



April 15, 2016

Mayor Darrel Nasogaluak
Hamlet of Tuktoyaktuk
P.O. Box 120
Tuktoyaktuk, NT X0E 1C0

Dear Mayor Nasogaluak:

Re: N5L3-0714 - Hamlet of Tuktoyaktuk, Municipal Water Licence Issuance

The Inuvialuit Water Board (IWB) is pleased to attach Water Licence N5L3-0714 granted to the Hamlet of Tuktoyaktuk in accordance with the *Waters Act* for the period commencing April 15, 2016 and expiring November 20, 2018. Included with the attached 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.

Please note that the requirement for the submission and approval of Sewage and Solid Waste Disposal Facilities Operation and Maintenance Plans and the Spill Contingency Plan has already been met. These were received and approved by the Board in their consideration of your application.

A copy of this Licence and all documentation associated with the application for consideration of 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 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.

Yours sincerely,



Roger Connelly
Chair

Attachments

Copied to: Bill Beamish, Senior Administrative Officer, Hamlet of Tuktoyaktuk
Philippe Thibert-Leduc, Water Resources Officer - ENR



INUVALUIT 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 Tuktoyaktuk

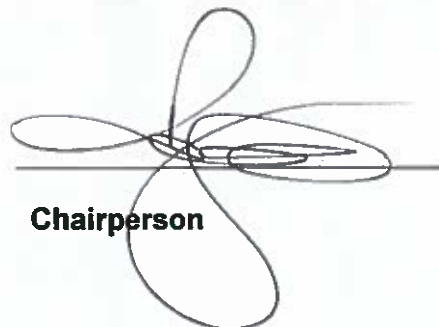
P.O. Box 120
Tuktoyaktuk, NT X0E 1C0
(Mailing Address)

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	<u>N5L3-0714</u>
Licence Type	<u>"B"</u>
Water Management Area	<u>Northwest Territories 05</u>
Location	<u>69° 27' North and 133° 02' West, Northwest Territories</u>
Purpose	<u>Water use and Waste disposal</u>
Description	<u>Municipal Undertaking</u>
Quantity of Water obtained from approved sources not to Exceed	<u>100,000 cubic metres (m³) per year or 100,000,000 Litres (L) per year</u>
Effective Date of Licence	<u>April 15, 2016</u>
Expiry Date of Licence	<u>November 20, 2018</u>

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

INUVALUIT WATER BOARD



Chairperson

April 15, 2016

Date

PART A: SCOPE AND DEFINITIONS

1. Scope

- a) This Licence entitles the Hamlet of Tuktoyaktuk to use Water and dispose of Waste for municipal undertaking at Tuktoyaktuk, Northwest Territories. The Hamlet is located at 69° 27' North and 133° 02' West.
- b) This Licence is issued subject to the conditions contained herein with respect to the taking of Water and the depositing of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the 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.
- d) 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: **N5L3-0714**

“Act” means 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”;

“Average Concentration for Faecal Coliforms” means the running geometric mean 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”;

“Bagged Toilet Wastes Disposal Facilities” comprises the area and associated structures designed to contain Bagged Toilet Wastes (honey bags);

“Board” means the Inuvialuit Water Board continued under Section 13 (1) of the *Act*;

“Closure and Reclamation” means leaving the project area after the completion and cessation of the activities as described in the completed Water Licence Application, and the counteracting, mitigating and remedying of adverse environmental effects with the intent of restoring the project area as nearly as possible to the same condition as it was prior to the commencement of the licensed activity;

“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;

“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;

“Freeboard” means the vertical distance between Sewage Disposal Facilities Water level and the lowest elevation point of the effective Water containment crest on a dam or dyke;

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

“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;

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

“Licensee” means the holder of this Licence;

“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;

“Pump-out Sewage” means all Toilet Wastes and/or Greywater collected by means of a vacuum truck for disposal at an approved facility;

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

“Segregated 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 Disposal Facilities” comprises the area and engineered structures designed to contain and treat Sewage as identified in the Hamlet of Tuktoyaktuk, Sewage Disposal Facilities Operation and Maintenance Plan, Figure 1 Facility Locations;

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

“Solid Waste Disposal Facilities” comprises the area and associated structures designed to contain solid Wastes as identified in the Hamlet of Tuktoyaktuk, Solid Waste Disposal Facilities Operation and Maintenance Plan, Figure 1-2 Location Map;

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

“Surveillance Network Program (SNP)” means a monitoring program established to define environmental sampling and analysis requirements, as detailed in Annex A 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;

“Temporary Hazardous Waste Containment Facility” means a bermed and lined area constructed and maintained for the temporary storage of Hazardous Waste prior to treatment and/or disposal;

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

“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 Disposal Facilities, Solid Waste Disposal Facilities, and Bagged Toilet Wastes Disposal Facilities;

“Watercourse” means a natural Watercourse, 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 Facilities” means all facilities designed 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 from 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 Disposal Facilities;
 - c) a summary of the monthly and annual quantities of Hazardous Waste stored on site and transported off site including the location and treatment or disposal plans for the remaining quantities;
 - d) the monthly and annual quantities of Sewage Sludge removed from the Sewage Disposal Facilities and disposal location;
 - 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 generated under the “Surveillance Network Program (SNP)”;
 - g) a list of Spills and unauthorized discharges;
 - h) a description of any Spill 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 any studies requested by the Board that relate to Water use, Waste disposal or Closure and Reclamation and a brief description of any future studies planned;
 - k) any updates and/or revisions to the:
 - approved Spill Contingency Plan;

- approved Solid Waste Disposal Facilities Operation and Maintenance Plan;
 - approved Sewage Disposal Facilities Operation and Maintenance Plan;
 - approved Hazardous Waste Management Plan; and
 - approved Closure and Reclamation Plan;
- l) results of any inspections of all dams, berms, dykes and control structures;
 - m) results of yearly staff inspections on all Water and Waste Disposal Facilities authorized under this licence and any corrective actions, as necessary;
 - n) the inclusion of all correspondence between the Inspector and the Licensee; and
 - o) any other details on Waste disposal requested by the Board by November 1 of the year being reported.
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 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) locations (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 Water Supply and Waste Disposal Facilities. Additional signage at the Solid Waste Disposal Facilities shall clearly indicate where different Waste streams collected by the Hamlet should be deposited including the Segregated Temporary Storage of Hazardous Wastes areas. All postings 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 and discharged shall be installed, operated and maintained by the Licensee to the satisfaction of the Inspector.
 7. The Licensee shall immediately report to the 24 Hour Spill Report Line (867 920-8130) any Spills of Waste which are reported to, or observed by, the Licensee within the municipal boundaries, or in the areas of the Water Supply or Waste Disposal Facilities.
 8. The Licensee shall erect and maintain, to the satisfaction of the Inspector, fencing around the perimeter of the Solid Waste Disposal Facilities, as necessary, to prevent the spread of wind blown litter and Waste to the areas surrounding the Solid Waste Disposal Facilities.
 9. The Licensee shall erect and maintain, to the satisfaction of the Inspector, gates at the entrances of the Solid Waste Disposal Facilities that are capable of being locked and can regulate hours to prevent the entry of unauthorized individuals and to discourage unauthorized deposits of Waste.
 10. The Licensee shall ensure a copy of this Licence is maintained at the municipal office at all times and that all employees conducting work related to any facilities within the scope of this Licence are made aware of the appropriate sections of the Licence.

11. 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 (CD's).

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain all Water for human consumption from the Kudlak Lake using the Water Supply Facilities or as otherwise approved by the Board.
2. The Licensee may obtain Water from an alternate Water supply for use on an emergency basis upon approval of the Inspector, when it is not possible to obtain Water from the source stated in Part C, Item 1.
3. The annual quantity of Water used for all purposes 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 entrainment of fish occurs.

PART D: CONDITIONS APPLYING TO SEWAGE AND SOLID WASTE DISPOSAL

1. The Licensee shall direct all Pump-out Sewage to the Sewage Disposal Facilities or as otherwise approved by the Board.
2. All effluent discharged from the Sewage Disposal Facilities at "Surveillance Network Program" Station Number 0714-2 shall meet the following effluent quality standards:

Parameters	Maximum Average Concentration
Faecal Coliforms	1 x 10 ⁴ CFU/100mL
Biological Oxygen Demand (BOD ₅)	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 ensure that the Sewage Disposal Facilities are maintained and operated in such a manner as to prevent structural failure.
4. A Freeboard limit of 1 metre (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 Sewage Disposal Facilities.
5. The Licensee shall maintain the Sewage Disposal Facilities to the satisfaction of the Inspector.
6. All Bagged Toilet Wastes (honey bags) shall be disposed of at the Bagged Toilet Waste Disposal Facilities to the satisfaction of the Inspector.
7. The Licensee shall dispose of all solid Wastes at the Solid Waste Disposal Facilities or as otherwise approved by the Board.
8. The Licensee shall notify the Inspector at least thirty (30) days prior to any discharge of Water

from the Solid Waste Disposal Facilities.

9. The Licensee may commence the discharge of Water from the Solid Waste Disposal Facilities upon receipt of the Inspector's approval.
10. 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.
11. 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 Disposal Facilities.
12. Any discharge of Water from the Solid Waste Disposal Facilities shall not exceed a discharge rate of 350 cubic metres per hour (m³/hr).
13. 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.
14. The Solid Waste Disposal Facilities discharge outlet shall be located ten (10) metres (m) from the shoreline, at a minimum.
15. The Solid Waste Disposal Facilities discharge outlet shall be anchored to minimize drifting and shall be fitted with a diffuser.
16. Any discharge of Water from the Solid Waste Disposal Facilities shall require the use of a floating intake.
17. The Licensee shall cease discharge of Water from the Solid Waste Disposal Facilities immediately upon observing the discharge of turbid Water.
18. All Water discharged from the Solid Waste Disposal Facilities at "Surveillance Network Program" Station Number 0714-3 shall meet the following effluent quality criteria:

Sample Parameter	Maximum Average Concentration
Biological Oxygen Demand (BOD ₅)	120mg/L
Total Suspended Solids (TSS)	180mg/L
Polychlorinated Biphenyls (PCB)	25µg/L
Oil and Grease	5mg/L

19. 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.
20. The Licensee shall notify the Inspector when any contaminated soil or snow or other hazardous material is deposited at the Temporary Hazardous Waste Containment Facility at the Solid Waste Disposal Facilities.
21. The Licensee shall contain all contaminated soil, snow and other hazardous materials in such a manner as to minimize the potential for migration of contaminants into any Waters, to the satisfaction of the Inspector.
22. The Licensee shall segregate and store Hazardous Waste in the designated contained temporary storage area, to the satisfaction of the Inspector.

23. The Licensee shall not accept Hazardous Wastes generated by the commercial and industrial operators at the Temporary Hazardous Waste Containment Facility unless and otherwise authorized by the Inspector.
24. The Licensee shall not openly burn solid or liquid Waste, with the exception of paper products, paperboard packaging and untreated wood and animal carcasses 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.
25. The Licensee shall ensure that any unauthorized Wastes associated with the municipal undertaking do not enter any Waters.
26. The Licensee shall advise the Inspector at least ten (10) days prior to initiating a decant of the Sewage Disposal Facilities should it be necessary.
27. Within sixty (60) days prior to the removal of sludge from the Sewage Disposal Facilities, a Sludge Removal Plan shall be submitted to the Board for approval.
28. The Licensee shall immediately notify the Board and Inspector of any effluent quality results that exceed the maximum standard concentration.
29. The Licensee shall provide a written submission on those activities conducted under Part D, Item 26 and 27 upon request of the Board or the Inspector.
30. The solid Waste disposal trenches and cells shall be maintained and operated in such a manner as to prevent structural failure and be maintained to the satisfaction of the Inspector.
31. The Licensee shall maintain the Segregated Waste Disposal Areas to the satisfaction of the Inspector.
32. The Licensee shall maintain the Temporary Hazardous Waste Containment Facility to the satisfaction of the Inspector.
33. The Licensee shall collect windblown litter in the Solid Waste Disposal Facilities and surrounding lands, once in the spring and again in the fall of every year for the duration of the Water Licence.
34. The Licensee shall, within six (6) months of the issuance of this Licence, submit to the Board the Terms of Reference and a Timeframe for an assessment of the effects of the Solid Waste Disposal Facilities on the small bay adjacent to the facilities, including, but not be limited to:
 - a) sampling and analysis of Water before, during and after decanting from the Solid Waste Disposal Facilities;
 - b) sampling and analysis of sediments before and after decanting from the Solid Waste Disposal Facilities; and
 - c) sampling and analysis of fish, shellfish and benthic organisms.
35. The Licensee shall implement appropriate measures to minimize and control contact between receiving waters and leachate from the Solid Waste Disposal Facilities.
36. The Licensee shall notify DFO if it has caused, or are about to cause, serious harm to fish, shellfish and benthic organisms due to effluent discharged from Waste Disposal Facilities.

PART E: CONDITIONS APPLYING TO OPERATION AND MAINTENANCE

1. The Licensee shall, within three (3) months of the issuance of this Licence, submit to the Board for approval an Operation and Maintenance Plan for the Sewage Disposal Facilities and Solid Waste Disposal Facilities that includes, but is not limited to, information and plans related to the following:
 - a) specifications of the Sewage Disposal Facilities and Solid Waste Disposal Facilities including Engineering drawings signed and stamped by an Engineer;
 - b) operations, maintenance and monitoring programs for the Sewage Disposal Facilities and Solid Waste Disposal Facilities including maintenance and inspection schedules;
 - c) quantification of Sewage generated and future projection;
 - d) Sewage Sludge management including the disposal of sludge generated at the Sewage Disposal Facilities;
 - e) quantification and composition of Solid Waste generated and future projection;
 - f) contaminated soil and snow segregation and management from Solid Waste Disposal Facilities;
 - g) Hazardous Waste segregation and management from Solid Waste Disposal Facilities;
 - h) prevention of windblown debris from Solid Waste Disposal Facilities;
 - i) security of the Sewage Disposal Facilities and Solid Waste Disposal Facilities;
 - j) flood response measures including temporary alternate Sewage, solid and Hazardous Waste disposal practices, locations and mitigation measures; and
 - k) operator training standards and plans.
2. The Operation 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.
3. 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 disposal site, including designation of areas for segregated Waste;
 - b) methods of implementing reuse of Hazardous Waste;
 - c) detailed amounts and sources of Hazardous Waste that are, and are not accepted into the Solid Waste Disposal Facilities;
 - d) identify the maximum quantities of each type of Hazardous Waste that will be stored on site;
 - e) methods of treatment and/or disposal of Hazardous Waste (including contaminated soil);
 - f) a Hazardous Waste inventory that identifies the type, means of containment, and quantity of all Hazardous Waste being stored in the Temporary Hazardous Waste Containment Area; and
 - g) location, timing and means of transport of all Hazardous Waste to an approved Hazardous Waste Disposal Facility.
4. The Licensee shall implement the Operation and Maintenance Plan specified in Part E, Item 1 and 3 as and when approved by the Board.
5. The Licensee shall review the 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. The proposed Modifications shall be submitted to the Board for approval.

PART F: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Licensee shall submit to the Board, within three (3) months of the issuance of this Licence, a Spill Contingency Plan in accordance with the *Guidelines for Spill Contingency Planning, April 2007* developed by INAC-Water Resources Division.
2. The Licensee shall implement the plan specified in Part F, Item 1 as and when approved by the Board.
3. The Licensee shall review the Spill Contingency Plan annually, and if necessary, modify the plan to reflect changes in operation(s) and technology, chemicals or fuels, or as directed by the Board. Any updated Spill Contingency Plan 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 Spill Contingency Plan;
 - b) report all Spills immediately via the (24) Hour NWT Spill Report Line (867) 920-8130 in accordance with the instructions contained in the Spill Report Form NWT 1752/0593;
 - c) report each Spill to the Board and 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. All Spills shall be reclaimed to the satisfaction of an Inspector.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written approval from the Board, carry out Modifications to the Water Supply Facilities or Waste Disposal Facilities 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 such proposed Modifications at least sixty (60) 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 sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - d) the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part G, 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 G, Item 1 within ninety (90) days of completion of the Modifications.

PART H: CONDITIONS APPLYING TO CONSTRUCTION

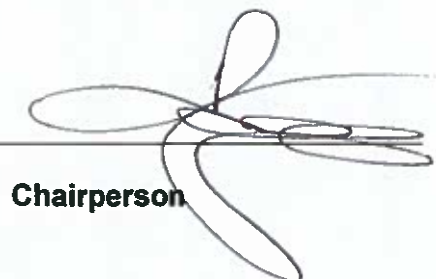
1. Prior to construction of any dams, dykes or structures intended to contain, treat, withhold, divert or retain Water or Wastes other than as contemplated in the Contingency Plan, the Licensee shall submit to the Board for approval a construction plan and a design report signed and stamped by an Engineer.

2. Construction of designed structures as described in Part H, Item 1, shall be carried out as approved by the Board.
3. As-built drawings of the dams, dykes or structures shall be signed and stamped by an Engineer and submitted to the Board within ninety (90) days of completion of construction.
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 CLOSURE AND RECLAMATION

1. The Licensee shall submit to the Board for approval a Closure and Reclamation Plan at least six (6) months prior to abandoning any Water Supply, Sewage or Solid Waste Disposal Facilities. The Plan shall include, but not be limited to, the following:
 - a) contaminated site remediation;
 - 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 facilities; and
 - i) a restoration monitoring plan.
2. The Licensee shall implement the Plan specified in Part I, Item 1 as and when approved by the Board.
3. The Licensee shall revise the Closure and Reclamation Plan referred to in Part I, Item 1 if not approved. The revised Plan shall be submitted to the Board for approval within six (6) months of receiving notification of the Board's decision.
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 restoration 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, the Licensee shall provide to the Board updates of all Closure and Reclamation activities within the Annual Report as described in Part B, Item 1.
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 *Waters Act* and its Regulations.

INUVIALUIT WATER BOARD



Chairperson

April 15, 2016

Date

ANNEX A: SURVEILLANCE NETWORK PROGRAM

LICENSEE: Hamlet of Tuktoyaktuk
LICENCE NUMBER: N5L3-0714
EFFECTIVE DATE OF LICENCE: April 15, 2016
EFFECTIVE DATE OF SURVEILLANCE NETWORK PROGRAM: April 15, 2016

A. Sampling Stations

Station Number	Description of Sampling Station
0714-1	Raw Water supply at the point of intake
0714-2	Effluent discharge from Sewage 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 decant and analysed for the following parameters:

Description of Sampling Station	Parameters
Effluent discharge from Sewage Discharge Facilities at the point of outflow	Biological Oxygen Demand (BOD ₅), Carbonaceous Biological Oxygen Demand (CBOD ₅), Un-ionized Ammonia (NH ₃), Total Suspended Solid (TSS), pH, Faecal Coliforms, Oil and Grease

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:

Description of Sampling Station	Parameters
Discharge from Solid Waste Disposal Facilities	pH, Total Suspended Solids (TSS), Biological Oxygen Demand (BOD ₅), Polychlorinated Biphenyls (PCB), Faecal Coliforms, 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)

3. Water at Station Numbers 0714-2 and 0714-3 shall be inspected monthly during periods of flow for the presence of an oily sheen. If a 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, 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" or by such other methods approved by an Analyst.
6. All analyses shall be performed in a laboratory approved by an Analyst.

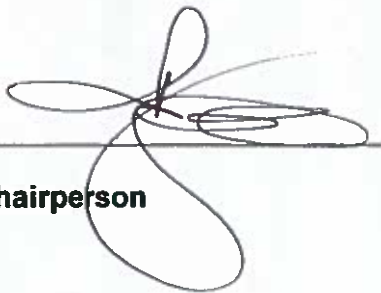
C. Flow Measurement and Recording Requirements

1. The Licensee shall measure and record in cubic metres (m³) or litres (L) the monthly and annual quantities of Water pumped from SNP Station Number 0714-1 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 Disposal Facilities.
3. The monthly and annual quantities of Sewage Sludge removed from the Sewage Disposal Facilities shall be measured and recorded in cubic metres (m³) or litres (L), and reported in the Licensee's Annual Report.
4. The Licensee shall measure and record in cubic metres (m³) or litres (L) the monthly and annual quantities of Sewage discharged from the Sewage Disposal Facilities.
5. The Licensee shall measure and record in cubic metres (m³) or litres (L) the monthly and annual quantities of Water pumped from the Solid Waste Disposal Facilities.

D. Reports

1. The Licensee shall submit all of the data and information generated by Part B and Part C of the Surveillance Network Program in the Licensee's Annual Report to the Board not later than April 30 of the year following the calendar year being reported as specified in Part B, Item 1 of the Licence.

INUVIALUIT WATER BOARD



Chairperson

April 15, 2016

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 8	Any discharge of Water from Solid Waste Disposal Facilities	At least thirty (30) days prior	Notify the Inspector
Part D, Item 25	Decant of the Sewage Disposal Facilities	At least ten (10) days prior to initiating the decant	Advise the Inspector
Part D, Item 26	A Sludge Removal Plan	Within sixty (60) days prior to the removal of sludge from the Sewage Disposal Facilities	Approval
Part D, Item 33	the Terms of Reference and a Timeframe for an assessment of the effects of the Solid Waste Disposal Facilities on the small bay adjacent to the facilities	within six (6) months of the issuance of this Licence	Acceptance
Part E, Item 1	An Operation and Maintenance Plan for the Sewage Disposal Facilities and Solid Waste Disposal Facilities	Within three (3) months of the issuance of this Licence	Approval
Part E, Item 3	A Hazardous Waste Management Plan	Within three (3) months of the issuance of this Licence	Approval
Part F, Item 1	A Spill Contingency Plan	Within three (3) months of the issuance of this Licence	Approval
Part G, Item 1a	Notification to the Board in writing of proposed Modifications	At least sixty (60) days prior to beginning the Modifications	Acceptance
Part G, Item 3	As modified site plans referred to in Part G, Item 1	Within ninety (90) days of completion of the Modifications	Acceptance
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 1	A Closure and Reclamation Plan	At least six (6) months prior to abandoning any Water Supply, Sewage or Solid Waste Disposal Facilities	Approval

**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 in Inuvik 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 issuance 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.

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
INUUVIK, 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) 765-6644
Fax No: (867) 920-8740

INSPECTOR: Inspector
Environment and Natural Resources
Government of the Northwest Territories
P.O. Box 2749
INUUVIK, NT X0E 0T0
Phone No: (867) 678-6676
Fax No: (867) 678-6699