

SATHU LAND AND WATER BOARD
DRAFT Type B Water Licence S17L1-004

Enbridge Pipelines (NW) Inc. – Industrial Use - Line 21 Pipeline Maintenance at Saline River

Part A: Scope and Definitions

Scope

1. This Licence entitles the Licensee to use Water, dewater a portion of the Saline River, and dispose of Waste for the purpose of industrial undertakings for the off Right-of-Way (ROW) activities associated with maintenance of the Line 21 Pipeline within the Saline River (KP 180.168 and KP 180.280) and includes the following:
 - i. Construction, operation, and maintenance of a temporary work space adjacent to the existing Enbridge ROW and below the Ordinary High Water Mark of the Saline River;
 - ii. Withdrawal of Water from the Saline River for maintenance of access routes and operation of the MYB camp with total volume use to be less than 100 m³/day;
 - iii. Watercourse crossing;
 - iv. Removal and re-placement of greater than 100 m³ of excavated material within the Ordinary High Water Mark of the Saline River;
 - v. Dewatering excavation areas if flow is present;
 - vi. Channel diversion if flow is present;
 - vii. Deposit of Waste to a licenced facility;
 - viii. Installation and maintenance of erosion control measures;
 - ix. Fuel and hazardous materials storage; and
 - x. Progressive Reclamation and associated closure activities.
2. This Licence is issued subject to the conditions contained herein with respect to the taking of Water and the depositing of Waste of any type 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. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the *Waters Act*, or other statutes imposing more stringent conditions relating to the quantity or type of Waste that may be so deposited or under which any such Waste may be so deposited this Licence shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations.
3. In conducting its activities under this Licence, the Licensee shall make best efforts to consider and incorporate any scientific and Traditional Knowledge that is made available to the Licensee.
4. Compliance with the term and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of any applicable Federal, Territorial or Municipal legislation.

Commented [SS1]: Appendix V includes extent of temporary work space as well as potential isolation options should flow be present during excavations

Definitions

In this Licence, S17L1-004

Act - the *Waters Act*, S.N.W.T. 2014, c.18.

Analyst - an Analyst designated by the Minister under subsection 65(1) of the Act.

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

Camp Wastes – all Wastes generated as part of the operation of the MYB Camp including Sewage.

Complete Application - the Type B Water Licence application with supporting documents as submitted to the Board and deemed complete on December 18, 2017 for maintenance at the Line 21 Pipeline site (KP 180.168) located within the Saline River in the Tulita District of the Sahtu, NT

Construction - any activities undertaken to construct or build any structures, facilities or components of, or associated with, the development of the Project including any Construction activities undertaken during Operations and closure phases of the Project.

Contingency Planning – a plan to establish a state of readiness that will enable prompt and effective response to possible spill or system failure.

Dam – a structure that meets the definition of a dam under the Dam Safety Guidelines and is intended to contain, withhold, divert, or retain water or Waste.

Dam Safety Guidelines - the *Canadian Dam Association's (CDA) Dam Safety Guidelines, 2007*. The scope and application of the *Dam Safety Guidelines* referred to in the Licence, is presented in Section 1 of the *Dam Safety Guidelines*.

Dewatering – the complete removal of water from an existing water body or portion thereof by pumping or draining.

Discharge – the direct or indirect release of any Water or Waste to the Receiving Environment.

Drawdown - the partial removal of Water from a natural waterbody.

Engagement Plan - a document, developed in accordance with the Board's June 2013 *Engagement and Consultation Policy and the Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits*, that describes proposed engagement activities during the life of the undertaking.

Engineered Structure - means any structure or facility related to Water Use or the deposit of Waste that is normally designed and approved by a Professional Engineer, that are associated with the Construction, Operation, closure and Reclamation of the Project.

Freeboard - the vertical distance between the Water line and the lowest elevation of the effective Water containment crest on a dam or dyke's upstream slope.

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

Groundwater - all Water in a zone of saturation beneath the land surface, regardless of its origin, as defined in the Regulations.

Inspector - an Inspector designated by the Minister under subsection 65(1) of the Act.

Licensee - the holder of this Licence.

Maximum Grab Concentration - a concentration of a parameter listed in the Licence that cannot be exceeded in any one grab sample.

Minister - a duly appointed member of the Executive Council who is responsible for the *Waters Act* or the department responsible for administering that Act.

Modification - a change, other than an expansion, that does not alter the purpose or function of a structure.

Ordinary High Water Mark - the usual or average level to which a body of Water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams), this refers to as active channel/bank-full level, which is often the 1:2 year flood flow return level. In inland lakes, wetlands or marine environments, it refers to those parts of the Watercourse bed and banks that are frequently flooded by Water so as to leave a mark on the land and where the natural vegetation changes from predominantly aquatic vegetation to terrestrial vegetation (excepting water tolerant species). For reservoirs, this refers to normal high operating levels (full supply level).

Professional Engineer - a person who is registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists in accordance with the Engineering and Geoscience Professions Act, S.N.W.T. 2006, V.16, or subsequent editions, as a Professional Engineer, and whose principal field of specialization is appropriate to address the components of the Project at hand.

Project - the undertaking described in Part A, item 1.

Receiving Environment – the natural/aquatic environment that receives any deposit or Discharge of Waste or Water, including runoff, from the Project.

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

Regulations - Regulations proclaimed pursuant to section 63 of the Act.

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.

Spill Contingency Plan - a document, developed in accordance with Indian and Northern Affairs Canada's April 2007 *Guidelines for Spill Contingency Planning* that describes the set of procedures to be implemented to minimize the effects of a spill.

Surveillance Network Program - a series or network of devices or sampling points designed to test environmental conditions for comparison against baseline data obtained from a point or area designated as a control. This is a method of tracking and identifying the spread of deleterious substances in the environment.

Toilet Wastes - all human excreta and associated products, but does not include 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 Discharge - is the release or Discharge of any Water or Waste not authorized under this Licence or legislation.

Waste(s) - any substance defined as Waste by section 1 of the Act.

Waste Management Plan - a document, developed in accordance with the Board's March 2011 *Guidelines for the Development of a Waste Management Plan*, which describes the methods of Waste management from Waste generation to final disposal.

Wastewater - any Water that is generated by Project activities, or that originates on site, which contains Waste and requires treatment or any other Water management activity, and includes but is not limited to runoff and Seepage.

Water(s) - means any Waters as defined by section 1 of the Act.

Water Use - a use of Water as defined by section 1 of the Act.

DRAFT

Part B: General Conditions

1. The Licensee shall ensure a copy of this Licence is maintained on site at all times, and that all employees conducting work related to the Project are made aware of the appropriate sections of this Licence.
2. 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 denoted.
3. All information submitted to the Board, as required by this Licence, shall:
 - a) Be submitted in a form acceptable to the Board;
 - b) Be in accordance with the Board's March 2012 *Document Submission Standards*;
 - c) Include a section within each submission which identifies wherein the pertinent requirements of this Licence are addressed; and
 - d) Includes a brief summary of any revisions made.
4. The Licensee shall operate in accordance with the plans approved pursuant to the conditions of this Licence, including any revisions as may be made pursuant to the conditions of this Licence and as approved by the Board. If any plan is not approved by the Board, the Licensee shall revise the plan as directed by the Board and resubmit it for approval. Each revised submission shall include a list of material revisions.
5. The Licensee shall review the plans, programs, and manuals annually, or as directed by the Board, and make any necessary revisions to reflect changes in operations. All revised plans, programs, studies and manuals shall be submitted to the Board, for approval, at least 60 days, unless otherwise specified, prior to implementing any proposed updates or changes in the approved plan, program, study or manual, and shall be accompanied by a brief summary of the changes made. All revised plans, programs, studies, and manuals shall be presented in a format consistent with the Board's *Standard Outline for Management Plans*.
6. The Licensee shall comply with the **Surveillance Network Program**, which is annexed to and forms part of this Licence, and any changes to the Surveillance Network Program as may be made from time to time by the Board.
7. The Surveillance Network Program and any compliance dates specified in this Licence may be changed at the discretion of the Board. If any date for any submission falls on a weekend or holiday, the item shall be submitted on the following business day.
8. Within 60 days of the issuance of this Licence, the Licensee shall post the necessary signs, where possible, to identify the station(s) of the Surveillance Network Program. All postings shall be located and maintained to the satisfaction of an Inspector.
9. Meters, devices, or other such methods used for measuring the volumes of Water used and Waste Discharged shall be installed, operated, and maintained by the Licensee to the satisfaction of an Inspector.
10. The Licensee shall act in accordance with the **Engagement Plan**, once approved by the Board.
11. The Licensee shall submit an **Annual Water Licence Report** to the Board not later than March 31, 2018 and each year thereafter for the life of the Water Licence, which shall include but not be limited to the following information:
 - a) The monthly and annual quantities in cubic metres of fresh Water obtained from all sources;
 - b) A summary of engagement activities conducted in accordance with the approved **Engagement Plan**, required in Part B of this Licence, and shall include a brief description of activities planned for the forthcoming year;
 - c) A summary of activities conducted in accordance with the approved **Waste Management Plan**, required in Part E of this Licence, including:

Commented [SS2]: Board staff are seeking reviewer input

- i. A summary of updates or changes to the process or facilities required for the management of Water, Wastewater and Waste;
 - ii. Monthly and annual quantities in cubic metres of all Waters discharged from the Project; and
 - iii. A detailed waste audit of all Waste produced, transported, and disposal method/location (in volumes and by type).
- d) A summary of activities conducted in accordance with the approved **Erosion and Sediment Control Plan**, required in Part E of this Licence, including:
 - i. A description and performance evaluation of each preventative and mitigative measure implemented to address erosion control issues and an assessment of any re-vegetation programs; and
 - ii. A description of any erosion susceptible areas encountered and a summary of activities to prevent or mitigate erosion.
- e) A summary of **Construction** activities conducted in accordance with Part F of this Licence;
- f) A summary of **Modifications** and/or major maintenance activities conducted in accordance with Part G of this Licence;
- g) A **Surveillance Network Program Report** as required under the Surveillance Network Program in accordance with reporting requirements in Part A, condition 2 of Annex A of this Licence;
- h) A record of Inspections with a summary of actions taken to address concerns, non-conformances, or deficiencies in any reports filed by an Inspector;
- i) A summary of activities conducted in accordance with the approved **Spill Contingency Plan**, required in Part H of this Licence, including:
 - i. A list of spills or Unauthorized Discharges, 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 of this Licence
 - ii. An outline of any spill training and communication exercises carried out during the previous calendar year;
- j) A summary of activities conducted in accordance with the approved **Closure and Reclamation Plan**, required in Part I of this Licence, including a summary of updates or changes made and an outline of any work anticipated for the next year; and
- k) Any other details requested by the as Board by November 1 of the year being reported.

Part C: Conditions Applying to Security Requirements

1. Prior to the use of Water or the disposal of Waste, the Licensee shall post and maintain a security deposit in the amount of \$ [REDACTED], pursuant to section 35(1) of the Act and section 11 of the Regulations.
2. Upon request of the Board, the Licensee shall submit an updated Project reclamation liability estimate utilizing the current version of RECLAIM or another method acceptable to the Board.
3. The amount of the security deposit required by Part C, condition 1 may be revised by the Board based on estimates of the Project's reclamation liability referred to in Part C, condition 2 or based on such other information as may become available to the Board.
4. If the amount of the security deposit is revised by the Board as described under Part C, condition 3, the Licensee shall post the revised amount with the Minister within 90 days of the Board giving notice of the revised amount.

Commented [SS3]: Board staff are seeking reviewer input

DRAFT

Part D: Conditions Applying to Water Use

1. The Licensee shall only obtain fresh Water for the Project from the Saline River, unless otherwise approved by the Board.
2. The total daily quantity of fresh Water withdrawn shall not exceed 100 cubic metres.
3. The Licensee shall construct and maintain the Water intake(s) with a screen designed to prevent impingement and/or entrapment of fish. The screen shall have a mesh size sufficient to ensure no entrainment of fish, as outlined in the Department of Fisheries and Oceans' 1995 Intake End-of-Pipe Fish Screen Guidelines.
4. The Licensee shall maintain daily water use logs for withdrawals and make them available at the request of the Board or an Inspector. The water uptake logs shall include the following information: identification of water source, volume of water withdrawn in cubic metres, cumulative uptake per source, time of update, date of uptake and contractor and employee identification.

DRAFT

Part E: Conditions Applying to Waste and Water Management

1. The Licensee shall manage Water and Waste with the objectives of minimizing impacts of the Project on the quantity and quality of Water in the Receiving Environment through use of the appropriate mitigation measures, monitoring, and follow-up actions.
2. The Licensee shall ensure that any Unauthorized Discharges associated with this Project do not enter any Waters.

Management Plans and Monitoring Programs

3. The Licensee shall act in accordance with the **Waste Management Plan**, once approved by the Board.
4. The Licensee shall comply with the **Sediment and Erosion Control Plan**, once approved by the Board. The Plan shall meet the objectives listed in Part E, condition 1, and shall include, but not be limited to the following:
 - a) Information regarding erosion and sediment control methodologies:
 - i. A summary, with appropriate maps or diagrams, of the Project site identifying areas susceptible to erosion;
 - ii. The process and criteria for assessing erosion risk;
 - iii. A description of the best management practices that will be employed for different Project activities and for different levels of assessed risk;
 - iv. Any other information required to describe how erosion and sediment release into the Receiving Environment will be minimized.
 - b) Information about monitoring including:
 - i. Details for monitoring, including rationale, that will be undertaken with respect to erosion and sediment control during all phases of the Project; and
 - ii. Any other information about monitoring that will be performed to meet the objectives in Part G, condition 1 of this Licence.
 - c) Information about responses to monitoring results:
 - i. A description of how the monitoring information will be assessed and generally what types of actions will be taken in response to the monitoring results.

Operations and Maintenance

5. The Licensee shall maintain and operate the temporary workspace located within the Ordinary High Water Mark of the Saline River in such a manner as to prevent structural failure and to the satisfaction of an Inspector.
6. The Licensee shall not dispose of Camp Waste to municipal facilities unless demonstrated to the Board that the facility has been designed, operated and licenced to handle the additional waste stream.

Effluent Quality Criteria

7. Prior to the discharge or decant of Wastes, including Wastewater, the Licensee shall:
 - a) Obtain a representative sample of the Waste or Wastewater using the best methods available and describe in detail the prevailing conditions and how the sample was obtained;
 - b) Conduct the analysis in accordance with Annex A – Surveillance Network Program, Part B;
 - c) Locate all discharge areas to the satisfaction of an Inspector; and
 - d) Indicate in writing to an Inspector and the Board:
 - i. The results of the sampling and analysis;

- ii. The location of the decant;
- iii. The volume of the decant
- iv. The method of the decant;
- v. The direction of flow;
- vi. The ability of all discharge areas to absorb the decanted Wastes or Wastewater under difference conditions.

8. The Licensee shall provide analytical results for Water sampling from Surveillance Network Program (SNP) station 2017-X, with the proposed discharge location, to an Inspector and the Board a minimum of ten (10) days prior to the discharge of Water. Discharge shall not commence until authorized in writing by an Inspector.

9. Wastewater to be discharged from the Landfarm (SNP 2017-X) shall meet the following effluent quality criteria:

Commented [SS4]: Board staff request reviewer input

Parameter	Maximum Grab Concentration (mg/L)

DRAFT

Part F: Conditions Applying to Construction

1. The Licensee shall ensure that all structures intended to contain, withhold, divert, or retain Water or Wastes are designed, constructed, and maintained to minimize the escape of Waste to the Receiving Environment.
2. The Licensee shall ensure that all Engineered Structures intended to contain, withhold, divert, or retain Water or Wastes and which meet the definition of a dam under the *Dam Safety Guidelines* are designed, constructed, and maintained to meet or exceed the *Dam Safety Guidelines*.
3. The Licensee shall ensure that all Engineered Structures are constructed and maintained following the recommendations of the Professional Engineer responsible for the design, including but not limited to, recommendations regarding field supervision and inspection requirements.
4. The Licensee shall maintain Construction records of Construction materials for all Engineered Structures and make them available at the request of the Board or an Inspector.
5. Within 60 days prior to the commencement of Construction of any Engineered Structures intended to contain, withhold, divert, or retain Water or Waste, the Licensee shall submit to the Board, the **Final Detailed Construction Plan** and a **Design Report**, stamped by a Professional Engineer, which note “issued for Construction” or similar phrase. The Licensee shall ensure that these Engineered Structures are constructed in accordance with this submission.
6. A minimum of 10 days prior to the commencement of Construction of the structures referred to in Part F, condition 5, the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the name and contact information for the site manager.
7. Within 90 days of the completion of the Construction of each Engineered Structure, the Licensee shall submit to the Board an **As-built Report** which shall include as-built drawings of the Engineered Structures, documentation of field decisions that deviate from the Final Detailed Construction Plan and Design Report referred to in Part D, condition 5, and any data used to support these decisions.
8. Within 30 days of Licence issuance, the Licensee shall provide the Board with a detailed sketch and photos of the layout of the Landfarm that shows where the holding tanks, sump (surface run-off Retention Pond), containment berms, surface and groundwater monitoring stations, and spill kits are/will be located, noting the size and capacity of each and any other relevant information.

Part G: Conditions Applying to Modifications

1. The Licensee may, without written approval from the Board, carry out Modifications to the Landfarm provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a) The Licensee has notified the Board and an Inspector in writing of such proposed Modifications at least 60 days prior to beginning the Modifications;
 - b) The Modifications do not place the Licensee in contravention of either the Licence or the Act;
 - c) The Board has not, during the 60 days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than 60 days;
 - d) An Inspector has authorized the proposed Modifications and provided a letter of notification to the Board; and
 - e) The Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part G, condition 1 have not been met, may be carried out only with written approval from the Board.
3. Within 90 days of the completion of Modifications referred to in Part G, condition 1, the Licensee shall provide as-built drawings stamped by a Professional Engineer to the Board.

DRAFT

Part H: Conditions Applying to Spill Contingency Planning

1. The Licensee shall act in accordance with the **Spill Contingency Plan**, once approved by the Board.
2. The Licensee shall ensure that petroleum products, hazardous material and other waste(s) associated with the Project do not enter any Waters.
3. If, during the period of this Licence, a spill or Unauthorized Discharge occurs, or is foreseeable, the Licensee shall:
 - a) Implement the approved Spill Contingency Plan referred to in Part H, condition 1;
 - b) Report the incident immediately via the 24-Hour Spill Report Line at (867) 920-8130 in accordance with the instructions contained in the Spill Report Form NWT 1752/0593;
 - c) Report each spill and Unauthorized Discharge to the Board and an Inspector within 24 hours; and
 - d) Submit a detailed report on each spill and Unauthorized Discharge, including descriptions of root causes, response actions and any changes to procedures to prevent similar occurrences in the future, to the Board and an Inspector within thirty (30) days.
4. All spills and Unauthorized Discharges shall be reclaimed to the satisfaction of an Inspector and the Board.

DRAFT

Part I: Conditions Applying to Closure and Reclamation

1. Within 60 days of issuance of this Licence, the Licensee shall submit to the Board for approval a **Closure and Reclamation Plan** which shall include, but is not limited to, the following information:
 - a) A description of existing conditions, including photographs;
 - b) A summary compilation of pre-existing conditions, including assessments of soil, Water, groundwater, and permafrost;
 - c) Closure and end land use goals, objectives and criteria;
 - d) Closure and reclamation of any site affected by Waste spills;
 - e) Management of natural runoff Waters from the Project area;
 - f) Restoration of natural drainage at the Project area;
 - g) Any potential for groundwater contamination;
 - h) Any facilities or areas which may have been affected by the Project such that potential pollution problems exist;
 - i) A description of the phased approach to closure and reclamation with an associated implementation schedule;
 - j) Maps delineating all disturbed areas and site facilities including hydrological features and elevation contours;
 - k) Future land use of the site;
 - l) Any other details pertaining to closure and Reclamation requested by the Board.
2. The Licensee shall act in accordance the Plan specified in Part I, condition 1, once approved by the Board.
3. The Licensee shall endeavor to carry out progressive Reclamation of areas as soon as reasonably practicable.
4. Upon implementation of the Closure and Reclamation Plan, the Licensee shall provide to the Board and Inspector updates of all related activities within the Annual Water Licence Report as per Part B, condition 11.
5. Prior to Licence expiry, the Licensee shall submit to the Board a **Final Remediation Report**, including a record of site condition and final risk assessment results.

Part J: Conditions Applying to Watercourse Crossings

1. The Licensee shall ensure any materials placed below the Ordinary High Water Mark used in the construction of Water crossings are free of any contaminants, debris or fine material.
2. The Licensee shall ensure any materials placed below the Ordinary High Water Mark used in the construction of Water crossings are removed before spring break-up.
3. The Licensee shall not remove naturally occurring material from the bed or banks of any Watercourse below the Ordinary High Water Mark **other than as identified in the complete application.**
4. The Licensee shall comply with the most recent version of the Department of Fisheries and Oceans *Protocol for Temporary Winter Access Water Crossings in the Northwest Territories*.
5. The Licensee shall not ford wet Watercourses or areas of overflow, unless authorized in writing by an Inspector.
6. The Licensee shall minimize the disturbance of riparian vegetation within the immediate boundary of any Watercourse crossing to the extent practicable.
7. The Licensee shall erect and maintain erosion protection materials (such as silt fencing) at the construction site to prevent sediment from entering the Watercourse, and shall be maintained in any manner at the request of an Inspector.
8. All areas affected by construction or removal activities shall be stabilized and landscaped to pre-construction profiles or as approved by an Inspector.

Part K: Conditions Applying to Dewatering

Commented [SS5]: Board staff seeking reviewer input

1. The Licensee shall monitor Water levels during dewatering to prevent dewatering of areas downstream of the isolated work area

DRAFT

Signed on behalf of the Sahtu Land and Water Board

Witness

Larry Wallace (Chairman)

**Annex A – Surveillance Network Program (SNP)
Annexed to Water Licence S17L1-004**

Table of Contents

Part A: Reporting Requirements

Part B: Sampling and Analysis Requirements

Part C: Surveillance Network Program (SNP) Station Descriptions and Monitoring Requirements

Part A: Reporting Requirements

1. The effective date of this Surveillance Network Program (SNP) is **XX**.
2. Beginning March 31, 2018, and for every year thereafter, the Licensee shall submit to the Board and Inspector, a **Surveillance Network Program Report** as part of the Annual Water Licence Report, as per Part B, condition 11, which shall include, but not be limited to the following:
 - a) Electronic and tabular summaries of all data and information generated under Part B of this Annex, including rationale for SNP stations where samples were not collected and results and interpretation of quality assurance/quality control procedures;
 - b) Graphical summaries and interpretation of the analytical results from the SNP samples collected at the points of compliance compared to the effluent quality criteria identified in Part E of this Licence;
 - c) An explanation of any actions taken in response to any exceedances of the effluent quality criteria;
 - d) Information regarding the calibration and status of the meters and devices referred to in Part B of this Licence;
 - e) The exact coordinates of all SNP stations which were established within the year being reported, including an updated map identifying the locations of all the SNP stations; and,
 - f) A tabular summary of all Water discharged.
3. The Licensee shall also provide SNP data at other times, if requested by the Board or Inspector.

Part B: Sampling and Analysis Requirements

1. The quantities of Water discharged from the Project shall be measured and recorded in cubic metres.
2. All sampling, sample preservation, and analyses shall be conducted in accordance with methods prescribed in the current edition of American Public Health Association's (APHA) *Standard Methods for the Examination of Water and Wastewater* at the time of analysis, or by other such methods approved by an Analyst.
3. All analyses shall be performed in a laboratory accredited by the Canadian Association for Laboratory Accreditation (CALA) for the specific analyses to be performed or as approved by an Analyst.
4. Prior to the collection of SNP samples, the Licensee shall submit to the Board and an Analyst, a Quality Assurance and Quality Control Plan, which shall include both field and laboratory requirements. The Analyst shall provide a recommendation to the Board. The Licensee shall not initiate the SNP until the Analyst has approved the Plan.
5. More frequent sample collection may be required at the request of an Inspector.

Part C: SNP Station Descriptions and Monitoring Requirements

1. The location of sampling sites is subject to approval of an Inspector.

2. Coordinates of the SNP stations shall be submitted to the Board within 60 days of issuance of this Licence.
3. The sampling station locations are as follows:

SNP Station Quick Reference Table

SNP Station #	Description	Status
2017-X	Monitors Waters from excavations prior to discharge to the Receiving Environment.	Active prior to proposed retention Water discharge; Point of compliance – to ensure Water meets Part E, condition 9

Signed on behalf of the Sahtu Land and Water Board

Witness

Larry Wallace (Chairman)

**Annex B – Concordance Table of Items Requiring Submission
Annexed to Water Licence S17L1-004**

Table 1: Summary of the information the Licensee is required to submit as per the Water Licence conditions

Part of Licence	Item	Timeline for Submission	Requirement
B	Post signs to inform the public of the Landfarm and SNP Stations	Within 60 days of Licence issuance	Satisfaction of Inspector
B	Submit Annual Water Licence Report	Beginning March 31, 2018 and every year thereafter	Acceptance by Board
B	Engagement Plan	-	
C	Security Deposit	Prior to the use of Water or disposal of Waste	
E	Waste Management Plan	-	
E	Sediment and Erosion Control Plan	-	
E	Submit analytical results from SNP station 2017-X with proposed discharge location	A minimum of 10 days prior to discharge	Written authorization by an Inspector
F	Submit Fine Detailed Construction Plan and Design Report for any structures intended to contain, withhold, divert or retain Waters or Wastes.	Within 60 days prior to commencement	
F	Notify Board and Inspector before commencing Construction	At least 10 days prior to commencement	
F	Submit As-built Report for Construction of any structures intended to contain, withhold, divert or retain Waters or Waste	Within 90 days of completion of Construction	
G	Notify Board and Inspector before commencing Modifications	At least 60 days prior to commencement	
G	Submit as-built drawings of Modifications	Within 90 days of completion	
H	Submit detailed spill and Unauthorized Discharge Report	Within 30 days of event	
I	Submit Closure and Reclamation Plan	Within 60 days of Licence issuance	Board approval
Annex A	Submit Surveillance Network Program Report	Beginning March 31, 2018 and every year thereafter with the Annual Water Licence Report	

**Annex C – Table of Revision History
Annexed to Water Licence S17L8-003**

Table 1: Updates and changes that have been made to the Water Licence since issuance

Date	Location of Change	Description of Change