water Treatment Plant, including accurate plot plan, signed and stamped by a Professional Engineer, for any Engineered Structures;
 - x. Water management and restoration of natural drainage;
 - xi. Predicted environmental effects during and after Closure and Reclamation activities;
 - xii. Post-closure monitoring, maintenance, and reporting for sediments, surface water, Groundwater, and erosion to ensure that the site does not pose unacceptable risks to human or environmental health;
 - xiii. Environmental management systems (if necessary) for Groundwater, and surface water;
 - xiv. Signage installation indicating closure in progress, and Facilities no longer in operation; and
 - xv. Climate change considerations.

Attachments

Attachment A – Concordance Table of Items Requiring Submission

The table below summarizes the items the Licensee is required to submit as per the Licence conditions. In the event of a discrepancy between this table and the Licence conditions, the Licence conditions shall prevail.

Condition Location	Item	Date
Part B, Condition 7	Conduct annual review of all plans, programs, manuals and studies. Submit revisions to submissions for Board approval (Plans, reports)	At any time, but at least 90 days prior to implementing any proposed updates or changes in the approved submission
Part B, Condition 15	Post signage to identify Surveillance Network Program stations (located and maintained to the satisfaction of an Inspector)	Prior to establishing, activating or relocating any SNP stations
Part B, Condition 17	Submit Annual Water Licence report (covering the previous calendar year of January 1 to December 31)	Beginning March 31, 2025 and every March 31 thereafter
Part F, Condition 11	Submit revised Sewage Disposal Facilities Operation and Maintenance Plan, for Board approval	Within 12 months of issuance (by DATE)
Part F, Condition 9	Submit revised Water Treatment Facilities Operation and Maintenance Plan, for Board approval	Within 12 months of issuance (by DATE)
Part F, Condition 16	Submit revised Solid Waste Disposal Facilities Operation and Maintenance Plan, for Board approval.	Within 12 months of issuance (by DATE)
Part E, Condition 8	Provide written notification of Construction to the Board and an Inspector	Minimum of 10 days prior to commencement of Construction
Part E, Condition 5	Submit Design and Construction Plan for Board approval	Minimum of 90 days prior to commencement of Construction
Part E, Condition 6	Submit design drawings to the Board	Minimum of 90 days prior to commencement of Construction of any Engineered Structures
Part E, Condition 10	Submit As-built Reports for Construction to the Board	Within 180 days of the completion of Construction of an Engineered Structure
Part H, Condition 3	Submit revised Spill Contingency Plan to the Board, for Board approval	Within 90 days of issuance (by DATE)
Part H, Condition 4	Submit detailed report of spill/incident to the Board and an Inspector	Within 30 days of initially reporting the spill/incident
Part I, Condition 1	Submit Component-Specific Closure and Reclamation Plan, for Board approval	One year prior to the Closure and Reclamation of any specific component of the Project included in the scope of the Licence

Commented [NL8]: TBD if required for the Plans, pending Board decision.

Attachment B – Revision History Table

The table below summarizes revisions made to the Licence since its effective date (as set out on the Cover Page).

Date	Location of Change	Description of Change
[issuance date of updated or amended Licence]	[Part(s) and/or Condition(s) of Licence]	

DRAFT

