



February 14, 2024

Mayor Erwin Elias
Hamlet of Tuktoyaktuk
P.O. Box 120
Tuktoyaktuk, NT X0E 1C0

Dear Mayor Elias:

Re: N5L3-0714 - Hamlet of Tuktoyaktuk – Municipal Water Licence Renewal

Please find attached N5L3-0714 - Hamlet of Tuktoyaktuk Municipal Water Licence renewed by the Inuvialuit Water Board (IWB) for the 5-year period commencing February 21, 2024, and expiring November 20, 2028. 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. Also note that the requirements for the submission and approval of updated Unauthorized Discharge (Spill) Contingency Plan, Solid and Sewage Waste Disposal Facilities Operation & Maintenance Plans, and Hazardous Waste Management Plan have been met. These plans were received and approved by the Board in their consideration of your application.

A copy of this Licence and all documents associated with the application, consideration and Licence renewal have been filed in the Public Register. Copies are available at the IWB office and on the IWB website. All inspection reports and other documents related to the implementation of this Licence will also be filed in the Public Register. All Public Register information associated with the Licence will be considered if an amendment to the Licence is requested.

The IWB appreciates the cooperation of the Hamlet of Tuktoyaktuk 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,

Richard Binder
Chairperson

Attachments

Copied to: Katrina Cockney, a/SAO – Hamlet of Tuktoyaktuk
Lloyd Gruben, Water Resource Officer - ECC Beaufort Delta Region, Inuvik
Donald Arey, Regional Superintendent - ECC Beaufort Delta Region, Inuvik



INUVIALUIT WATER BOARD

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

Hamlet of Tuktoyaktuk

**P.O. Box 120
Tuktoyaktuk, NT X0E 1C0
(Mailing Address)**

hereinafter referred to as 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	N5L3-0714 (Renewal)
Licence Type	"B"
Water Management Area	Northwest Territories 5
Location	69° 27' North and 133° 02' West, Northwest Territories
Purpose	Water Use and Waste Disposal
Description	Municipal Undertaking
Quantity of Water Obtained from Approved Sources not to Exceed	100,000 cubic metres (m ³) per year or 100,000,000 Litres (L) per year
Effective Date of Licence	February 21, 2024
Expiry Date of Licence	November 20, 2028

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

INUVIALUIT WATER BOARD

Chairperson

Date

PART A: SCOPE AND DEFINITIONS

1. Scope

- This Licence renewal entitles the Hamlet of Tuktoyaktuk to use water, divert water and dispose of waste for municipal purposes at Tuktoyaktuk, Northwest Territories. The Hamlet is located at 69° 27' North latitude and 133° 02' 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 the 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: **N5L3-0714**

“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 accidentally 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;

“Freeboard” means the vertical distance between the Solid and/or Sewage Waste Disposal Facility water level and the lowest point of the containment structure;

“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;

“Sewage Sludge” means the residual non-stabilized semi-solid material separated from Sewage as a result of a natural or other process at the Sewage Waste Disposal Facility;

“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 impacts 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 final disposal to an approved facility;

“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 the 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;
 - c) 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) sludge depth and the monthly and annual quantities of sewage sludge removed from the Sewage Waste Disposal Facility and an explanation of disposal arrangements that have been undertaken for sludge;
 - e) any problems, modifications or repairs done to the Water Supply and Waste Disposal Facilities, including all associated structures;
 - f) tabular summaries of all data collected under the Surveillance Network Program (SNP);

- g) a list of unauthorized discharges, including spills;
 - h) a description of any unauthorized discharges (including spills) training and/or other operator training carried out;
 - i) a description of any closure and reclamation work completed during the year and an outline of any work anticipated for the next year;
 - j) a description of the status and results of any studies requested by the Board and a brief description of any future studies planned;
 - k) 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;
 - l) results of staff inspections on all water supply and waste disposal facilities authorized under this Licence, and any corrective actions, as necessary;
 - m) all correspondence between the Inspector and the Licensee; and
 - n) 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, Waste Disposal Facilities and Surveillance Network Program (SNP) monitoring sites. All the sign(s) shall be located and maintained to the satisfaction of the Inspector.
 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 NWT/NU Spill Report Line (1-867-920-8130) any unauthorized discharges of wastes 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 times, 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 (USB's).

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain all community water supplies from Kudlak Lake or from a source otherwise approved by the Board.
2. On an emergency basis only, the Licensee may, when it is not possible to obtain water from Kudlak Lake, obtain water from an alternate water supply upon approval by the Inspector.
3. The annual quantity of water taken from all sources shall not exceed 100,000 cubic metres (m³) or 100,000,000 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. For reference, review the Department of Fisheries and Oceans, Interim Code of Practice for End-of-Pipe Screens. (<http://www.dfo-mpo.gc.ca/pnw-ppe/codes/screen-ecran-eng.html>); and the licensee shall follow DFO's protective measures for fish and fish habitat and standard codes of practice which can be found on DFO's website (<https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html>; and <https://www.dfo-mpo.gc.ca/pnw-ppe/practice-practique-eng.html>).

PART D: CONDITIONS APPLYING TO SOLID WASTE DISPOSAL

1. The Licensee shall dispose of all solid waste at the Solid Waste Disposal Facility or as otherwise approved by the Board.
2. The Licensee shall ensure that any unauthorized wastes associated with the municipal undertaking do not enter any waters.
3. All Discharge from the Solid Waste Disposal Facility at Surveillance Network Program Station Number 0714-3 shall meet the following quality standards:

Testing Parameters	Maximum Concentration of any Grab Sample
Total Mercury (Hg)	0.000016 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

	<p>At hardness ≥ 82 to ≤ 180 mg CaCO_3/L, the maximum concentration is calculated using the equation:</p> <p>Maximum Concentration ($\mu\text{g}/\text{L}$) = $0.2 * e^{\{0.8545[\ln(\text{hardness})]-1.465\}}$</p> <p>At hardness > 180 mg CaCO_3/L, the maximum concentration is 0.004 mg/L</p> <p>If the hardness is unknown, the maximum concentration is 0.002 mg/L</p>
Total Nickel (Ni)	<p>When the water hardness is 0 to ≤ 60 mg CaCO_3/L, the maximum concentration is 0.025 mg/L</p> <p>At hardness > 60 to ≤ 180 mg CaCO_3/L, the maximum concentration is calculated using the equation:</p> <p>Maximum Concentration ($\mu\text{g}/\text{L}$) = $e^{\{0.76[\ln(\text{hardness})]+1.06\}}$</p> <p>At hardness > 180 mg CaCO_3/L, the maximum concentration is 0.150 mg/L</p> <p>If the hardness is unknown, the maximum concentration is 0.025 mg/L</p>
Total Cadmium (Cd)	0.00012 mg/L
Total Lead (Pb)	<p>When the water hardness is 0 to ≤ 60 mg CaCO_3/L, the maximum concentration is 0.001 mg/L</p> <p>At hardness > 60 to ≤ 180 mg CaCO_3/L, the maximum concentration is calculated using the equation:</p> <p>Maximum Concentration ($\mu\text{g}/\text{L}$) = $e^{\{1.273[\ln(\text{hardness})]-4.705\}}$</p> <p>At hardness > 180 mg CaCO_3/L, the maximum concentration is 0.007 mg/L</p> <p>If the hardness is unknown, the maximum concentration is 0.001 mg/L</p>
Total Cobalt (Co)	0.004 mg/L
Total Manganese (Mn)	Maximum concentration (mg/L) = $0.0044 * \text{hardness (mg CaCO}_3/\text{L}) + 0.605$
Benzene	0.110 mg/L
Toluene	0.215 mg/L
Ethylbenzene	0.025 mg/L
Xylene	0.03 mg/L
Total Petroleum Hydrocarbons (TPH)	5 mg/L
Biochemical Oxygen Demand (BOD_5)	120 mg/L
Oil and Grease (Hexane Extractable Material)	5 mg/L
Total Suspended Solids (TSS)	180 mg/L
Faecal Coliform	1×10^4 CFU/100mL
pH	Between 6 and 9

Carbonaceous Biochemical Oxygen Demand (cBOD ₅)	60 mg/L
Total Ammonia (NH ₃)	To be determined maximum concentration based on the temperature and pH as per Canadian Council of Ministers of the Environment (CCME) Water Quality Guidelines for the Protection of Aquatic Life: https://ccme.ca/en/chemical/5#_aql_fresh_concentration
Nitrate (NO ₃)	200 mg/L
Nitrite (NO ₂)	0.197 mg/L
Total Phenols	0.001 mg/L

4. The Licensee shall immediately notify the Board and Inspector of any effluent quality results that exceed the maximum standard concentration.
5. The Licensee shall notify Department of Fisheries and Oceans (DFO) if it has caused, or is about to cause, serious harm to fish or fish habitat, shellfish and benthic organisms due to effluent discharged from the Waste Disposal Facilities.
6. The Licensee shall notify the Inspector at least thirty (30) days prior to any discharge of water from the Solid Waste Disposal Facilities.
7. The Licensee may commence the discharge of water from the Solid Waste Disposal Facilities upon receipt of the Inspector's approval.
8. Any discharge of water from the Solid Waste Disposal Facilities shall be conducted between September 15 and October 31. No discharge shall occur at any other time unless approved by the Inspector.
9. Any discharge of water from the Solid Waste Disposal Facilities shall not be conducted at the same time as the discharge of sewage effluent from the Sewage Waste Disposal Facilities.
10. Any discharge of water from the Solid Waste Disposal Facilities shall not exceed a discharge rate of 350 cubic metres per hour (m³/hr).
11. Any discharge of water from the Solid Waste Disposal Facilities shall be discharged to the mouth of the small bay adjacent to the Solid Waste Disposal Facilities.
12. The Solid Waste Disposal Facilities discharge outlet shall be located ten (10) metres (m) from the shoreline, at a minimum.
13. The Solid Waste Disposal Facilities discharge outlet shall be anchored to minimize drifting and shall be fitted with a diffuser.
14. Any discharge of water from the Solid Waste Disposal Facilities shall require the use of a floating intake.
15. The Licensee shall cease discharge of water from the Solid Waste Disposal Facilities immediately upon observing the discharge of turbid water.
16. A freeboard limit of 0.5 metres (m) or as recommended by an engineer and as approved by the Board shall be maintained at all dams, dykes and structures associated with the Solid Waste Disposal Facilities.

17. 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 signage postings shall be located and maintained to the satisfaction of the Inspector.
18. 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.
19. 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 debris into surrounding areas and the access of wildlife into the solid waste disposal area.
20. 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.
21. 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.
22. The Licensee shall, to the satisfaction of the Inspector, construct and maintain a Temporary Hazardous Waste Containment Area within the Solid Waste Disposal Facility.
23. The Licensee shall, to the satisfaction of the Inspector, segregate and store all hazardous waste in the designated Temporary Hazardous Waste Containment Area.
24. 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.
25. 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.
26. The Licensee shall not accept any hazardous wastes generated by the Industrial / Commercial / Institutional sector unless the Licensee is registered and approved to accept hazardous waste with the GNWT Department of Environment and Climate Change (ECC) and acceptance types and procedures are detailed in the Hazardous Waste Management Plan.
27. 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.
28. The Licensee shall not openly burn solid or liquid waste with the exception of paper products, paperboard packaging and untreated wood. Authorized burning shall be in accordance with the guideline "*Municipal Solid Wastes Suitable for Open Burning*", developed by the Government of Northwest Territories (GNWT) - Department of Environment and Natural Resources (Currently the Department of Environment and Climate Change). To the extent possible, the Licensee shall minimize or eliminate the use of open burning.
29. If necessary, the Licensee shall manage any animal carcasses in a designated location within the Solid Waste Disposal Facility, as approved by the Inspector.
30. The Licensee shall maintain the segregated waste disposal areas to the satisfaction of the Inspector.

31. 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:
- specifications of the Facility including engineering drawings signed and stamped by an engineer;
 - operations, maintenance and monitoring programs as well as maintenance and inspection schedules;
 - quantification and composition of solid waste anticipated to be accepted on an annual basis;
 - segregation and management of contaminated soil and snow;
 - hazardous waste segregation, management and ultimate disposal;
 - prevention of windblown debris;
 - security;
 - flood response measures including temporary alternate solid and hazardous waste disposal practices, locations and mitigation measures; and
 - operator training standards and plans.
32. 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 (MACA) and *"Solid Waste Management for Northern and Remote Communities, Planning and Technical guidance Document, March 2017"* developed by Environment and Climate Change Canada (ECCC).
33. The Licensee shall implement the Solid Waste Operations and Maintenance Plan specified in Part D, Item 31 as and when approved by the Board.
34. 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.
35. 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

- The Licensee shall direct all pump-out sewage to the Sewage Waste Disposal Facility or as otherwise approved by the Board.
- The Licensee shall ensure that any unauthorized wastes associated with the municipal undertaking do not enter any waters.
- The Licensee shall notify Department of Fisheries and Oceans (DFO) if it has caused, or is about to cause, serious harm to fish or fish habitat, shellfish and benthic organisms due to effluent discharged from the Waste Disposal Facilities.
- All discharge from the current Sewage Waste Disposal Facility at Surveillance Network Program Station Number 0714-2 shall meet the following quality standards:

Testing Parameters	Maximum Average Concentration
Fecal Coliforms	1 x 10 ⁴ CFU/100mL

Biochemical Oxygen Demand (BOD ₅)	120 mg/L
Carbonaceous Biochemical Oxygen Demand (cBOD ₅)	60 mg/L
Un-ionized Ammonia (NH ₃)	0.019 mg/L
Oil and Grease (Hexane Extractable Material)	5 mg/L
Total Suspended Solids (TSS)	180 mg/L
The effluent discharged shall have a pH between 6 and 9.	

5. The Licensee shall immediately notify the Board and the Inspector of any discharge quality results that exceed the maximum average concentration standards.
6. The Licensee shall ensure that the Sewage Waste Disposal Facility is maintained and operated in such a manner as to prevent structural failure.
7. A freeboard limit of 1 metre (m), or as recommended by an Engineer and as approved by the Board, shall be maintained for structures associated with the Sewage Waste Disposal Facility.
8. The Licensee shall maintain the Sewage Waste Disposal Facility to the satisfaction of the Inspector.
9. The Licensee shall advise the Inspector at least ten (10) days prior to initiating a planned discharge of the Sewage Waste Disposal Facility should it be necessary.
10. Within sixty (60) days prior to the removal of sludge from the Sewage Waste Disposal Facility, a Sludge Removal and Management Plan shall be submitted to the Board for approval.
11. The Licensee shall provide a written submission describing those activities conducted under Part E, Item 9 and 10 upon request of the Board or the Inspector.
12. 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) sewage sludge management including the disposal of sludge;
 - e) security;
 - f) flood response measures including temporary alternate sewage waste disposal practices, locations and mitigation measures; and
 - g) operator training standards and plans.
13. The Licensee shall implement the Sewage Waste Disposal Facility Operations and Maintenance Plan specified in Part E, Item 12 as and when approved by the Board.
14. The Licensee shall review the Sewage Waste Disposal Facility 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 a 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;
 - d) details related to the methods of storage, treatment and/or ultimate disposal of 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 (SPILL) CONTINGENCY PLANNING

1. The Licensee shall submit to the Board, within three (3) months of the issuance of this Licence, an Unauthorized Discharge (Spill) 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; and GNWT Spill Contingency Planning and Reporting Regulations.
2. The Licensee shall implement the Unauthorized Discharge (Spill) Contingency Plan specified in Part G, Item 1 as and when approved by the Board.
3. The Licensee shall review the Unauthorized Discharge (Spill) 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 (Spill) Contingency Plan;
 - b) report all Unauthorized Discharges immediately via the (24) Hour NWT/NU Spill Report Line (1-867-920-8130) 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.

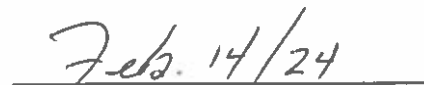
PART I: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written approval from the Board, carry out modifications to the Water Supply Facility or Sewage or Solid Waste Disposal Facility provided that such modifications are consistent with the terms and conditions 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

1. 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 (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****Date**

ANNEX A: SURVEILLANCE NETWORK PROGRAM (SNP)**LICENSEE:** Hamlet of Tuktoyaktuk**LICENCE NUMBER:** N5L3-0714 (Renewal)**EFFECTIVE DATE OF LICENCE:** February 21, 2024**EFFECTIVE DATE OF****SURVEILLANCE NETWORK PROGRAM:** February 21, 2024**A. Sampling Stations**

SNP Station Number	Description of Sampling Station
0714-1	Raw Water Supply at the point of intake
0714-2	Effluent discharge from Sewage Waste Disposal Facilities at the point of outflow
0714-3	Discharge from Solid Waste Disposal Facilities

B. Sampling and Analysis Requirements

1. Water at Station 0714-2 shall be sampled prior to, and once during each discharge of water from the Sewage Waste Disposal Facilities. Each sample shall be analysed for the following parameters and compared for any exceedances with the effluent quality criteria as indicated in Water Licence Part E, Item 4:

Description of Sampling Station	Testing Parameters
Effluent discharge from Sewage Waste Disposal Facilities at the point of outflow	Biochemical Oxygen Demand (BOD ₅), Carbonaceous Biochemical Oxygen Demand (cBOD ₅), Un-ionized Ammonia (NH ₃), Total Suspended Solid (TSS), pH, Faecal Coliforms, Oil and Grease (Hexane Extractable Material)

2. Water at Station Number 0714-3 shall be sampled prior to, and once during each discharge of water from the Solid Waste Disposal Facilities. Each sample shall be analysed for the following parameters and compared for any exceedances with the effluent quality criteria as indicated in water licence Part D, Item 3:

Description of Sampling Station	Testing Parameters
Discharge from Solid Waste Disposal Facilities	pH, Total Suspended Solids (TSS), Biochemical Oxygen Demand (BOD ₅), Faecal Coliforms, Oil and Grease (Hexane Extractable Material), Total Mercury (Hg), Total Chromium (Cr), Total Copper (Cu), Total Nickel (Ni), Total Iron (Fe), Total Cadmium (Cd), Total Cobalt (Co), Total Manganese (Mn), Total Lead (Pb), Total Zinc (Zn), Hardness, Water Temperature, Total Ammonia, Nitrate, Nitrite, Carbonaceous Biochemical Oxygen Demand (cBOD ₅), Total Phosphorus, Dissolved Organic Carbon (DOC), Total Phenols, Benzene, Toluene, Ethylbenzene, Xylene, Total Petroleum Hydrocarbons

3. Water at SNP Station Numbers 0714-2 and 0714-3 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 (e.g., remove, add) 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.
6. All analyses shall be performed in a laboratory approved by an Analyst.
7. The sampling Quality Assurance/Quality Control (QA/QC) procedure shall be followed as per instruction provided by an Analyst.
8. 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 (m^3) or litres (L) the monthly and annual quantities of water pumped from Station Number 0714-1 for municipal purposes.
2. The Licensee shall measure and record in cubic metres (m^3) or litres (L) the monthly and annual quantities of sewage discharged into the Sewage Waste Disposal Facility.
3. The monthly and annual quantities of sewage sludge removed from the Sewage Waste Disposal Facility shall be measured and recorded in cubic metres (m^3) or litres (L) and reported in the Licensee's Annual Report.
4. The Licensee shall measure and record in cubic metres (m^3) or litres (L) the annual quantities, by month, of sewage discharged from the Sewage Waste Disposal Facilities.
5. The Licensee shall measure and record in cubic metres (m^3) or litres (L) the annual quantities, by month, of water pumped from the Solid Waste Disposal Facilities.

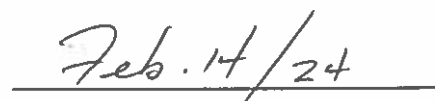
D. Reports

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 (SNP) 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 31	A Solid Waste Disposal Facility Operation and Maintenance Plan	Within three (3) months of the issuance of this Licence	Approval
Part E, Item 12	A Sewage Waste Disposal Facility Operation and Maintenance Plan	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 (Spill) 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 renewal, 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 Climate Change (ECC) has appointed Inspectors in accordance with the *Waters Act* Section 65 (1). The Inspectors coordinate their activities with officials of the ECC Land and Waters Division. The Inspector responsible for the Licence is located in the ECC Land and Waters Division 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 Climate Change (ECC)
Government of the Northwest Territories
P.O. Box 1320
YELLOWKNIFE, NT X1A 2L9

Phone No: (867) 767-9235 Ext: 53150

Fax No: (867) 920-8740

INSPECTOR: Inspector
Environment and Climate Change (ECC)
Land and Waters Division
Government of the Northwest Territories
Bag Service #1
86 Duck Lake Road
INUVIK, NT X0E 0T0

Phone No: (867) 678-8090 Ext: 24659

Fax No: (867) 777-2090