



**NUNAVUT WATER BOARD**  
**TYPE “A” WATER LICENCE NO: 3AM-IGL2131**



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**Licence No: 3AM-IGL2131**

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

**MUNICIPALITY OF IGLOOLIK**

(Licensee)

**P.O. BOX 30 IGLOOLIK NUNAVUT X0A 0L0**

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or dispose of waste for a period subject to restrictions and conditions contained within this Licence renewal:

Licence Number/Type: **3AM-IGL2131 / TYPE "A"**

Water Management Area: **KINGORA WATERSHED (20)**

Location: **QIKIQTANI REGION, NUNAVUT**

Classification: **MUNICIPAL UNDERTAKING**

Purpose: **USE OF WATER AND DEPOSIT OF WASTE**

Quantity of Water use not To Exceed: **102,800 CUBIC METRES PER ANNUM AT MAXIMUM RATE OF 299 CUBIC METRES PER DAY**

Effective Date: **JANUARY 12, 2021**

Expiry of Licence: **JANUARY 11, 2031**

This Licence issued (Motion Number: 2020-18-P22-05) and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

**Lootie Toomasie,  
Nunavut Water Board, Chair**

**APPROVED** Daniel Vandal  
**BY:** Minister of Northern Affairs

**APPROVAL**

**DATE:** \_\_\_\_\_



## **PART A: SCOPE, DEFINITIONS AND ENFORCEMENT**

### **1. SCOPE**

1. This Type “A” Water Licence No: 3AM-IGL2131 (Licence) authorizes the Municipality of Igloolik (Licensee) to use Water and dispose Waste in support of a Municipal undertaking, as classified under Schedule 1 of the Regulations, located within the municipal boundaries at the following approximate geographic coordinates:

Undertaking	Latitude	Longitude
Municipal	69°23' N	81°46' W

The scope of activities, works, and undertakings authorized in accordance with the terms and conditions of this Licence is as follows:

- a. Withdrawal of Water from South Lake to support community needs;
  - b. Continued operation and maintenance of the following municipal facilities:
    - Water Treatment and Supply Facilities, including a water storage reservoir
    - Solid Waste Disposal Facility
    - Sewage Disposal Facility (with upgraded sewage lagoon)
  - c. Roads management, watercourse crossings and culvert installations within municipal boundaries; and
  - d. Proposed construction of a new engineered solid waste disposal facility in the near future.
2. This Licence is issued subject to conditions contained herein with respect to the use of Waters 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 Governor in Council under the *Act*, or other statutes imposing more stringent conditions relating to the quantity, type or manner under which any such Waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and
  3. Compliance with the terms and conditions of this Licence does not absolve the Licensee from the responsibility for compliance with all applicable legislation, guidelines, and directives.

### **2. DEFINITIONS**

1. The Licensee shall refer to [Schedule A](#) for definitions of terms used in this Licence.



### 3. ENFORCEMENT

1. Failure to comply with this Licence shall be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*.
2. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*.
3. For the purpose of enforcing the terms and conditions of this Licence with respect to the use of Water and deposit or Discharge of Waste in Waters, Inspectors appointed under the *Act*, hold all powers, privileges, and protections that are conferred upon them by the *Act* or by other applicable laws.

### **PART B: GENERAL CONDITIONS**

1. The Licensee shall file, with the Board for review, no later than the 31<sup>st</sup> of March of the year following the calendar year being reported, an Annual Report formulated in accordance with the requirements under [Schedule B](#) of this Licence.
2. The Licensee shall maintain a copy of this Licence at the Municipal Office and Water Treatment and Supply Facilities at all times.
3. The Licensee shall file an application for renewal or amendment of this Licence at least one (1) year prior to the Licence expiry or requested amendment.
4. The Licensee shall install, operate, and maintain the meters, devices or other appropriate methods for measuring the volumes of Water used and Waste discharged or deposited to the satisfaction of an Inspector.
5. The Licensee shall post the necessary signs to identify the stations of the Monitoring Program included under [Schedule H](#) of this Licence. All signage shall be in the Official Languages of Nunavut.
6. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written approval and/or directions from the Board. The Board may alter or modify a Plan if necessary to achieve legislative objectives and will notify the Licensee in writing of acceptance, rejection, or alteration of the Plan.
7. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as accepted by the Board or approved by the Board in writing.



8. The Licensee shall, within thirty (30) days of notification or within the timeframe specified by the Board, submit for review and/or the Board’s approval revisions to any plan that is unacceptable to the Board.
9. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of the Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board shall also become part of the Licence. All relevant terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
10. The Licensee shall review the Plans or Manuals referred to in this Licence as required by changes in operation and/or technology and modify the Plans/Manuals accordingly. Revisions to any Plan/Manual shall be submitted in the form of an addendum to be included within the Annual Report required under Part B, Item 1, complete with the lists of revisions detailing where significant content changes are made.
11. The Licensee shall immediately report to the NWT/NU 24-Hour Spill Report Line (867-920-8130) any spills of Waste, which are reported to or observed by the Licensee, which may have resulted from the operations of Water supply and Waste disposal activities.
12. Any communication with respect to this Licence shall be made in writing to the attention of:  
  

Manager of Licensing  
Nunavut Water Board  
P. O. Box 119  
Gjoa Haven, NU X0B 1J0  
Telephone: (867) 360-6338  
Fax: (867) 360-6369  
Email: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)
13. Any notice made to an Inspector shall be made in writing to the attention of:  
  

Water Resources Officer  
Nunavut District, Nunavut Region  
P.O. Box 100  
Iqaluit, NU X0A 0H0  
Telephone: (867) 975-4295  
Fax: (867) 979-6445
14. Unless otherwise directed by the Board in writing, the Licensee shall submit to the Board one (1) electronic copy of all reports, studies, and Plans generated for the works, activities, and undertakings under this Licence. All Reports, studies or Plans submitted to the Board by the Licensee shall include an executive summary in English, Inuktitut, and French.



15. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received by the Board and maintain on file a copy of the acknowledgment of receipt issued by the Manager of Licensing or his/her designate.
16. This Licence is assignable as provided for in section 44 of the *Act*.
17. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.
18. The Schedules attached to this Licence provide details regarding the requirements associated with specific items in the main body of the Licence and are included in the Schedule to provide greater clarity and as an aid to interpretation for the Licensee. If the Board subsequently determines that an item in any of the Schedules requires revision in order to better reflect the intent and objectives of the Licence, the Board may at its discretion, and upon consulting and providing written notice to the Licensee and interested parties, revise the Schedule accordingly. Unless the Board directs otherwise, such revision may not necessarily be considered as an “Amendment” to the Licence.
19. Unless otherwise stated, references in the Licence to any specific legislation, policy, guideline or other regulatory requirement are deemed to refer to the regulatory requirement as may be amended or as may be expressly replaced by successor legislation, policy, guidelines or other regulatory requirements after the Licence is approved by the Minister.

**PART C: CONDITIONS APPLYING TO SECURITY**

1. The Licensee is not required to post reclamation security for the activities, works, and undertakings authorized under this Licence.

**PART D: CONDITIONS APPLYING TO THE USE OF WATERS AND WATER MANAGEMENT PLANS**

1. The Licensee shall withdraw Water for the Municipal Undertaking from its primary source which is South Lake, at the Monitoring Program Station IGL-1, using the Water Treatment and Supply Facilities and/or from the secondary source which is Fish Lake, at the Monitoring Program Station IGL-1a, or as otherwise approved by the Board in writing.
2. The annual quantity of Water used for all purposes from South Lake and/or Fish Lake shall not exceed one hundred and two thousand and eight hundred (102,800) cubic metres per annum, or as otherwise approved by the Board in writing.



3. The Licensee shall, within ninety (90) days of approval of this Licence, install the appropriate flow-metering equipment required to accurately record the quantity of Water withdrawn from South Lake.
4. The Licensee shall, within ninety (90) days of approval of this Licence, install the appropriate flow-metering equipment required to accurately record the quantity of Wastewater discharged from the Sewage Disposal Facility.
5. The Licensee shall equip all freshwater intake structures with screens of appropriate mesh size that meet the requirements of Fisheries and Oceans Canada’s (DFO) *Freshwater Intake End-of-Pipe Fish Screen Guidelines* (1995 or the most current) so as to prevent the entrainment of fish and control Water withdrawal rates such that fish do not become impinged within the screens.
6. The Licensee shall not remove any material from below the ordinary High Water Mark of any Water body unless otherwise approved by the Board in writing.
7. The Licensee shall not cause erosion to the banks of any body of Water and shall provide the necessary controls to prevent such erosion.
8. The Licensee shall implement necessary measures to control sediment and erosion prior to and during operations to prevent entry of sediments into Water.
9. The Licensee shall maintain the Water Treatment and Supply Facilities in accordance with applicable guidelines, procedures, and regulations and to the satisfaction of an Inspector.

**PART E: CONDITIONS APPLYING TO THE DEPOSIT OF WASTE AND WASTE MANAGEMENT**

1. The Licensee shall direct all Sewage to the Sewage Disposal Facility, or as otherwise approved by the Board in writing.
2. The Licensee shall establish/maintain the relevant monitoring stations for the facilities authorized under this Licence in accordance with [Schedule H](#).
3. All Effluent discharged from the Sewage Disposal Facility at Monitoring Program Stations IGL-4, and IGL-5 shall meet the following Effluent quality standards and/ or any new applicable discharge criteria developed under territorial or federal legislation:

Parameter	Maximum Concentration of Any Grab Sample
BOD <sub>5</sub>	100 mg/L
Total Suspended Solids	120 mg/L





Fecal Coliforms	1x10 <sup>6</sup> CFU/100ml
Oil and Grease	No visible sheen
pH	Between 6 and 9

4. The Effluent discharged from the Sewage Disposal Facility at Monitoring Program Stations IGL-5, shall be demonstrated to be Acutely non-Lethal, as stipulated in [Schedule H](#) of the Licence.
5. The Licensee shall maintain at all times, a freeboard of at least one (1) metre, or as recommended by a qualified engineer and as approved by the Board in writing, for all dams, dykes or other structures intended to contain, withhold, divert or retain water or wastes.
6. The Licensee shall implement measures to prevent hazardous materials and/or leachate from the Solid Waste Disposal Facility from entering water, and shall control surface runoff from these facilities.
7. The Licensee shall dispose of, and contain, all municipal solid waste generated by the Municipality at the Solid Waste Disposal Facility or as otherwise approved by the Board in writing.
8. The Licensee shall maintain all licensed facilities to the satisfaction of an Inspector.
9. The Licensee shall dispose of all Waste, including construction Waste, Hazardous Waste, waste oil generated through the course of the operation at a licensed Waste disposal facility.
10. The Licensee shall maintain records of all Waste removed from site and records of confirmation of proper disposal of removed Waste. These records shall be made available to an Inspector or the Board upon request.
11. The Licensee shall provide a minimum of ten (10) days’ notice to an Inspector of the intent to discharge effluent from either the Sewage Disposal Facility.

**PART F: CONDITIONS APPLYING TO MODIFICATIONS AND CONSTRUCTION**

1. The Licensee shall submit to the Board for approval, sixty (60) days prior to commencing construction of any facilities or infrastructure authorized under this Licence, for-construction design report and drawings stamped by a Professional Engineer registered in Nunavut.
2. The Licensee shall submit to the Board for approval, at least sixty (90) days prior to initiating construction of the new solid waste management facility, a detailed Design



Report that includes design drawings, rationale for system selection, assurance that the system will be feasible to install and operate, information on landfill management, and all other relevant information.

3. The Licensee may, without written consent from the Board, carry out Modifications to the facilities or infrastructure authorized under this Licence, 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 are consistent with the NPC Land Use Planning Conformity Determination and the NIRB Screening Decision;
  - c. Such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
  - d. 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
  - e. the Board has not rejected the proposed Modifications.
4. Modifications for which all of the conditions referred to in Part F, Item 3 have not been met can be carried out only with written approval from the Board.
5. The Licensee shall, within ninety (90) days from completion of Modification or construction of facilities and/or infrastructure associated with this Undertaking, submit to the Board a Construction Summary Report prepared by a Professional Engineer that includes, among other relevant information, as-built drawings, documentation of field decisions that deviated from original plans, and any information used to support these decisions.
6. The Licensee shall implement measures to ensure that all materials used in the construction of the facilities or infrastructure associated with the Undertaking are free of contaminants, to the extent that they do not cause harmful or significant effects to Water.
7. The Licensee shall, if contamination of surface and/or groundwater is encountered during construction and excavation, notify the Inspector immediately and implement the Spill Contingency Plan, referred to in Part H, Item 1.
8. The Licensee shall develop and implement measures necessary to prevent and mitigate erosion and/ or the release of sediment into Water during any construction activities associated with the Undertaking.



9. All activities shall be conducted in such a way as to minimize impacts on surface drainage, and the Licensee shall immediately undertake any corrective measures in the event of any impacts on surface drainage.
10. With respect to earthworks, the deposition of debris or sediment into or onto any Water body is prohibited. These materials shall be disposed at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the Water.
11. The construction or disturbance of any stream/lake bed or banks of any definable watercourse are not permitted, unless authorized by the Board in writing.

**PART G: CONDITIONS APPLYING TO OPERATIONS AND MAINTENANCE**

1. The Licensee shall implement the Plan entitled “Operation and Maintenance Manual for Water Supply Pipeline” dated September, 2020, which was submitted as additional information with the Application and has been approved by the Board with the issuance of the Licence.
2. The Licensee shall implement the Plan entitled “Operation and Maintenance Manual for Water Reservoir” dated September, 2020, which was submitted as additional information with the Application and has been approved by the Board with the issuance of the Licence.
3. The Licensee shall implement the Plan entitled “Operation and Maintenance Manual for Water Treatment Plant / Truck Fill Station” dated September, 2020, which was submitted as additional information with the Application and has been approved by the Board with the issuance of the Licence.
4. The Licensee shall implement the Plan entitled “Mechanical and Electrical Operation and Maintenance Manual for Water Treatment Plant / Truck Fill Station” dated September, 2020, which was submitted as additional information with the Application and has been approved by the Board with the issuance of the Licence.
5. The Licensee shall implement the Plan entitled “Igloolik Landfill Site Operation and Maintenance Manual”, dated September, 2020, which was submitted as additional information with the Application and has been approved by the Board with the issuance of the Licence.
6. The Licensee shall implement the Plan entitled “Operation and Maintenance Manual Wastewater Treatment Facility (Sewage Lagoon System)” dated September, 2020, which was submitted as additional information with the Application and has been approved by the Board with the issuance of the Licence.



7. The Licensee shall submit to the Board, an updated Operation and Maintenance Manual Wastewater Treatment Facility (Sewage Lagoon System) within sixty (60) days of approval of this Licence to take into consideration the intervener’s comments and recommendations made during the licensing process.
8. The Licensee shall review all Manuals referred to in this Part as required by changes in operation and/or technology and modify accordingly. Revisions are to be submitted in the form of an Addendum to be included with the Annual Report, unless directed otherwise by the Board or an Inspector.
9. The Licensee shall maintain all facilities approved under this Licence in accordance with applicable guidelines, procedures, and regulations and to the satisfaction of an Inspector.
10. An inspection of all engineered facilities associated with this Licence shall be carried out at least once annually, in July or August, by an Engineer (Civil, Municipal or Geotechnical). The Engineer’s report shall be submitted to the Board within sixty (60) days of the inspection, including a cover letter from the Licensee outlining an implementation plan to address each of the Engineer’s recommendations.
11. The Licensee shall perform more frequent inspections of the engineered facilities at the request of an Inspector.

**PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING**

1. The Licensee shall implement the Plan entitled “Spill Contingency Plan, Municipality of Igloolik, Nunavut”, dated September 2020, that was submitted as additional information with the Application and has been approved by the Board with the issuance of the Licence.
2. The Licensee shall submit to the Board within sixty (60) days of approval of this Licence, an updated Spill Contingency Plan taking into consideration the intervener’s comments and recommendations made during the licensing process.
3. The Licensee shall prevent any chemicals, petroleum products or Wastes associated with the activities under this Undertaking from entering Water. All Sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent Water body and inspected on a regular basis.
4. The Licensee shall conduct any equipment maintenance and servicing in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other Waste and contain potential spills.



5. The Licensee shall, subject to Section 16 of the Regulations, report any unauthorized deposits of Waste or foreseeable unauthorized deposits of Waste and/or Discharges of Effluent, and:
  - a. employ the appropriate contingency measures outlined in the Spill Contingency Plan referred to in Part H, Item 1; take whatever steps are immediately practicable to protect human life, health and the environment;
  - b. report the incident immediately to the NWT/NU 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
  - c. for each spill occurrence, submit to the Inspector, within thirty (30) days after initially reporting the event, a detailed report that provides the necessary information on the location (including the GPS coordinates), initial response action, remediation/clean-up, status of response (ongoing, complete), proposed disposal options for dealing with contaminated materials and any preventative measures to be implemented.
6. The Licensee shall, in addition to Part H, Item 5, regardless of the quantity of releases of harmful substances, report to the NWT/NU 24-Hour Spill Line, if the release is near or into a Water body.

#### **PART I: CONDITIONS APPLYING TO MONITORING**

1. The Licensee shall monitor the Water Treatment and Supply Facilities and Sewage and Solid Waste Disposal Facilities authorized under this Licence in accordance with requirements included under [Schedule H](#).
2. The Licensee shall measure and record, in cubic metres, the daily, monthly and annual quantities of water pumped at Monitoring Program Stations IGL-1 and IGL-1a, for all purposes.
3. The Licensee shall sample at Monitoring Program Station IGL-2 monthly during periods of observed run-off. Samples shall be analyzed for the parameters listed in [Schedule H](#) in accordance with Tables 1 and 2.
4. The Licensee shall sample at Monitoring Program Stations IGL-4 and IGL-5, monthly during periods of observed flow. Samples shall be analyzed for the parameters listed in [Schedule H](#) in accordance with Tables 1 and 2.
5. The Licensee shall determine, in consultation with the Inspector, the GPS coordinates of all locations where sources of Water are utilized for all purposes and Wastes associated



with the Undertaking are deposited at all Monitoring Program Stations, and provide these coordinates within the Annual Report.

6. All sampling, sample preservation and analyses required under [Schedule H](#) shall be conducted in accordance with methods prescribed in the most recent edition of “*Standard Methods for the Examination of Water and Wastewater*”, or by such other methods as approved by the Board in writing.
7. All analyses shall be performed at a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
8. The Licensee shall implement the Plan entitled “Quality Assurance / Quality Control (QA/QC) Program, Wastewater Treatment Facility (Sewage Lagoon System), Water Treatment Plant / Truck Fill Station, Solid Waste Facility, Municipality of Igloolik, Nunavut”, dated September, 2020, that was submitted as additional information with the Application and has been accepted by the Board with the issuance of the Licence.
9. The Licensee shall annually review the QA/QC Plan submitted under Part I, Item 5 and modify it as necessary. Revised Plan shall be submitted to the NWB with an approval letter from an accredited laboratory that meets standards set in Part I, Items 7 and 8.
10. The Licensee shall include all of the data and information required by the Monitoring Program under Schedule H within the Annual Report required under Part B, Item 1 of the Licence, or as otherwise requested by an Inspector and/or the Board.
11. Additional Monitoring may be requested by the Board and/or the Inspector.
12. The Monitoring Program and compliance dates specified in the Licence may be modified at the discretion of the Board in writing and do not necessarily constitute an Amendment to the Licence as defined in the *Act*.

## **PART J: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION**

1. The Licensee shall, at least six (6) months prior to abandoning any facilities or upon submission of final design drawings for the construction of new facilities to replace the existing ones, submit to the Board for approval in writing a Closure and Reclamation Plan for the facilities being decommissioned. The Plan shall be prepared by an Engineer in accordance with the industry’s best practices and relevant guidelines and shall incorporate, where applicable, the following information:
  - a. Facilities being abandoned;
  - b. Maps delineating all disturbed areas and site facilities;



- c. Environmental conditions existing before the use of the site;
  - d. Remediation objectives;
  - e. Any sites affected by waste spills and measures taken to remediate these sites;
  - f. An implementation schedule;
  - g. Type and source of cover materials;
  - h. Future use of the area;
  - i. Hazardous wastes;
  - j. Financing of the restoration/remediation costs.
2. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee’s operations.
3. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
4. Areas that have been contaminated by hydrocarbons shall be reclaimed to meet objectives as outlined in the *Government of Nunavut’s Environmental Guideline for Site Remediation*, January 2009. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.



## **SCHEDULES**

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[Schedule A](#): Scope, Definitions, and Enforcement

[Schedule B](#): General Conditions

Schedule C: No Schedule for Security

Schedule D: No Schedule for Use of Water and Water Management Plans

Schedule E: No Schedule for Deposit of Waste and Waste Management

Schedule F: No Schedule for Modifications and Construction

Schedule G: No Schedule for Operations and Maintenance

Schedule H: No Schedule for Spill Contingency Planning

[Schedule I](#): Monitoring

Schedule J: No Schedule for Closure and Reclamation





## **Schedule A:**                      **Definitions**

In this Licence No: 3AM-IGL2131

“**Act**” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Addendum**” means the supplemental text that is added to a full plan, manual, or report, usually included at the end of the document and is not intended to require a full resubmission of the revised report. It may also be considered as an appendix or supplement;

“**Amendment**” means a change to any terms and conditions of this Licence through application to the NWB, requiring a change, addition, or deletion of specific terms and conditions of the Licence not considered as a modification;

“**Annually**” means, in the context of monitoring frequency, one sampling event occurring every 365 days with a minimum of 200 days between sampling events;

“**Application**” means, for the purposes of this License, the totality of the NWB Public Registry opened as a result of the filing of the application to replace and amend expired Water Licence No: 3BM-IGL1520;

“**Appurtenant Undertaking**” means an undertaking in relation to which a use of water or a deposit of waste is permitted by a Licence issued by the Board;

“**Board**” means the Nunavut Water Board established under Article 13 of the *Nunavut Agreement* and under section 14 of the *Act*;

“**Discharge**” means the release of any Water or Waste to the receiving environment;

“**Effective Date**” means the date on which the Minister of Northern Affairs approves the Licence;

“**Effluent**” means treated or untreated liquid Waste material that is discharged into the environment from the site water management facilities such as a settling pond or a treatment plant;

“**Engineer**” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

“**Engineered Structure**” means any facility, designed and approved by a Professional Engineer who is registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;

“**Final Discharge Point**” in respect of an effluent means an identifiable discharge point of a facility beyond which the operator of the facility no longer exercises control over the quality of the effluent;

“**Grab Sample**” means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;



“**Greywater**” means the component of Effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), excluding Sewage;

“**Hazardous Waste**” means materials or contaminants categorized as dangerous goods under the *Transportation of Dangerous Good Act (1992)*, no longer used for their original purpose and intended for recycling, treatment, disposal or storage at appropriate facilities;

“**High Water Mark**” means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. *Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities*);

“**Inspector**” means an Inspector designated by the Minister under section 85 (1) of the *Act*;

“**Licence**” means this Type “A” Water Licence No: 3AM-IGL2131, issued by the Nunavut Water Board to the Municipality of Igloolik (“Municipality”) in accordance with the *Act*;

“**Licensee**” means the entity to whom Licence No: 3AM- IGL2131 is issued or assigned;

“**Minister**” means the Minister of Northern Affairs;

“**Modification**” means an alteration to a physical work that may introduce a new structure or eliminates an existing structure and does not alter the purpose or function of the work;

“**Monitoring Program**” means the program to collect data on surface water quality to assess impacts to the environment of an appurtenant undertaking;

“**Monthly**” means, in the context of monitoring frequency, one sampling event occurring within calendar month with a minimum of twenty-one (21) days between sampling events;

“**Nunavut Agreement**” means the “*Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada*,” including its preamble and schedules, and any Amendments to that agreement made pursuant to it;

“**Quality Assurance / Quality Control (QA/QC)**” Quality Assurance means the system of activities designed to better ensure that quality control is done effectively; Quality Control means the use of established procedures to achieve standards of measurement for the three principle components of quality: precision, accuracy and reliability;

“**Regulations**” means the *Nunavut Waters Regulations* (SOR/2013-669);

“**Sewage**” means all toilet wastes and greywater;

“**Sewage Disposal Facility**” means the facility, comprising the sewage lagoons (Cell A, Cell B and Cell C) and the wetland area in the Municipality of Igloolik, as described in the Application;

“**Solid Waste Disposal Facility**” means the facility, comprising the metal waste area, Hazardous waste area, contaminated soil area and landfill in the Municipality of Igloolik, as described in the Application;



“**Spill Contingency Plan**” means a Plan developed to deal with unforeseen petroleum and hazardous materials events that may occur during the operations conducted under the Licence;

“**Surface Drainage**” means all surface waters resulting from the flow over, through or out of an operations area and is collected by means of Engineered structures;

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

“**Undertaking or Undertakings**” means an undertaking or undertakings in respect of which Water is to be used or Waste is to be deposited, as classified in Schedule 1 of the *Regulations*;

“**Use**” means use as defined in section 4 of the *Act*;

“**Waste**” means Waste as defined in section 4 of the *Act*;

“**Wastewater**” means the water generated by site activities or originates on-site that requires treatment or any other water management activity;

“**Water or Waters**” means water as defined in section 4 of the *Act*;

“**Water Treatment and Supply Facilities**” means the engineered facilities and appurtenances designed and constructed for the withdrawal, storage, treatment and distribution of fresh water for domestic purposes, which comprises the water supply pipeline, water storage reservoir, water treatment facility and the truck-fill station infrastructure at South Lake, as described in the Application;

“**Wetland**” means the area of undeveloped tundra between the sewage lagoon system and Turton Bay with an approximate area of 42.8 hectares, where the decanted sewage receives supplementary treatment before being discharged into Turton Bay.



## **Schedule B: Annual Reporting Requirements**

The Annual Report referred to in Part B, Item 1, shall include the following:

- a. The monthly and annual quantities in cubic metres of fresh Water withdrawn from South Lake at Monitoring Station No: IGL-1
- b. The monthly and annual quantities in cubic metres of any Discharges to the Sewage Disposal Facility at Monitoring Station IGL-3;
- c. The monthly and annual quantities in cubic metres of sludge removed from the Wastewater Treatment Plant;
- d. A summary report which includes all data and information generated under the Monitoring Program, including the QA/QC program, in electronic formats acceptable to the Board;
- e. A summary of modifications and/or major maintenance work carried out on the potable Water Treatment and Supply Facilities, Sewage Disposal Facility, Solid Waste Disposal Facility, including all associated structures;
- f. A progress report and revisions (if applicable) to any studies requested by the Board that relate to Waste management, Water use or reclamation and a brief description of any future studies planned by the Licensee including, a non-technical executive summary for the general public, translated into Inuktitut;
- g. Any revisions required, in the form of addenda, to Plans, Manuals and Reports approved under the Licence;
- h. A list and description, including volumes, of all unauthorized discharges, spills and summaries of follow-up action taken;
- i. A summary of any closure and reclamation work undertaken and an outline of any work anticipated for the next year, including any changes to implementation and scheduling;
- j. A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector;
- k. A brief update on the implementation plan of all facilities within the scope of this Licence including changes projected implementation;
- l. A summary of any studies, reports and plans requested by the Board that relate to Waste disposal, Water use or reclamation and a brief description of any future studies planned; and
- m. Any other details on the use of Water or Waste disposal requested by the Board by November 1st of the year being reported.



**Schedule I: Conditions Applying to Monitoring**

**Table 1 – Water Quality Parameters**

Test Group	Analytical Parameter	Unit of Measurement
Effluent (E)	pH (field and lab)	NA
	Conductivity (field and lab)	$\mu\text{S}/\text{cm}$
	Temperature (field)	$^{\circ}\text{C}$
	Total Suspended Solids (TSS)	mg/L
	Biochemical Oxygen Demand	mg/L
	Fecal Coliform	CFU/100 mL
	Nitrate-Nitrite	mg/L
	Ammonia Nitrogen	mg/L
	Sulphate	mg/L
	Chloride	mg/L
	Total Hardness	mg/L
	Total Alkalinity	mg/L
	Total Phenols	mg/L
	Total Organic Carbon - TOC	mg/L
Acute Lethality (AL)	Based on Environment Canada’s Acute Lethality of Effluents to Rainbow Trout (as per Environment Canada’s Environmental Protection Series Biological Test Method EPS/1/RM/13 Second Edition December 2000 (with May 2007 amendments)	“Pass” / “Fail”
ICP Metals Scan (Total) (Me)	Al, As, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Na, Ni, Pb, Zn	mg/L
Flow (F)	Volume	$\text{m}^3$



**Table 2 – Water Quality Monitoring Criteria**

<b>Station ID</b>	<b>Description</b>	<b>Status</b>	<b>Parameter</b>	<b>Testing / Measurement Frequency</b>	<b>Reporting Frequency</b>
<b>IGL-1</b>	Raw Water Supply Intake at South Lake	<b>Active</b>	<b>F</b>	<b>Daily</b>	<b>Annually</b>
<b>IGL-1a</b>	Raw Water Supply Intake at Fish Lake	<b>Active</b>	<b>F</b>	<b>Daily</b>	<b>Annually</b>
<b>IGL-2</b>	Runoff from the Solid Waste Disposal Facility	<b>Active</b>	<b>F, E, Me</b>	<b>When flow is observed</b>	<b>Annually</b>
<b>IGL-3</b>	Raw Sewage at Discharge point into the Sewage Disposal Facility	<b>Active</b>	<b>F</b>	<b>Daily</b>	<b>Annually</b>
<b>IGL-4A</b>	Final Effluent Control points from the Sewage Disposal Facility (Lagoons A, B and C)	<b>Active</b>	<b>F, E, Me</b>	<b>Monthly</b>	<b>Annually</b>
<b>IGL-4B</b>					
<b>IGL-4C</b>					
<b>IGL-5A</b>	Final Effluent Discharge Points prior entering Foxe Basin (Lagoons A, B and C)	<b>Active</b>	<b>F, E, AL, Me</b>	<b>When flow is observed</b>	<b>Annually</b>
<b>IGL-5B</b>					
<b>IGL-5C</b>					