

October 11, 2019

Mayor Andrew Charlie Hamlet of Aklavik P.O. Box 88 Aklavik, NT X0E 0A0

Dear Mayor Charlie:

### Re: Water Licence N3L3-0570 - Hamlet of Aklavik - Renewal

Please find attached Water Licence N3L3-0570 - Hamlet of Aklavik, renewed by the Inuvialuit Water Board (IWB) for a period of five (5) years commencing December 1, 2019 and expiring November 30, 2024. Included with the attached licence are 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.

Please note that approval of the submitted Unauthorized Discharge Contingency Plan, Hazardous Waste Management Plan, and Operation and Maintenance Plans for Solid Waste Disposal and Sewage Waste Disposal Facilities will be withheld pending receipt and consideration of the additional information requested on September 6, 2019.

A copy of this Licence and all documentation associated with the application, consideration and issuance of this 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 this 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,

Roger Connelly Chairperson

Attachments

Copied to:

Fred Behrens, Senior Administrative Officer, Hamlet of Aklavik

Lloyd Gruben, Water Resource Officer - ENR



#### INUVIALUIT WATER BOARD

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

#### Hamlet of Aklavik

P.O. 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.

Licence Number

N3L3-0570 (renewal)

**Licence Type** 

"B"

Water Management Area

Northwest Territories 3

Location

68° 13' North and 135° 0' West,

Northwest Territories

**Purpose** 

Water Use and Waste Disposal

Description

Municipal Undertaking

Quantity of Water Obtained from

150,000 cubic metres (m³) per year or

**Approved Sources not to Exceed** 

150,000,000 Litres (L) per year

**Effective Date of Licence** 

December 1, 2019

**Expiry Date of Licence** 

November 30, 2024

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

**INUVIALUIT WATER BOARD** 

Chairperson

Date

Stoleer 1,2019

#### PART A: SCOPE AND DEFINITIONS

#### 1. Scope

- This Licence renewal entitles the Hamlet of Aklavik to use water and dispose of waste for municipal purposes at Aklavik, Northwest Territories. The Hamlet is located at 68° 13' North latitude and 135° 0' West longitude.
- Whenever new Regulations are made or existing Regulations are amended by the Commissioner in Executive Council under the Act, or other statutes relating to the use of water or deposit of waste, this Licence shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations.
- 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 and regulations.
- This Licence is issued subject to the conditions contained herein and as described within the Act.

#### 2. Definitions

In this Licence: N3L3-0570

"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 Act;

"Analyst" means a person designated as an Analyst by the Minister under Section 65 (1) of the Act;

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

"Average Concentration for Faecal Coliforms" means the running geometric mean of up to four consecutive analytical results submitted to the Board in any single calendar year in accordance with the sampling and analysis requirements specified in the licence's "Surveillance Network Program";

"Bagged Toilet Wastes Disposal Facility" comprises the area within the Solid Waste Disposal Facility and associated structures designed to contain bagged toilet wastes ('honey bags');

"Board" means the Inuvialuit Water Board;

"Closure" means the permanent dismantlement of an Undertaking for the specific purpose of making it unavailable for its originally intended use. This includes the removal of associated equipment and structures used in the construction or maintenance of the Undertaking;

"Contingency Plan" means a detailed program of action designed to control and/or minimize the effects of an emergency situation in which prompt corrective measures, beyond normal procedures, are required to protect human life, to minimize injury and/or losses, and to reduce the exposure of physical assets and the receiving environment to risks resulting from an incident;

- "Construction" means any activities initiated to build any components of, or associated with, the Undertaking;
- "Contaminant" means a biological, chemical, physical or radiological substance that becomes harmful for humans or living organisms, when accidently or deliberately introduced to air, water, soil or food;
- "Discharge" means the approved direct or indirect release of any water or waste into a receiving environment:
- **"Engineer"** means a person registered as a professional engineer 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;
- "Greywater" means all liquid wastes from showers, baths, sinks, kitchens and domestic washing, but does not include toilet wastes;
- "Hazardous Wastes" mean those wastes with properties such as flammability, corrosiveness, or inherent toxicity that may pose a variety of risks, from skin damage on contact, to the contamination of ground water, surface water, or soil leaching when improperly treated, stored, transported, or disposed of, or otherwise managed;
- "Inspector" means a person designated by the Minister under Section 65 (1) of the Act;
- "Minister" means a duly appointed member of the Executive Council who is responsible for the Act;
- "Modification" means an alteration to an existing approved physical structure which forms part of an Undertaking 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;
- "Pump-out Sewage" means all toilet wastes and/or greywater collected by means of a vacuum truck for disposal at an approved Facility;
- "Receiving Environment" means the environment that receives any water or waste released from the Undertaking;
- "Reclamation" means the process of restoring the Undertaking area, as nearly as possible, to the same condition as it was prior to the commencement of the licensed activity;
- "Regulations" means rules and or directives promulgated pursuant to Section 63 of the Act;
- "Segregated Solid Waste Disposal Areas" means defined areas identified within the Solid Waste Disposal Facility set apart for the deposit of specific solid waste materials;
- "Sewage" means all toilet wastes and Greywater;
- "Sewage Waste Disposal Facility" comprises the area and engineered structures, as approved by the Board, designed to contain and treat Sewage;
- "Solid Waste Disposal Facility" comprises the area and associated structures, as approved by the Board, designed to contain solid wastes;
- "Spill" see 'Unauthorized Discharge';

- "Surveillance Network Program (SNP)" means a monitoring program, as detailed in Annex A of this Licence, requiring environmental sampling and analysis, to determine water quality, to assess Discharge quality, determine licensee compliance with Licence terms and conditions and to assess potential licensee activity impact on the environment;
- "Temporary Hazardous Waste Containment Area" means a bermed and lined area within the Solid Waste Disposal Facility constructed and maintained for the temporary storage of Hazardous Wastes, prior to their treatment and/or disposal;
- "Toilet Wastes" means all human excreta and associated products, but does not include Greywater;
- "Unauthorized Discharge" means a spill, a release or discharge of any Waters or Waste not authorized under this licence or by an Inspector;
- "Undertaking" means the whole of the activity for which the water licence has been issued;
- "Waste" means any substance defined as waste as defined by Section 1 of the Act;
- "Waste Disposal Facilities" mean all facilities designated for the disposal of waste, and includes the Sewage and Solid Waste Disposal Facilities;
- "Watercourse" means a natural body of water or water supply, whether usually containing water or not, and includes groundwater, springs, swamps, and gulches, as defined in the Waters Regulations;
- "Waters" means any waters as defined by Section 1 of the Act; and
- "Water Supply Facility" means all components of an Undertaking constructed to collect, treat and supply water for municipal purposes.

#### PART B: GENERAL CONDITIONS

- 1. The Licensee shall file an Annual Report with the Board, not later than April 30 of each year, which shall contain the following information about activities during the previous calendar year:
  - a) the monthly and annual quantities in cubic metres (m³) or litres (L) of fresh water obtained from all sources;
  - b) the monthly and annual quantities in cubic metres (m³) or litres (L) of all sewage discharged to the Sewage Waste Disposal Facility;
  - a summary of the monthly and annual quantities of hazardous waste stored on site and those transported off site. The summary shall also include the quantities, location, treatment and/or disposal plans for all hazardous wastes remaining at the end of the reporting period;
  - d) any problems, modifications or repairs done to the Water Supply and Waste Disposal Facilities, including all associated structures;
  - e) tabular summaries of all data collected under the Surveillance Network Program (SNP);
  - f) a list of unauthorized discharges, including spills;
  - g) a description of any unauthorized discharge (including spills) training and/or other operator training carried out;
  - h) a description of any closure and reclamation work completed during the year and an outline of any work anticipated for the next year;
  - a description of the status and results of any studies requested by the Board and a brief description of any future studies planned;

- i) any updates and/or revisions to the:
  - approved Unauthorized Discharge (Spill) Contingency Plan;
  - approved Solid Waste Disposal Facility Operation and Maintenance Plan;
  - approved Sewage Waste Disposal Facility Operation and Maintenance Plan;
  - · approved Hazardous Waste Management Plan; and
  - approved Closure and Reclamation Plan;
- k) results of staff inspections on all Water Supply and Waste Disposal Facilities authorized under this Licence; and any corrective actions, as necessary;
- I) all correspondence between the Inspector and the Licensee; and
- m) All other details on water use or waste disposal requested by the Board during the reporting year.
- 2. The Licensee shall comply with the Surveillance Network Program attached to this Licence, and any amendment to the Surveillance Network Program, as may be made from time to time.
- 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 sixty (60) days of the issuance of this Licence, submit to the Board for approval, a map or drawing indicating the location of all Surveillance Network Program (SNP) sampling stations, with associated Global Positioning System (GPS) coordinates (Note: Due to inconsistencies between individual GPS units, Google Earth latitude and longitude should be utilized as the GPS points).
- 5. The Licensee shall, within sixty (60) days of issuance of this Licence, post signs in the appropriate areas to inform the public of the location of the Water Supply and Waste Disposal Facilities.
- 6. Meters, devices or other such methods used for measuring the volumes of water obtained and waste disposed of and discharged shall be installed, operated and maintained by the Licensee to the satisfaction of the Inspector.
- 7. The Licensee shall ensure that any wastes associated with the undertaking do not enter any waters unless authorized by this licence.
- 8. The Licensee shall immediately report to the 24-Hour Spill Report Line (867 920-8130) any unauthorized discharges of waste that are reported to, or observed by, the Licensee that occur either at or adjacent to the Water Supply or Waste Disposal Facilities or elsewhere within the municipal boundaries.
- 9. All fuel or storage vessels containing hazardous substances left for extended periods of time (including overnight in vehicles), shall be stationed in an area that contains sufficient secondary containment (i.e. drip pans, lined bermed areas, double walled enviro-tanks, etc.).
- 10. For the operator's convenience and increased environmental protection, all heavy equipment and refueling vehicles shall carry portable spill kits that include items such as absorbent pads, containment booms, and spill pool catchment receptacles.
- 11. The Licensee shall, at all time, keep a copy of this Licence in the municipal office. All employees conducting work related to any undertaking within the scope of this Licence are to be made aware of the appropriate sections of the Licence.

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

## PART C: CONDITIONS APPLYING TO WATER USE

- 1. The Licensee shall obtain all community water supplies from the Peel River or from a source otherwise approved by the Board.
- 2. The Licensee may, when it is not possible to obtain water from the source stated in Part C, Item 1, obtain water from an alternate water supply for use on an emergency basis upon approval by the Inspector.
- 3. The annual quantity of water taken from all sources shall not exceed 150,000 cubic metres (m³) or 150,000,000 Litres (L).
- 4. The water intake hose, used on the water pumps, shall be equipped with a screen with a mesh size sufficient to ensure no fish can be drawn into the intake hose.

# PART D: CONDITIONS APPLYING TO SOLID WASTE DISPOSAL

- 1. The Licensee shall dispose of all solid wastes at the Solid Waste Disposal Facility or as otherwise approved by the Board.
- 2. All Discharge from the Solid Waste Disposal Facility at Surveillance Network Program Station Number 0570-2 shall meet the following quality standards:

Testing Parameters	Maximum Concentration of any Grab Sample
Total Mercury (Hg)	0.000026 mg/L
Total Chromium (Cr)	0.002 mg/L
Total Iron (Fe)	0.30 mg/L
Total Zinc (Zn)	0.03 mg/L
Total Copper (Cu)	When the water hardness is 0 to < 82 mg CaCO $_3$ /L, the maximum concentration is 0.002 mg/L
	At hardness ≥82 to ≤180 mg CaCO₃/L the maximum concentration is calculated using equation:
	Maximum Concentration ( $\mu$ g/L) = 0.2 * e {0.8545[ln(hardness)]-1.465}
	At hardness >180 mg CaCO $_3$ /L, the maximum concentration is 0.004 mg/L
	If the hardness is unknown, the maximum concentration is 0.002 mg/L
Total Nickel (Ni)	When the water hardness is 0 to $\leq$ 60 mg CaCO <sub>3</sub> /L, the maximum concentration is 0.025 mg/L
	At hardness > 60 to $\leq$ 180 mg CaCO <sub>3</sub> /L, the maximum concentration is calculated using equation:
	Maximum concentration ( $\mu$ g/L) = e {0.76[ln(hardness)]+1.06}
	At hardness >180 mg CaCO <sub>3</sub> /L, the maximum concentration is 0.150

	mg/L		
	If the hardness is unknown, the maximum concentration is 0.025 mg/L		
Total Cadmium (Cd)	When the waters hardness is 50 mg CaCO₃/L, maximum concentration is 0.00009 mg/L		
	At hardness between 17 and 280 mg CaCO <sub>3</sub> /L the maximum concentration is calculated using equation:		
	Maximum concentration (μg/L) = 10 <sup>{0.83(log[hardness]) - 2.46}</sup>		
	At hardness > 280 mg CaCO <sub>3</sub> /L the maximum concentration is 0.00037 mg/L		
Total Lead (Pb)	When the hardness is 0 to ≤ 60 mg CaCO₃/L, the maximum concentration is 0.001 mg/L		
	At hardness >60 to $\leq$ 180 mg CaCO $_3$ /L, the maximum concentration is calculated using equation:		
	Maximum concentration( $\mu$ g/L) = $e^{\{1.273[ln(hardness)]-4.705\}}$		
	At hardness >180 mg CaCO <sub>3</sub> /L, the maximum concentration is 0.007 mg/L, If the hardness is unknown, the maximum concentration is 0.001 mg/L		
Total Ammonia (NH3)	To be determined maximum concentration based on the temperature and pH as per Canadian Council of Ministers of the Environment (CCME) Canadian Water Quality Guidelines for the Protection of Aquatic Life		
Nitrate (NO₃)	13 mg/L		
Nitrite (NO <sub>2</sub> )	0.06 mg NO <sub>2</sub> -N/L		
Total Phenois	0.004 mg/L		
Benzene	0.37 mg/L		
Toluene	0.002 mg/L		
Ethylbenzene	0.09 mg/L		
Xylene	0.03 mg/L		
Total Petroleum			
Hydrocarbons	5 mg/L		
Polychlorinated	0.000001 mg/L		
Biphenyls (PCB)			
Faecal Coliforms	1 x 10 <sup>4</sup> CFU/100mL		
Biological Oxygen Demand (BOD <sub>5</sub> )	100 mg/L		
Total Suspended Solids (TSS)	120 mg/L		
рН	Between 6 and 9		

- Signage within the Solid Waste Disposal Facility shall clearly indicate where different types of
  waste collected by the Hamlet should be deposited including the segregated temporary
  storage areas for hazardous wastes. All postings shall be located and maintained to the
  satisfaction of the Inspector.
- 4. Disposal trenches and cells shall be maintained to the satisfaction of the Inspector and be operated in such a manner as to prevent structural failure.

- 5. The Licensee shall, as necessary, erect and maintain, to the satisfaction of the Inspector, fencing around the perimeter of the Solid Waste Disposal Facility so as to prevent the spread of wind-blown litter and waste into surrounding areas and the access of wildlife into the solid waste disposal area.
- 6. At least once in the spring and again in the fall of each year, the Licensee shall collect windblown litter found within the Solid Waste Disposal Facility and in the surrounding area.
- 7. The Licensee shall erect and maintain, to the satisfaction of the Inspector, gates at the entrance of the Solid Waste Disposal Facility that are capable of being locked. The gates must be constructed in a manner that will permit the municipality to regulate hours of access to the Facility, prevent unauthorized access by individuals and discourage unauthorized deposits of waste.
- 8. The Licensee shall, to the satisfaction of the Inspector, construct and maintain a Temporary Hazardous Waste Containment Area within the Solid Waste Disposal Facility.
- 9. The Licencee shall, to the satisfaction of the Inspector, segregate and store all hazardous waste in the designated Temporary Hazardous Waste Containment Area.
- 10. The Licensee shall notify the Inspector prior to the deposit of any contaminated soil or snow within the Solid Waste Disposal Facility's Temporary Hazardous Waste Containment Area.
- 11. The Licensee shall, to the satisfaction of the Inspector, contain all contaminated soil, snow and all other hazardous materials in such a manner as to minimize the potential for migration of contaminants into any waters.
- 12. The Licensee shall not accept any hazardous wastes generated by the Industrial/ Commercial/Institutional sector unless the Licencee is registered with the Department of Environment and Natural Resources and types and procedures detailed in the Hazardous Waste Management Plan.
- 13. All bagged toilet wastes (honey bags) shall be disposed of, to the satisfaction of the Inspector, at the Bagged Toilet Waste Disposal Area within the Solid Waste Disposal Facility.
- 14. The Licensee shall not openly burn solid or liquid waste, with the exception of paper products, paperboard packaging, untreated wood. Authorized burning shall be in accordance with the guideline "Municipal Sold Wastes Suitable for Open Burning", developed by the Government of Northwest Territories (GNWT) Department of Environment and Natural Resources.
- 15. If necessary, the Licensee shall openly burn any animal carcasses in a designated location within the Solid Waste Disposal Facility.
- 16. The Licensee shall, within three (3) months of the issuance of this Licence, submit to the Board for approval, an Operations and Maintenance Plan for the Solid Waste Disposal Facility that includes, but is not limited to, information and plans related to the following:
  - a) specifications of the Facility including engineering drawings signed and stamped by an engineer;
  - b) operations, maintenance and monitoring programs as well as maintenance and inspection schedules;
  - c) quantification and composition of solid waste anticipated to be accepted on an annual basis;
  - d) segregation and management of contaminated soil and snow;
  - e) hazardous waste segregation, management and ultimate disposal;
  - f) prevention of windblown debris;

- g) security;
- h) flood response measures including temporary alternate solid and hazardous waste disposal practices, locations and mitigation measures; and
- i) operator training standards and plans.
- 17. The Solid Waste Disposal Facility Operations and Maintenance Plan shall be consistent with the "Guideline for the Planning, Design, Operations and Maintenance of Modified Solid Waste Sites in the Northwest Territories, April 2003" developed by the Government of the Northwest Territories (GNWT) Department of Municipal and Community Affairs.
- 18. The Licensee shall implement the Solid Waste Operations and Maintenance Plan specified in Part D, Item 16 as and when approved by the Board.
- 19. The Licensee shall review the Solid Waste Operation and Maintenance Plan annually and modify the plan as necessary to reflect changes in design, operation and maintenance or any other changes that may be required by the Board or the Inspector. All proposed modifications shall be submitted to the Board for approval.
- 20. The Licensee shall implement all other appropriate measures to minimize and control contact between receiving waters and run-off from the Solid Waste Disposal Facility.

# PART E: CONDITIONS APPLYING TO SEWAGE WASTE DISPOSAL

- 1. The Licensee shall direct all pump-out sewage to the Sewage Waste Disposal Facility or as otherwise approved by the Board.
- 2. All Discharge from the Sewage Waste Disposal Facility at Surveillance Network Program Station Number 0570-3 shall meet the following quality standards:

Testing Parameters	Maximum Average Concentration
Faecal Coliforms	1 x 10 <sup>4</sup> CFU/100mL
Biological Oxygen Demand (BOD₅)	120 mg/L
Oil and Grease	5 mg/L
Total Suspended Solids (TSS)	180 mg/L
The effluent discharged shall have	a pH between 6 and 9, and no visible sheen of oil and grease.

- 3. The Licensee shall immediately notify the Board and the Inspector of any discharge quality results that exceed the maximum average concentration standards shown in Part E, Item 2.
- 4. The Licensee shall ensure that the Sewage Waste Disposal Facility is maintained and operated in such a manner as to prevent structural failure.
- 5. The Licensee shall maintain the Sewage Waste Disposal Facility to the satisfaction of the Inspector.
- 6. The Licensee shall, within three (3) months of the issuance of this Licence, submit to the Board for approval, an Operations and Maintenance Plan for the Sewage Waste Disposal Facility that includes, but is not limited to, information and plans related to the following:
  - a) specifications of the Facility including engineering drawings signed and stamped by an engineer;
  - b) operations, maintenance and monitoring programs including maintenance and inspection schedules;

- c) quantification of sewage that is anticipated to be accepted at the Facility on an annual basis;
- d) security;
- e) flood response measures including temporary alternate sewage waste disposal practices, locations and mitigation measures; and
- f) operator training standards and plans.
- 7. The Licensee shall implement the Sewage Waste Operations and Maintenance Plan specified in Part E, Item 6 as and when approved by the Board.
- 8. The Licensee shall review the Sewage Waste Operations and Maintenance Plan annually and modify the plan as necessary to reflect changes in design, operation and maintenance or any other changes that may be required by the Board or the Inspector. All proposed modifications shall be submitted to the Board for approval.

# PART F: CONDITIONS APPLYING TO HAZARDOUS WASTE MANAGEMENT

- 1. The Licensee shall, within three (3) months of the issuance of this Licence, submit to the Board for approval, a Hazardous Waste Management Plan. The plan shall include, but is not limited to:
  - a) design of Temporary Hazardous Waste Containment Area, including designation of areas for segregated wastes;
  - b) detailed listings of the types of hazardous wastes that are, and those that are not accepted into the Temporary Hazardous Waste Containment Area;
  - c) description of the maximum quantities of each type of hazardous waste that will be temporarily stored in the Temporary Hazardous Waste Containment Area;
  - details related to the methods of storage, treatment and/or ultimate disposal each type of hazardous waste (including contaminated soil and snow);
  - e) any details related to the re-use of hazardous waste following treatment;
  - f) a description of the process that ensures the maintenance of a hazardous waste inventory that identifies the type, means of containment, and quantity of all types of hazardous waste being stored in the Temporary Hazardous Waste Containment Area; and
  - g) a description of the location, timing and means of transport of all hazardous waste to an approved Hazardous Waste Disposal Facility.
- 2. The Licensee shall implement the Hazardous Waste Management Plan specified in Part F, Item 1 as and when approved by the Board.
- 3. The Licensee shall review the Hazardous Waste Management Plan annually and modify the plan as necessary to reflect changes in design, operation and maintenance or any other changes that may be required by the Board or the Inspector. All proposed modifications shall be submitted to the Board for approval.

# PART G: CONDITIONS APPLYING TO UNAUTHORIZED DISCHARGE CONTINGENCY PLANNING

- 1. The Licensee shall submit to the Board, within three (3) months of the issuance of this Licence, an Unauthorized Discharge Contingency Plan in accordance with the "Guidelines for Spill Contingency Planning, April 2007" developed by Government of Canada's (GOC) Department of Indian and Northern Affairs Canada (INAC) Water Resources Division.
- 2. The Licensee shall implement the plan specified in Part G, Item 1 as and when approved by

the Board.

- 3. The Licensee shall review the Unauthorized Discharge Contingency Plan annually, and if necessary, modify the plan to reflect changes in operation(s) and technology, chemicals or fuels, or any other changes that may be required by the Board or the Inspector. All proposed modifications shall be submitted to the Board for approval.
- 4. If, during the period of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
  - a) implement the approved Unauthorized Discharge Contingency Plan;
  - b) report all Unauthorized Discharges immediately via the (24) Hour NWT Spill Report Line (867) 920-8130 in accordance with the instructions contained in the Northwest Territories -Nunavut Spill Report Form;
  - c) report each Unauthorized Discharge to the Board and the Inspector within 24 hours; and
  - d) submit to the Board and the Inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the event. The detailed report shall include descriptions of root causes, response actions, and any changes to procedures to prevent similar occurrences in the future.
- 5. The reclamation of the receiving environment resulting from an Unauthorized Discharge shall be to the satisfaction of the Inspector.

#### PART H: CONDITIONS APPLYING TO CONSTRUCTION

- 1. Prior to construction of any dams, dykes or structures intended to contain, treat, withhold, divert or retain water or wastes, the Licensee shall submit, for the Board's approval, a construction plan and a design report signed and stamped by an Engineer.
- 2. Construction of designed structures described in Part H, Item 1, shall be carried out when approved by the Board.
- 3. Should revisions to approved construction plans be necessary during construction, the Licensee shall submit to the Board, within ninety (90) days of the completion of construction, a description as to why the revisions were necessary and revised 'as-built' drawings of the dams, dykes or structures that are signed and stamped by an Engineer.
- 4. Any fill material used in the construction of any structures as described in Part H, Item 1, must be clean and free of contaminants.

# PART I: CONDITIONS APPLYING TO MODIFICATIONS

- 1. The Licensee may, without written approval from the Board, carry out modifications to the Water Supply Facility or Solid Waste Disposal Facility 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 in writing of the proposed modifications at least five (5) 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 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 all of 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 modified' site plans referred to in Part I, Item 1 within ninety (90) days of completion of the modifications.

# PART J: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION

- The Licensee shall submit to the Board, for approval, a Closure and Reclamation Plan at least nine (9) months prior to abandoning any Water Supply, Sewage or Solid Waste Disposal Facility. The Plan shall include, but not be limited to, discussion of the following:
  - a) site reclamation;
  - b) the potential for groundwater contamination (leachate prevention);
  - c) consideration of altered drainage patterns;
  - d) type and source of cover materials;
  - e) future area use;
  - f) hazardous wastes removal, transportation and disposal;
  - g) an implementation schedule;
  - h) maps delineating all disturbed areas, borrow material locations, and site Facility; and
  - i) a site monitoring plan.
- 2. The Licensee shall implement the Closure and Reclamation Plan specified in Part J, Item 1 as and when approved by the Board.
- 3. If the Closure and Reclamation Plan specified in Part J, Item 1 does not receive Board approval, the Licensee shall make the necessary revisions and re-submit the Plan to the Board for approval prior to implementing the Plan.
- 4. Notwithstanding the time schedule referred to in the Closure and Reclamation Plan, the Licensee shall endeavour to carry out progressive reclamation of areas, which are abandoned prior to the closure of operations.
- 5. The Licensee shall complete the reclamation work within the time schedule specified in the Plan, or as subsequently revised and approved by the Board.
- 6. Upon implementation of the Closure and Reclamation Plan, and in accordance with the reporting requirements described in Part B, Item 1, the Licensee shall, within its Annual Report (see Part B, Item 1), provide updates regarding all Closure and Reclamation activities.
- 7. Compliance with the Closure and Reclamation Plan specified in this Licence does not limit the legal liability of the Licensee, other than liability arising from provisions of the *Act* and its Regulations.

#### **INUVIALUIT WATER BOARD**

Chairperson

October 11. 2019

Date

ANNEX A: SURVEILLANCE NETWORK PROGRAM (SNP)

LICENSEE: Hamlet of Aklavik

LICENCE NUMBER: N3L3-0570

**EFFECTIVE DATE OF LICENCE:** December 1, 2019

**EFFECTIVE DATE OF** 

SURVEILLANCE NETWORK PROGRAM: December 1, 2019

#### A.Sampling Stations

SNP Station Number	Description of Sampling Station
0570 - 1	Raw Water supply at the point of intake
0570 - 2	Run-off from Solid Waste Disposal Facility
0570 - 3	Discharge from Sewage Waste Disposal Facility at the point of outflow

#### **B.Sampling and Analysis Requirements**

1. Water at Station Number 0570-2 shall be sampled annually when run-off is observed and analyzed for the following parameters:

Description of Sampling Station	Testing Parameters	
Discharge from Solid Waste Disposal Facilities	Mercury (Hg), Total Chromium (Cr), Total Iron (Fe), Total Zinc (Zn), Total Copper (Cu), Total Nickel (Ni), Total Cadmium (Cd), Total Lead (Pb), Total Ammonia, Nitrate, Nitrite, Total Phenols, Benzene, Toluene, Ethylbenzene, Xylene, Total Petroleum Hydrocarbons, Polychlorinated Biphenyls (PCB), Faecal Coliforms, Biological Oxygen Demand (BOD <sub>5</sub> ), Total Suspended Solids (TSS), pH, Hardness, Temperature	

2. Water at Station Number 0570-3 shall be sampled once immediately after break-up and monthly during the open water season and analyzed for the following parameters:

Description of Sampling Station	Testing Parameters
Discharge from Sewage Waste Disposal Facilities at the point of outflow	Faecal Coliforms, Biological Oxygen Demand (BOD₅), Oil and Grease, Total Suspended Solid (TSS), pH

- 3. Water at Station Numbers 0570-2 and 0570-3 shall be inspected for the presence of an oily sheen, monthly during periods of flow. If an oily sheen is detected, then a sample shall be collected and analyzed for the presence of oil and grease.
- 4. Sample collection requirements such as sampling frequency, testing parameters and locations may be modified by the Inspector.
- 5. All sampling, sample 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 Water Works Association and the Water Environment Federation or by such other methods approved by an Analyst.

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- 6. All analyses shall be performed in a laboratory approved by an Analyst.
- 7. The Licensee shall immediately notify the Board and the Inspector of any discharge quality results that exceed the maximum standard concentration.

# C. Flow Measurement and Recording Requirements

- 1. The Licensee shall measure and record in cubic metres (m³) or litres (L) the monthly and annual quantities of water pumped from Station Number 0570-1 for municipal purposes.
- 2. The Licensee shall measure and record in cubic metres (m³) or litres (L) the monthly and annual quantities of sewage discharged into the Sewage Waste Disposal Facility.

#### **D.Reports**

1. In accordance with the reporting requirements described in Part B, Item 1, the Licensee shall submit all of the data and information generated by Part B and Part C of the Surveillance Network Program to the Board not later than April 30 of the year following the end of the calendar year (end of the reporting period)

#### **INUVIALUIT WATER BOARD**

Chairperson

Date

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

Licence Condition	Reports/Others	Timeline for Submission	Required Board Action/Others
Part B, Item 1	Annual Report	Not later than April 30 of each year	Acceptance
Part B, Item 4	A map or drawing indicating the location of all Surveillance Network Program sampling stations	Within sixty (60) days of the issuance of this Licence	Approval
Part B, Item 5	Post signs in the appropriate areas	Within sixty (60) days of the issuance of this Licence	To the satisfaction of the Inspector
Part D, Item 16	An Operation and Maintenance Plan Solid Waste Disposal Facility	Within three (3) months of the issuance of this Licence	Approval
Part E, Item 6	An Operation and Maintenance Plan for the Sewage Waste Disposal Facility	Within three (3) months of the issuance of this Licence	Approval
Part F, Item 1	A Hazardous Waste Management Plan	Within three (3) months of the issuance of this Licence	Approval
Part G, Item 1	An Unauthorized Discharge Contingency Plan	Within three (3) months of the issuance of this Licence	Approval
Part H, Item 3	As-built drawings of the dams, dykes or structures	Within ninety (90) days of completion of construction	Acceptance
Part I, Item 1a	Notification to the Board in writing of proposed modifications	At least five (5) days prior to beginning the modifications	Acceptance
Part I, Item 3	As modified site plans referred to in Part I, Item 1	Within ninety (90) days of completion of the modifications	Acceptance
Part J, Item 1	A Closure and Reclamation Plan	At least nine (9) months prior to abandoning any Water Supply, Sewage or Solid Waste Disposal Facility	Approval

# GENERAL PROCEDURES FOR THE ADMINISTRATION OF LICENCES ISSUED UNDER THE WATERS ACT IN THAT PORTION OF THE INUVIALUIT SETTLEMENT REGION LOCATED WITHIN 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 in Inuvik. Copies are available here or on the IWB website at www.inuvwb.ca.
- 2. To enforce the terms and conditions of the Licence, the Minister of Environment and Natural Resources (ENR) 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 ENR. The Inspector responsible for the Licence is located in the ENR Regional 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 inspection 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 use and waste disposal must cease, or you, the Licensee, would be in contravention of the *Waters Act*. Under normal circumstances an application for renewal should be made at least six (6) 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

P.O. 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: Inspector

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