December 20, 2017

Mayor Andrew Charlie
Hamlet of Aklavik
PO Box 88
Aklavik, NT X0E 0A0

Dear Mayor Charlie:

Re: N3L1-1839 – Hamlet of Aklavik – Bridge Construction and Culvert Installation – Aklavik Traditional Trail, Aklavik, NWT

The Inuvialuit Water Board (IWB) is pleased to attach Water Licence N3L1-1839 (the Licence) granted to the Hamlet of Aklavik in accordance with the Waters Act for the period commencing December 20, 2017 and expiring December 19, 2022. Included with the Licence are the Terms and Conditions applying to the Licence and the General Procedures for the Administration of Licences in that portion of the Inuvialuit Settlement Region located in the Northwest Territories. Please review the Licence, the Terms and Conditions and the General Procedures carefully and address any questions to the IWB.

A copy of the Licence and all documentation associated with the application for and issuance of the Licence has been filed in the Public Register. Copies are available at the IWB office and on the IWB website. All inspection reports and other documentation related to the implementation of the Licence will also be filed in the Public Register. All Public Register material will be considered if an amendment to the Licence is requested.

The IWB appreciates the cooperation of the Hamlet of Aklavik in complying with the Terms and Conditions of the Licence. Should you have questions or concerns, please contact Mardy Semmler, Executive Director at (867) 678-2942.

Sincerely,

[Signature]
Roger Connelly
Chairperson

Attachments

Copied to: Lloyd Gruben, Water Resources Officer – ENR Inuvik Region
INUVELUIT WATER BOARD

Pursuant to the Waters Act and Waters Regulations the Inuvialuit Water Board, hereinafter referred to as the Board, hereby grants to

Hamlet of Aklavik

PO Box 88
Aklavik, NT X0E 0A0
(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water and deposit waste as provided for under the Waters Act and Waters Regulations and subject to and in accordance with the terms and conditions specified in this Licence.

<table>
<thead>
<tr>
<th>Licence Number</th>
<th>N3L1-1839</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licence Type</td>
<td>&quot;B&quot;</td>
</tr>
<tr>
<td>Water Management Area</td>
<td>Northwest Territories - 3</td>
</tr>
</tbody>
</table>
| Location             | Bridge Site: 68° 13' 57" N and 135° 10' 16" W  
                        Culvert Site: 68°13’52.3” N and 135°9'38.87"W  
                        Northwest Territories |
| Purpose              | To cross a watercourse |
| Description          | Industrial Undertaking |
| Quantity of Water Not To Be Exceeded | Not Applicable |
| Effective Date of Licence | December 20, 2017 |
| Expiry Date of Licence | December 19, 2022 |

This Licence issued and recorded at Inuvik includes and is subject to the annexed conditions.

INUVELUIT WATER BOARD

[Signature]
Chairperson

[Signature]
Date

December 20, 2017
PART A: SCOPE AND DEFINITIONS

1. Scope

a) This Licence entitles the Hamlet of Aklavik to cross a watercourse associated with an industrial undertaking for the "construction of a bridge and installation of a culvert" located in the Inuvialuit Settlement Region (ISR) of the Northwest Territories with coordinates 68° 13' 57" North and 135° 10' 16" West (bridge construction site at an un-named creek); and 68° 13' 52.3" North and 135° 9' 38.87" West (culvert installation site).

b) This Licence is issued subject to the conditions contained herein with respect to the crossing of a watercourse, taking of water and the depositing of waste of any type in any waters or in any place under any condition where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made, or existing Regulations are amended by the Commissioner in Executive 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.

c) Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable federal, territorial and municipal legislation for which any and all applicable licences and permits shall also be obtained by the Licensee.

d) This Licence determines terms and conditions for crossing a watercourse, water use and waste disposal for both the bridge construction and culvert installation period and a subsequent monitoring period as determined by the Board.

e) This Licence is issued subject to the conditions contained herein with respect to the use of waters and deposit of waste as prescribed in Section 10 and Section 11 of the Waters Act.

2. Definitions

In this Licence: N3L1-1839

"Act" means the Waters Act;

"Amendment" means a change to any terms and conditions of this Licence as provided for under Section 36 (1)(b) of the Waters Act;

"Analyst" means an analyst designated by the minister under Section 65 (1) of the Act;

"Average Concentration" means the discrete average of up to four consecutive analytical results submitted in any single calendar year to the Board in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program";

"Closure" means the permanent dismantlement of a component of the Project with the intent of making the component incapable of its intended use. This includes the removal of associated equipment and structures used in the construction or maintenance of the Project;

"Construction" means any activities undertaken to construct or build any component of, or
associated with, the bridge construction and culvert installation Project;

“**Contingency Plan**” means a detailed program of action to control and/or minimize the effects of an emergency requiring prompt corrective measures beyond normal procedures to protect human life, to minimize injury, to optimize loss control, and to reduce the exposure of physical assets and the environment to risks resulting from an incident;

“**Discharge**” or “**Deposit**” means the direct or indirect release of any waters or waste to the receiving environment;

“**Earthworks**” are engineered structures that are constructed with or require excavation into one or more of the following unconsolidated materials: waste rock, tailings, overburden, sand, silt, clay, gravel, soil or any other borrow material;

“**Engineer**” means a professional engineer registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists and whose principal field of specialization is appropriate to address the components of the undertaking at hand;

“**Engineered Structure**” means any structure or facility related to water use or the deposit of waste that is, or normally would be, designed and approved by an engineer;

“**Greywater**” means all liquid wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet wastes;

“**Ground Water**” means water occupying the pores and fractures in rock, soil or muskeg below the surface of the ground in a liquid or frozen state;

“**Hazardous Wastes**” mean those wastes with properties such as flammability, corrosiveness, or inherent toxicity and can pose a variety of risks, from skin damage on contact, to the contamination of ground water, surface water, or soil as a result of leaching into the environment when improperly treated, stored, transported, or disposed of, or otherwise managed;

“**High Water Mark**” means the visible high-water mark of any lake, river, stream or other waterbody where the presence and action of the water is so common and usual, and so long continued, as to mark upon the soil of the bed of the lake, stream or other waterbody, a character distinct from that of the banks thereof, both in respect to vegetation and in respect to the nature of the soil itself;

“**Inspector**” means an inspector designated by the minister under Section 65 (1) of the Act;

“**Licence**” means this Type B Water Licence N3L1-1839 as issued by the Board in accordance with the Act, to the Licensee;

“**Minister**” means a duly appointed member of the Executive Council who is responsible for the Act;

“**Modification**” means an alteration to a physical work that introduces a new structure or replaces or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

“**Monitoring Program**” means any program designed to collect data on the quality or quantity of surface water or ground water to assess impacts on the environment of the Project;

“**Project**” means the bridge construction, culvert installation and post construction monitoring
activities to be carried out by the Hamlet of Aklavik as defined in the Water Licence Application and associated documents, which includes the Project Descriptions;


“Receiving Environment” means, for the purpose of this Licence, the natural environment that receives any deposit or discharge of waste, including seepage or runoff, from the Project;

“Reclamation” means the process of restoring the Project area as nearly as possible to the same condition as it was prior to the commencement of the licensed activity;

“Regulations” means Waters Regulations promulgated pursuant to Section 63 of the Act;

“Remediation” means the removal, reduction or neutralization of substances, wastes or hazardous materials from a site so as to prevent or minimize any adverse effects on the environment now or in the future;

“Seepage” includes water or waste that drains through or escapes from any structure designed to contain, treat, withhold, divert or retain water or waste;

“Sewage” means all toilet wastes and greywater;

“Spill” means to allow or accidentally release waste from containment vessels or structures into the receiving environment;

“Surface Waters” means flowing or standing waters such as streams, rivers, lakes or ponds;

“Surveillance Network Program (SNP)” means a monitoring program established to define environmental sampling and analysis requirements, as detailed in Annex 1 of this Licence, to collect water quality data, and to assess discharge quality, compliance with Licence Terms and Conditions and potential for Licensee activity impact on the environment;

“Toilet Wastes” means all human excreta and associated products but does not include greywater;

“Unauthorized Discharge” is a discharge of any water or waste not authorized under this Licence;

“Waste” means any substance defined as waste as defined by Section 1 of the Act;

“Watercourse” means a natural watercourse, waterbody or water supply, whether usually containing water or not, and includes groundwater, springs, swamps, and gulches, as defined in the Waters Regulations;

“Water Licence Application” means the Type B Water Licence application received on July 21, 2017 and all supplemental information submitted to the Board;

“Waterbody” means any area that in a normal year has water flowing or standing above ground to the extent that evidence of an ordinary high-water mark is established. Wetlands contiguous to the waterbody are considered part of the waterbody;
"Water Source" means local surface water sources located at the Project area.

"Waters" means any waters as defined by Section 1 of the Act.

PART B: GENERAL CONDITIONS

1. The Licensee shall file an Annual Report with the Board no later than June 30 of each year which shall contain the following information on Project related activities during the prior 12 month period from May 1 to April 30:
   a) the monthly and annual quantities in cubic metres (m³) or litres (L) of sewage disposed of and associated disposal location;
   b) the monthly and annual quantities and types of non-hazardous waste removed from the Project and associated disposal locations;
   c) the monthly and annual quantities and types of hazardous waste removed from the Project and associated disposal locations;
   d) the quantities and types of hazardous and non-hazardous waste temporarily stored on site including disposal plans for each type of waste;
   e) a summary report which includes all data and information generated under the "Surveillance Network Program (SNP)"
   f) a summary of the bridge construction and culvert installation activities completed and an updated construction schedule;
   g) a list and description including location and volumes of all unauthorized discharges, spills and summaries of all associated remediation activities and follow-up action taken;
   h) a description of any spill training and communications exercises carried out;
   i) a report on any studies required by the Board and a brief description of any future studies planned by the Licensee;
   j) a summary of modifications and/or major maintenance work as related to the Project completed;
   k) a description of any updates and/or revisions to any of the following plans:
      i. Spill Contingency Plan
      ii. Waste Management Plan; and
      iii. Erosion and Sediment Control Plan.

2. The Licensee shall comply with the "Surveillance Network Program" annexed to this Licence, and any amendment to the said "Surveillance Network Program" as may be made from time to time, pursuant to the conditions of this Licence.

3. The "Surveillance Network Program" and compliance dates specified in the Licence may be modified at the discretion of the Board.

4. The Licensee shall, within seven (7) days prior to beginning of construction, post the necessary signs to identify the stations of the "Surveillance Network Program". All postings shall be located and maintained to the satisfaction of the inspector.

5. Any meters, devices or other such methods used for measuring the volumes of water used or waste disposed and discharged shall be installed, operated and maintained by the Licensee to the satisfaction of the inspector.

6. The Licensee shall ensure a copy of this Licence is maintained at the site of operation at all times.

7. The Licensee shall, at a minimum, implement all of the policies, practices, mitigation measures, recommendations and procedures for the protection of the environment referred to
in its application, Project Description Reports and other documents submitted regarding the Bridge Construction and Culvert Installation.

8. All field operation staff shall be provided with appropriate advice/training on how to implement these policies, practices, mitigation measures, recommendations and procedures.

9. The Licensee shall ensure that all contractors and sub-contractors conform to all Terms and Conditions of this Licence.

10. The Licensee shall take every reasonable precaution to protect the environment.

11. The Licensee shall operate in accordance with any plans approved pursuant to the conditions of this Licence and with any revisions to such plans, as may be made from time to time 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 according to the Board's direction and re-submit it to the Board for approval.

12. All revised management plans submitted to the Board shall include a brief summary of the changes made to the plan.

13. In a form acceptable to the Board, the Licensee shall submit two (2) copies of all reports, plans, maps and drawings in printed format accompanied by two (2) electronic copies (CDs).

**PART C: CONDITIONS APPLYING TO WATER USE**

1. There shall be no water use involved for the bridge construction and culvert installation project from any water sources.

**PART D: CONDITIONS APPLYING TO WASTE MANAGEMENT AND DISPOSAL**

1. The Licensee shall manage all wastes and hazardous waste in accordance with the approved Waste Management Plan or as otherwise approved by the Board.

2. The Waste Management Plan as approved by the Board shall be made available to all involved parties throughout the duration of the project.

3. The Licensee shall use porta-potties (portable toilet facilities) on site for sewage generated by the construction crew.

4. Licensee shall pump out sewage from porta-potties as needed and transport to the Aklavik Sewage Waste Disposal Facilities for disposal.

5. Licensee shall remove all porta-potties from site once the bridge construction and culvert installation projects are completed.

6. There should be no discharge of floating solids, garbage, grease, free oil or foam.

7. Licensee shall collect all on site garbage and transport as needed to the Aklavik Solid Waste Disposal Facilities for disposal.

8. The Licensee shall store, segregate and dispose of all on site garbage and hazardous wastes in a manner acceptable to the inspector.
9. Unless authorized by this Licence, the Licensee shall ensure that any wastes associated with this undertaking do not enter any water body.

10. All wastes, soils, and vegetation associated with the Project shall be handled, stored, transported and disposed of in such a manner that they are not deposited, or allowed to be deposited, into any waterbody. All materials shall be stored above the ordinary high-water mark to the satisfaction of the inspector.

11. During construction (bridge construction and culvert installation), if water is present in a liquid state in the watercourse crossings listed in Annex 1: Surveillance Network Program, Part A, it shall be sampled daily at 50 m upstream and 50 m downstream of the watercourse crossings and shall not exceed the following effluent standards:

   a) An increase in Total Suspended Solid (TSS) between the downstream and upstream sample of 100 mg/L; and

   b) For the downstream sample, the effluent standards for Total Petroleum Hydrocarbon (TPH) and pH:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Maximum Average Concentration</th>
<th>Maximum Concentration of Any Grab Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Petroleum Hydrocarbon (TPH)</td>
<td>3 mg/L</td>
<td>5 mg/L</td>
</tr>
<tr>
<td>pH</td>
<td>Between 6.0 and 9.0</td>
<td>Between 6.0 and 9.0</td>
</tr>
</tbody>
</table>

12. In the event that the surveillance station water quality exceeds the effluent standards outlined in this Licence the inspector shall be immediately notified.

13. The Licensee shall notify the inspector and take necessary corrective action to mitigate any erosion problems to the satisfaction of the inspector.

14. Hazardous materials should be handled in a manner to prevent contamination of any waterbody to the satisfaction of the inspector.

15. The Licensee shall on an annual basis review the Waste Management Plan and revise as necessary, or as requested by the Board, to reflect changes in operations and technology. Any revisions or updates to the plan shall be reported in the annual report as set out in Part B, Item 1.

**PART E: CONDITIONS APPLYING TO CONSTRUCTION**

1. The Licensee shall ensure that the bridge construction and culvert installation are supervised by an engineer. The Licensee shall also ensure that the following post-construction information for the bridge and culvert is signed and stamped by an engineer, and submitted to the Board and the inspector: construction records, as-built documentation, and a summary of any deviations from the original design that required engineer approval. The post-construction information shall be provided to the Board and the inspector within ninety (90) days of completion of the construction.

2. The Licensee shall undertake necessary corrective measures to mitigate negative impacts on surface drainage resulting from the Licensee’s activities to the satisfaction of the inspector. Work facilities shall be located so as to minimize negative impacts to surface drainage.
3. The Licensee shall provide written notification to the Board and the inspector a minimum of thirty (30) days prior to commencement of the bridge construction and culvert installation.

4. The Licensee shall submit to the Board names, addresses and functions of contractors and sub-contractors for the bridge construction and culvert installation at least thirty (30) days prior to beginning of construction.

5. The Licensee shall submit to the Board the number of field crew and the number and type of construction equipment to be used for the bridge construction and culvert installation at least thirty (30) days prior to beginning of construction.

6. The Licensee shall submit to the Board a drawing of the culvert signed and stamped by a professional engineer registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientist at least thirty (30) days prior to beginning the culvert installation.

7. The Licensee shall ensure that there is no obstruction of water flow in watercourses as a result of engineered structures being placed in, or about, a watercourse.

8. The Licensee shall implement best practices for erosion control during construction and maintenance work to the satisfaction of the inspector.

9. For the excavation, backfill and the removal of debris activities, the Licensee shall control siltation or sedimentation downstream of the work area and minimize further erosion to the extent possible, utilizing appropriate measures to the satisfaction of the inspector.

10. The Licensee shall include action levels (triggers) and management responses for potential erosion, sedimentation and water quality issues into the Erosion and Sediment Control Plan and submit to the Board for approval.

11. Implement erosion control measures in accordance with the approved Sediment and Erosion Control Plan.

12. The Licensee shall implement erosion and sediment control measures by installing silt fences anchored properly and that regular maintenance be performed to prevent ripping and lean over from the weight of snow. All trapped sediment should be cleaned from the silt fences. The Licensee shall install Coco matting in a manner that prevents tenting.

13. Equipment used during the construction, excavation and backfill shall be mechanically sound and free of leaks. Mechanized clearing of brush, wood and other debris shall not be done within thirty (30) metres of any waterbody.

14. All construction, including the bridge and culvert installation, for the watercourse crossings shall be conducted in accordance with the Department of Fisheries and Oceans Regulations;

15. It remains the responsibility of the Licensee to avoid causing serious harm to fish in compliance with the Fisheries Act, and avoid prohibited effects on listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in compliance with the Species at Risk Act.

16. It is the Licensee’s responsibility to notify the Department of Fisheries and Oceans if they have caused, or are about to cause, serious harm to fish that are part of or support a commercial, recreational or Aboriginal fishery. Such notifications should be directed to http://www.dfo-mpo.gc.ca/pnw-ppe/violation-infract/index-eng.html.
17. Culverts should be imbedded to prevent perching and allow for fish passage during periods of low flow.

18. Culvert outlet velocities should not prohibit the passage of fish through the culvert.

19. All work should be timed to avoid damage to fish, including their eggs, juveniles, spawning adults and/or the organisms upon which they feed.

20. Culverts should be steamed clear during break up to ensure the normal flow of water at that time of year is not obstructed by ice.

21. The Licensee shall not destroy, damage or disturb any wildlife habitat or wildlife activities throughout the duration of the project;

22. Fuel, lubricants, hydraulic fluids, coolants and similar substances shall be stored a minimum of thirty (30) metres from the high-water mark of any waterbody, in such a way that said substances are not deposited in or allowed to be deposited in waters.

23. A dedicated area should be used for refueling equipment with measures taken to ensure capture and containment of drips and potential spills. Secondary containment or a surface liner should be used when refueling any equipment on site and should also be used at all fuel drum locations. An appropriate spill kit with absorbent material should be located at all fuel storage and transfer sites.

24. Refueling of equipment with limited mobility may be refueled above the high-water mark and refueling activities shall adhere to the following:
   a) the fuel transfer shall be visually and continually monitored;
   b) a containment tray will be placed below the vehicle’s refueling portal;
   c) fuel transfer nozzles shall be operated manually and will not be locked in the open positions;
   d) spill kits, including absorbent pads, shall be maintained in close proximity to the stationary equipment during refueling operations;
   e) fuel transfers shall be conducted with an operator at each end of the transfer hose;
   f) fuel transfers shall only be conducted when there is adequate visibility; and
   g) fuel transfer equipment components such as pumps, hoses and nozzles shall be visually checked for leaks or damage prior to each refueling operation.

PART F: CONDITIONS APPLYING TO MODIFICATIONS

1. Except for those engineered structures addressed by Part E, Item 1 the Licensee may, without written approval from the Board, carry out modifications to the planned undertakings 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 the inspector in writing of such proposed modifications at least five (5) days prior to beginning the modifications;
   b) such modifications do not place the Licensee in contravention of either the Licence or the Act;
   c) the Board has not, during the five (5) days following notification of the proposed modifications, informed the Licensee that review of the proposal will require more than five (5) days; and
   d) the Board has not rejected the proposed modifications.

2. Modifications for which the conditions referred to in Part I, Item 1 have not been met may be carried out only with written approval from the Board.
3. The Licensee shall provide to the Board as-built plans and drawings of the modifications signed and stamped by an engineer referred to in this Licence within ninety (90) days of completion of the modifications.

PART G: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Licensee shall implement the Spill Contingency Plan as approved by the Board.

2. The Licensee will maintain a copy of the approved Spill Contingency Plan in a readily available location to the satisfaction of the inspector.

3. The Licensee shall ensure that petroleum products, hazardous material and other wastes associated with the Project do not enter any waters.

4. The Licensee shall ensure that all containment berms are constructed of an impermeable material to the satisfaction of the inspector.

5. If, during the period of this Licence, an unauthorised discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
   a) implement relevant components of the Spill Contingency Plan;
   b) report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130;
   c) report each spill and unauthorized discharge of waste to the inspector at (867) 678-0623 (Cell), within 24 hours; and
   d) submit to the inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.

6. The Licensee shall review the Spill Contingency Plan annually and revise the Plan as necessary, or as required by the Board, to reflect changes in operation and technology. Any revisions or updates to the plan shall be reported in the annual report as set out in Part B, Item 1.

7. All spills and unauthorized discharges of water or waste shall be cleaned up and the affected area reclaimed to the satisfaction of the inspector.

PART H: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION

1. Upon completion of all activities, the Licensee shall ensure that all materials, equipment, temporary structures and debris are removed from the site. Other final restoration activities as may be outlined in the Project Description shall be implemented to the satisfaction of the inspector.

2. All disturbed areas relating to the Water Licence activities shall be restored, where soil conditions permit reseeding, with an approved natural or native seed mixture to the satisfaction of the inspector.

INUUVIALUIT WATER BOARD

[Signature]

Chairperson

[Signature]

Date: December 20, 2017
ANNEX 1: SURVEILLANCE NETWORK PROGRAM

LICENSEE: Hamlet of Aklavik  
LICENSE NUMBER: N3L1-1839  
EFFECTIVE DATE OF LICENCE: December 20, 2017  
EFFECTIVE DATE OF SURVEILLANCE NETWORK PROGRAM: December 20, 2017

A. Sampling Stations

<table>
<thead>
<tr>
<th>Station Number</th>
<th>Description of Sampling Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1839-1a</td>
<td>50 m upstream of the watercourse crossing from bridge construction site</td>
</tr>
<tr>
<td>1839-1b</td>
<td>50 m downstream of the watercourse crossing from bridge construction site</td>
</tr>
<tr>
<td>1839-2a</td>
<td>50 m upstream of the watercourse crossing from culvert installation site</td>
</tr>
<tr>
<td>1839-2b</td>
<td>50 m downstream of the watercourse crossing from culvert installation site</td>
</tr>
</tbody>
</table>

B. Sampling and Analysis Requirements

1. Watercourse crossing “Surveillance Network Program” shall be sampled and analyzed for the following parameters:

<table>
<thead>
<tr>
<th>Station Number</th>
<th>Parameters</th>
<th>Sampling Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1839-1a and 1839-1b</td>
<td>Total Suspended Solids (TSS), Turbidity (Nephelometric Turbidity Units), Temperature, Dissolved Oxygen, pH, Conductivity, Calcium, Magnesium, Hardness, Nutrients (Ammonia, nitrate, nitrite), Total Arsenic, Basic metal Scan (Total Cd, Cr, Cu, Co, Mn, Ni, Pb, Zn, Fe), Total Mercury, Total Petroleum Hydrocarbon (TPH)</td>
<td>Active bridge construction activities – weekly during periods of open water. and Once annually during spring freshet for the duration of the licence.</td>
</tr>
<tr>
<td>1839-2a and 1839-2b</td>
<td>Total Suspended Solids (TSS), Turbidity (Nephelometric Turbidity Units), Temperature, Dissolved Oxygen, pH, Conductivity, Calcium,</td>
<td>Active culvert installation activities – weekly during periods of open water. and Once annually during spring</td>
</tr>
</tbody>
</table>


2. Sample collection requirements such as sampling location, frequency and parameters in accordance of the Surveillance Network Program may be modified by the inspector.

3. All sampling, preservation, and analyses shall be conducted in accordance with methods prescribed in the current edition of “Standard Methods for the Examination of Water and Wastewater” published by the American Public Health Association, the American Waterworks Association and the Water Environmental Federation or by such other methods as approved by an analyst.

4. All off-site analysis shall be performed in a laboratory as approved by an analyst.

5. The Licensee shall, at least thirty (30) days prior to beginning of the bridge construction and culvert installation, submit to an analyst for approval a Quality Assurance/Quality Control Plan, a copy of the approved plan shall be submitted to the Board.

6. The Quality Assurance/Quality Control Plan shall be implemented as approved by an analyst.

C. Flow and Volume Measurement Requirements

1. The Licensee shall measure and record in cubic metres (m³) or litres (L) the daily, monthly and annual quantities of sewage collected and transported off site to the Aklavik Sewage Waste Disposal Facilities.

D. Reports

1. The Licensee shall submit the following information in electronic and printed formats as part of the Annual Report required in Part B, Item 1 of the Licence:

   a) all laboratory results and analysis of all data collected during each SNP sampling period for the previous year;
   b) tabular summaries of all data and information generated under Part B and C of the SNP;
   c) rationale for any SNP sites where samples were not collected;
   d) Quality Assurance/Quality Control results and interpretations, in accordance with the approved Quality Assurance/Quality Control Plan;
   e) any interpretive comments and calculations; and
   f) identification of any anomalies and trends.

INUVIALUIT WATER BOARD

Chairperson

Date
## SUPPLEMENTAL INFORMATION TO BE SUBMITTED BY LICENSEE AS REQUIRED THROUGH LICENCE CONDITIONS

<table>
<thead>
<tr>
<th>Licence Condition</th>
<th>Report/Others</th>
<th>Timeline for Submission</th>
<th>Required Board Action/Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part B, Item 1</td>
<td>Annual Report</td>
<td>Not later than June 30 of each year.</td>
<td>Provide to the Board for approval</td>
</tr>
<tr>
<td>Part B, Item 4</td>
<td>Post signs indicating the location of all Surveillance Network Program (SNP) sampling stations</td>
<td>Within seven (7) days prior to beginning of bridge construction and culvert installation.</td>
<td>To the satisfaction of the inspector</td>
</tr>
<tr>
<td>Part E, Item 1</td>
<td>As-constructed documentation for the bridge and culvert</td>
<td>Within ninety (90) days of completion of the bridge construction and culvert installation.</td>
<td>Provide a copy to the Board and the Inspector</td>
</tr>
<tr>
<td>Part E, Item 3</td>
<td>Notice of Construction</td>
<td>A minimum of thirty (30) days prior to commencement of bridge construction and culvert installation.</td>
<td>Provide a copy to the Board and the Inspector</td>
</tr>
<tr>
<td>Part E, Item 4</td>
<td>Names, addresses and functions of contractors and sub-contractors</td>
<td>At least thirty (30) days prior to commencement of bridge construction and culvert installation.</td>
<td>Provide a copy to the Board and the Inspector</td>
</tr>
<tr>
<td>Part E, Item 5</td>
<td>Number of field crew, number and type of construction equipment</td>
<td>At least thirty (30) days prior to commencement of bridge construction and culvert installation.</td>
<td>Provide a copy to the Board and the Inspector</td>
</tr>
<tr>
<td>Part E, Item 6</td>
<td>A drawing of culvert signed and stamped by a professional engineer registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientist</td>
<td>At least thirty (30) days prior to commencement of culvert installation.</td>
<td>Provide a copy to the Board and the Inspector</td>
</tr>
<tr>
<td>Part E, Item 10</td>
<td>Revised Erosion and Sediment Control Plan to include action levels (triggers) and management responses for potential erosion, sedimentation and water quality issues.</td>
<td>At least thirty (30) days prior to commencement of bridge construction and culvert installation.</td>
<td>Provide to the Board for approval</td>
</tr>
<tr>
<td>Annex 1: SNP</td>
<td></td>
<td>At least thirty (30) days prior to commencement of bridge construction and culvert installation.</td>
<td>Submit to an Analyst for approval and provide an approved copy to the Board and the Inspector</td>
</tr>
</tbody>
</table>
GENERAL PROCEDURES FOR THE ADMINISTRATION OF LICENCES
ISSUED UNDER THE WATERS ACT IN THAT PORTION OF THE INUVIALUIT
SETTLEMENT REGION LOCATED IN THE NORTHWEST TERRITORIES

1. At the time of issuance, a copy of the Licence is placed in the Public
Register at the Inuvialuit Water Board (IWB) Office and on the IWB website.

2. To enforce the terms and conditions of the Licence, the Minister of
Environment and Natural Resources has appointed Inspectors in
accordance with Section 65(1) of the Waters Act. The Inspectors
coordinate their activities with officials of the Water Resources Division of
the Department of Environment and Natural Resources. The Inspector
responsible for the Licence is located in the Department of Environment
and Natural Resources Office in Inuvik.

3. To keep the IWB and members of the public informed of the Licensee's
conformity to Licence Terms and Conditions, the Inspectors prepare reports
which detail observations on how each requirement of the Licence has
been met. These reports are forwarded to the Licensee with a covering
letter indicating what action, if any, should be taken. The inspection reports
and covering letters are placed in the Public Register, as are any
responses received from the Licensee pertaining to the inspection reports.
Licensees must respond to all areas of concern outlined in the inspection
reports.

4. If renewal of the Licence is contemplated it is the responsibility of the
Licensee to apply to the IWB for renewal of the Licence. The past
performance of the Licensee, new documentation and information, and
points raised during a public hearing, if required, will be used to determine
the terms and conditions of any Licence renewal. Please note that if the
Licence expires and another has not been issued, then Water and Waste
disposal must cease, or you, the Licensee, would be in contravention of the
Waters Act. It is suggested that an application for renewal of the Licence
be made at least eight months in advance of the Licence expiry date.

5. If, for some reason the Licence requires an amendment, a public hearing
may be required. You are reminded that applications for amendments
should be submitted as soon as possible to provide the IWB with ample
time to go through the amendment process. The process may take up to
six (6) months or more depending on the scope of the amendment
requested.

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6. Specific clauses of your Licence make reference to the IWB, Analyst or Inspector. The contact person, address, phone and fax number of each is:

**BOARD:**
Executive Director
Inuvialuit Water Board
Box 2531
INUVIK, NT X0E 0T0

Phone No: (867) 678-2942
Fax No: (867) 678-2943

**ANALYST:**
Analyst
Taiga Environmental Laboratory
Environment and Natural Resources
Government of the NWT
P.O. Box 1320
YELLOWKNIFE, NT X1A 2L9

Phone No: (867) 767-9235 ext. 53150
Fax No: (867) 920-8740

**INSPECTOR:**
Water Resources Officer
Environment and Natural Resources
Government of the Northwest Territories
P.O. Box 2749
INUVIK, NT X0E 0T0

Phone No: (867) 678-6676
Fax No: (867) 678-6699