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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYIT
OFFICE DES EAUX DU NUNAVUT

File No.: 3BM-SAN1214

February 28, 2012

Andre Larabie
Senior Administrative Officer
Hamlet of Sanikiluaq
P.O. Box 157
Sanikiluaq, Nunavut
X0A 0W0

Email: sanisao@qiniq.com

Bhabesh Roy, P. Eng.
Municipal Planning Engineer,
Baffin Region
Government of Nunavut
Department of Community and
Government Services
P.O Box 379
Pond Inlet, NU X0A 0S0

E-mail: broy@gov.nu.ca

RE: Hamlet of Sanikiluaq, Renewal of NWB Licence No. 3BM-SAN1214

Dear Mr. Larabie and Mr. Roy:

Please find attached water licence no. 3BM-SAN1214 (Licence) issued to the Hamlet of Sanikiluaq (Licensee) by the Nunavut Water Board (NWB or Board) pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada* (Nunavut Land Claims Agreement or NLCA). The terms and conditions of the attached Licence related to water use are an integral part of this approval.

If the Licensee contemplates the renewal of this Licence, it is the responsibility of the Licensee to apply to the NWB for its renewal. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the Licence renewal. Note that if the Licence expires before the NWB issues a new one, then water use and waste disposal must cease, or the Licensee may be in contravention of the *Nunavut Land Claims Agreement* (NLCA) and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA). However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence. The NWB recommends that an application for the renewal of this Licence be filed at least three (3) months prior to the Licence expiry date.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, if in the public interest, to hold a public hearing. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process and timing may vary depending on the scope of the amendment, however a minimum of sixty (60) days is required from time of acceptance by the NWB. It is the responsibility of the Licensee to ensure that all application materials have been received and acknowledged by the Manager of Licensing.

The NWB strongly recommends that the Licensee consult the comments received from interested persons

on issues identified. This information is attached for your consideration[1].

During review of the application, the Licensee indicated that funding is available to build a new Sewage Disposal Facility for the Hamlet and that a feasibility study is being conducted to upgrade the Hamlet's Solid Waste Disposal Facility. If the Licensee contemplates the construction of any new facilities, or the expansion of any existing facilities covered by this Licence, a water licence amendment will be required.

Sincerely,



Thomas Kabloona
Nunavut Water Board
Chair

TK/kt/pb

Enclosure: Licence No. 3BM-SAN1214
Comments

cc: Qikiqtani Distribution List

[1] Indian and Northern Affairs Canada (INAC), March 25, 2011; Environment Canada (EC), March 25, 2011; Government of Nunavut Department of Culture, Language, Elders, and Youth (GN-CLEY), February 23, 2011.

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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYIT
OFFICE DES EAUX DU NUNAVUT

DECISION

LICENCE NUMBER: 3BM-SAN1214

This is the decision of the Nunavut Water Board (NWB) with respect to an application for a licence renewal / amendment received November 24, 2008 made by:

HAMLET OF SANIKILUAQ

to allow for the use of water and disposal of waste for the Hamlet of Sanikiluaq, located within the Qikiqtani region of Nunavut. With respect to this application, the NWB gave notice to the public that the Hamlet had filed an application for a water licence renewal.

DECISION

After having been satisfied that the application was exempt from the requirement for screening by the Nunavut Impact Review Board in accordance with s. 12.3.2 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada* (Nunavut Land Claims Agreement or NLCA), the NWB decided that the application could proceed through the regulatory process. After reviewing the full submission of the Applicant and written comments expressed by interested parties, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of the *NLCA* and of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA), decided to waive the requirement to hold a public hearing and determined that:

Licence Number 3BM-SAN1214 be issued subject to the terms and conditions contained therein. (Motion #: 2011-21-01)

SIGNED this 28th day of February, 2012 at Gjoa Haven, NU.

_____

Thomas Kabloona
Nunavut Water Board
Chair

TABLE OF CONTENTS

DECISION ..... **III**

I. BACKGROUND **1**

II. PROCEDURAL HISTORY **1**

III. ISSUES **4**

TERM OF LICENCE 4
ANNUAL REPORT 5
WATER USE 5
SEWAGE 5
SOLID WASTE 6
FINAL DISCHARGE POINTS 7
OPERATIONAL PLANS 7
ABANDONMENT AND RESTORATION 8
UNAUTHORIZED DISPOSAL AREAS 8
MONITORING 8

WATER LICENCE **9**

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT **10**

1. SCOPE 10
2. DEFINITIONS 10
3. ENFORCEMENT 12

PART B: GENERAL CONDITIONS **12**

PART C: CONDITIONS APPLYING TO WATER USE AND MANAGEMENT **15**

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT **15**

PART E: CONDITIONS APPLYING TO MODIFICATIONS AND CONSTRUCTION **16**

PART F: CONDITIONS APPLYING TO OPERATION AND MAINTENANCE **17**

PART G: CONDITIONS APPLYING TO ABANDONMENT, RESTORATION AND CLOSURE **18**

PART H: CONDITIONS APPLYING TO THE MONITORING PROGRAM **19**

NWB LICENCE No. 3BM-SAN1214

I. BACKGROUND

The Hamlet of Sanikiluaq is located on the North end of Flaherty Island, a large central island off the Belcher Islands in Hudson Bay. Located at 56° 32' N latitude and 79° 14' W longitude, the community is approximately 1,024 air km southwest of Iqaluit, NU and 1,282 air km northwest of Montreal, in the Baffin Region of Nunavut. According to the Nunavut Bureau of Statistics the population of Sanikiluaq in 2010 was 812.

According to the Application's reference to the N.W.T. Data Book, 1986/87, past typical mean minimum and maximum temperatures for July and January are 3.3 °C and 25.6 °C and -42.8 °C and -22.8 °C respectively.

The community is serviced by trucked water and sewage. Water for domestic use is obtained directly from Lake Sanikiluaq located near the edge of the community. Wastewater is directed to a wastewater treatment facility which consists of a sewage lagoon located 2.9 km west of the Hamlet with an approximate capacity of 21,600 cubic meters. This facility discharges effluent through an undefined wetland prior to discharge to the marine environment. Domestic solid waste is directed to a Solid Waste Disposal Facility which consists of a landfill and bulky metals area located just north of the wastewater treatment facility. Combustible solid wastes are periodically burned.

II. PROCEDURAL HISTORY

The Hamlet of Sanikiluaq was issued water licence NWB3SAN0308 dated November 28, 2003 by the Nunavut Water Board (NWB or Board) for the use of water and disposal of waste including sewage and solid waste. On January 27, 2004 an errata was issued by the NWB to correct the volume of water use referred to on page 2 of the decision from 27.394 to 27,394. This licence expired on November 15, 2008.

On November 24, 2008, the NWB received an application for water licence renewal (Application) from the Government of Nunavut Community Government Services (GN-CGS) on behalf of the Hamlet of Sanikiluaq. The Application included the following documents:

- Letter from Muhamud Hassan, Hamlet of Sanikiluaq Interim SAO, to Phyllis Beaulieu, NWB Manager of Licensing, dated November 7, 2008;
- Completed water licence application form signed by Muhamud Hassan, dated November 1, 2008;
- Completed water licence application supplemental questionnaire for municipalities;
- Technical summary of the environmental facilities on the Hamlet of Sanikiluaq prepared by Bhabesh Roy., M.A.Sc., P.Eng., MPE, GN-CGS, Baffin Region, in English and Inuktitut; and
- Application fee.

On January 26, 2009, following a preliminary technical review of the Application, the NWB requested a response from GN-CGS regarding the following issues:

1. The NWB does not have the annual reports for the years of 2003, 2004, 2005 and 2006;
2. Under Part D, Item 8 of the previous Licence, the Licensee was to submit a report identifying each of the final discharge points under the Licence. The NWB has not received this report;

3. Under Part F, Item 1 of the previous Licence, the Licensee was to submit an Operation and Maintenance Manual. The NWB has not receive this manual;
4. Under Part H, Item 6 of the previous Licence, the Licensee was to submit a Quality Assurance and Quality Control Plan. The NWB has not received this Plan;
5. The application did not contain any drawings, maps or figures of the Water Supply, Waste Water Treatment or Solid Waste Disposal Facilities. The NWB requests any maps, drawings and figures of the facilities;
6. The water source for the community is not identified;
7. Clarification is requested on the maximum daily volume of water requested;
8. The application does not identify the screen mesh size on the water intake pipe;
9. The application states that water is only drawn intermittently from June to August and that there is no reservoir or water storage. How (where) is water taken between September and May?
10. The water supply facilities are identified as being in unsatisfactory condition, however no explanation is provided. A discussion or explanation is requested;
11. Modifications to the Water Supply, Solid Waste Disposal and Sewage Treatment Facilities are said to be in the planning stage but no details are provided. Is this short term, long term? Are these modifications or new facilities that are being planned;
12. A description of the burning practices for solid municipal waste is not provided;
13. It is unclear from the application if waste petroleum products, hazardous, metal and bulky wastes are segregated at the Solid Waste Disposal Facilities;
14. The date of the most recent INAC inspection is not filled out;
15. There is no information on how sampling is performed, who is responsible for the sampling, where the sample tests are performed or proof of the laboratories' accreditation. See above, Item 4; and,
16. The application states that 68 cubic metres of water per day is returned to source. Please elaborate on where this water is originally taken from and where it is returned to.

On May 13, 2009, the NWB received a response from GN-CGS to the NWB's January 26, 2009 correspondence; however, on September 10, 2009 the NWB found that the Application remained incomplete due to the following outstanding issues:

- Where specific plans required pursuant to 3BM-SAN0308 are identified in the preliminary technical review as not submitted, the CGS submission suggests that this non-compliance will continue until new facilities are built, even though the construction timeframe for new facilities is indeterminate and contingent on capital funding which has not been committed;
- The NWB requested clarification on the segregation of materials at the Solid Waste Disposal Facility. The CGS submission suggests that the wastes will not be segregated until the facility is decommissioned, with decommissioning not taking place until a new facility is built, the timing of which is subject to a five year capital plan to which funding has not been committed; and
- The submission is not dated, signed, or presented on letterhead.

In its September 10, 2009 correspondence, the NWB recommended that representatives of GN-CGS and the Hamlet participate in a teleconference with the NWB technical staff to assist GN-CGS with the submission of a complete Application sufficient for proceeding with the review process.

On October 7, 2009, GN-CGS indicated to the NWB via email that parties would be unavailable for a teleconference until an unspecified later date.

On November 20, 2009, GN-CGS provided clarification regarding the Hamlet's water truck fill station, sewage lagoon and solid waste management, generally indicating that funding is an issue in moving forward.

On July 20, 2010, the NWB issued a letter to GN-CGS and the Hamlet of Sanikiluaq noting the extensive time that had passed since receipt of the original Application submission and requesting an update to the Application along with a Plan for Compliance to address the issues identified in previous NWB assessments to facilitate the processing of the file.

On November 8, 2010, the NWB received a response from GN-CGS to its January 26, 2009 and July 29, 2010 correspondence including the following documents:

- Letter from B. Roy, GN-CGS, to P. Beaulieu, NWB, Re: Reply to Sanikiluaq Water Licensing Issues: Sanikiluaq Water License #3BM-SAN0308, dated November 5, 2010;
- Sanikiluaq Watershed and Sites Map;
- Hamlet annual reports 2003 – 2009;
- Water and Sewer Consumption Summary April 2006 to March 2007;
- Sanikiluaq Landfill and Sewage Lagoon Report, dated July 24, 2010, inspected by Patricio Fuentes; and
- Document entitled "*Design Brief – Sanikiluaq Truck Fill Station*" prepared for Department of Community & Government Services, Government of Nunavut, Pond Inlet; prepared by Trow Associates Inc.; Project Number OTCD00020127A; dated May 2010.

On February 23, 2011, the NWB concluded that the Application met the requirements of section 48(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA or Act) and forwarded notice of the Application to regulators, council of the municipality most affected by the project and other interested parties. Parties were invited to make representations to the NWB within thirty (30) days.

By March 25, 2011, the NWB was in receipt of comments from Indian and Northern Affairs Canada (INAC), Environment Canada (EC), and Government of Nunavut Department of Culture, Language, Elders and Youth (GN-CLEY). In its submission, INAC requested clarification regarding the requested volume of water to be authorized. On April 20, 2011, the NWB forwarded INAC's request via email to GN-CGS and on April 21, 2011 the GN-CGS provided a response.

No public concern was expressed during the notice period. Therefore, the NWB waived the requirement to hold a public hearing and proceeded with the application process.

Based upon the results of the detailed assessment of the Application, including consideration of any potential accidents, malfunctions, or impacts to water that the overall project might have in the area, the Board has approved the Application and has issued water licence 3BM-SAN1214.

III. ISSUES

Term of Licence

In accordance with section 45 of the Act, the NWB may issue a licence for a term not exceeding twenty-five years. In determining an appropriate term of a water licence, the Board considers a number of factors, including the results of INAC site inspections and the compliance record of the Applicant.

According to the latest INAC inspection report dated August 17, 2010, the following issues of non-compliance with expired licence 3BM-SAN0308 were identified:

- Lack of signage, monitoring and reporting requirements;
- Lack of segregation and appropriate management at solid waste sites;
- Inadequate sewage lagoon capacity; and
- Lack of operations and maintenance manuals, and spill contingency plans.

An internal review of administrative compliance for the expired licence 3BM-SAN0308 revealed the following additional issues:

- Untimely submission of annual reports as required by Part B Item 1;
- Incomplete annual reports as required by Part B Item 1;
- Incomplete report identifying each final discharge point as required by Part D Item 8;
- Submission of as-built plans for the new water truck fill station as required by Part E Item 4; and
- Submission of monitoring results as required by Part H.

In its Application, the Hamlet requested a licence term of five (5) years. No concerns were raised during the review process pertaining to the length of the requested licence renewal term; however, due to the aforementioned compliance issues, the NWB has decided to issue the Licence for a term of two (2) years. The two (2) year Licence term is intended to provide the Licensee time to take immediate action towards achieving full compliance with all Licence requirements. Upon submission of an application to renew this Licence in approximately 21 months, the Board fully expects the Hamlet to be in compliance with the Licence. This shorter licence duration also permits the Board to increase its level of confidence of the Licensee that the facilities are operating as they should.

The Board agrees with INAC's recommendation in its March 25, 2011 submission, that the Hamlet and GN-CGS regularly brief the Board and INAC Water Resource Officers on the status of their efforts to comply with the terms and conditions of the Licence. As per Part B, Item 6 of the Licence renewal, the Licensee must submit a Plan for Compliance that clearly demonstrates how the Hamlet will achieve full compliance with the Licence conditions during this time period. To assist the Licensee in this matter, the NWB has prepared a *Draft Guide to the Development of a Plan for Compliance*, dated June 2010, including a template which is available upon request.

The NWB reminds the Licensee of its responsibility to be in compliance with the conditions of the Licence.

Annual Report

In accordance with Part B Item 1 of expired water licence 3BM-SAN0308, annual reports were to be filed with the Board not later than March 31st of the year following the calendar year reported. On November 8, 2010 annual reports for 2003 to 2009 were submitted as part of the Application; however, as noted by INAC in its March 25, 2011 submission these reports were significantly incomplete with respect to the provision of monitoring results. In addition, the NWB received the Hamlet's 2010 annual report on March 31, 2011.

The NWB would like to emphasize the requirement to produce an annual report for submission not later than March 31st of the year following the calendar year being reported. The requirement to produce annual reports is to ensure that the NWB has an accurate and timely annual update of municipal activities during a calendar year. This information is maintained on the NWB's public registry and is available to interested parties upon request. A *"Standardized Form for Annual Reporting"* is available for use from the NWB file transfer protocol (ftp) site under the Public Registry link below, or through the NWB Website at www.nunavutwaterboard.org.

Link = ftp://nunavutwaterboard.org/ADMINISTRATION/Standardized%20Forms/

This form is to be used when reporting; however, additional information may be required of the annual report and can be provided as an appendix.

Water Use

Water licence 3BM-SAN0308 approved a quantity of water not to exceed 34,000 cubic metres per year. In its Application, the Hamlet of Sanikiluaq requested a quantity of water of 100 cubic metres per day or less. INAC noted in its March 25, 2011 submission that the "*Design Brief – Sanikiluaq Truck Fill Station*" prepared by Trow Associates Inc.; dated May 2010 estimates an annual water use of 35,500 cubic meters which is consistent with the Hamlet's request; however, it does not consider the next five years of water use increase. INAC recommended that the Licence renewal should consider an annual limit closer to 40,000 cubic metres. INAC's recommendation was forwarded to GN-CGS on April 20, 2011 and on April 21, 2011, GN-CGS responded in agreement. The NWB has therefore authorized the requested increase in water use to 40,000 cubic metres per annum.

The Application indicated that rehabilitation of the water supply facility was scheduled for completion in November 2010. As noted by INAC in its March 25, 2011 submission, the Licensee is required to submit as-built plans for any modifications, including the rehabilitated water supply facility, within ninety (90) days of completion of the modification, in accordance with Part E Item 4 of the expired licence. The Board agrees with INAC and has carried forward this condition to Part E Item 4 of the Licence renewal.

Sewage

The Sewage Disposal Facility is located 2.9 km west of the Hamlet and consists of a lagoon with a retention capacity of approximately 19,360 cubic metres. The facility discharges effluent seasonally (typically in August) through an undefined wetland prior to discharge to the marine environment. Correspondence from GN-CGS received by the NWB on November 8, 2010 indicates that the final discharge point for the Sewage Disposal Facility has been tentatively established at the end of the lagoon on the wetlands prior to mixing and diluting with the surface water of the Eskimo Harbour more than 2

km from the lagoon. In addition, the Application indicates that the GN-CGS plans to build a new Sewage Disposal Facility with approved funding; however, at this time, the Hamlet requires continued use of the existing facility.

To date, no monitoring results have been submitted to confirm that the effluent quality limits specified in Part D Item 2 of the expired licence 3BM-SAN0308 have been achieved. The Board notes that the *Sanikiluaq Landfill and Sewage Lagoon Report*, dated July 24, 2010, inspected by Patricio Fuentes indicates that runoff from the Solid Waste Disposal Facility drains through a nearby pile of demolition garbage before subsequently entering the Sewage Disposal Facility. The Board is concerned that this runoff may affect the quality of effluent discharged from the Sewage Disposal Facility and emphasizes the importance of monitoring to confirm compliance with water licence conditions.

No comments were received regarding the effluent quality limits for the Sewage Disposal Facility; therefore, the Board is maintaining the limits prescribed in the expired licence 3BM-SAN0308 which are consistent with the *Guidelines for the Discharge of Treated Municipal Wastewater in the Northwest Territories* Northwest Territories Water Board, 1992.

As noted by EC in its March 25, 2011 submission, the Licensee must also ensure that any effluent is in compliance with Section 36(3) of the *Fisheries Act*. According to Section 36(3) of the *Fisheries Act*, the deposition of deleterious substances of any type, under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter such water, is prohibited. The Licensee is advised that compliance with this Licence does not absolve the Licensee from the responsibility to comply with other applicable legislation.

Solid Waste

The Solid Waste Disposal Facility consists of a landfill and bulky metals area which is located adjacent to the Sewage Disposal Facility approximately 1.4 km west of the community. The domestic wastes are burned twice weekly and the landfill is compacted and covered with sandy soil on a yearly basis. The Application indicates that a feasibility study is being conducted for upgrading the Solid Waste Disposal Facility, but funds are not yet available. Therefore, the Board has considered the continued use of the existing facility in this Licence renewal.

Both INAC and EC commented in their March 25, 2011 submissions on hazardous waste management including the need for proper segregation and disposal of hazardous waste to ensure that hazardous materials and leachate do not enter water. The Board agrees with INAC and EC and is continuing to require the Licensee to implement measures to ensure that hazardous material and/or leachate from the Solid Waste Disposal Facility do not enter water as a condition of Part D Item 7 of the Licence renewal. In addition, the Board has updated the Licence renewal to include the following requirements as conditions in Part D Items 8 to 10: (1) segregate and store all hazardous materials including waste oil, within the Solid Waste Disposal Facility to prevent the deposit of deleterious substances into any water, until such a time as disposal arrangements are made to a licensed facility; (2) backhaul and dispose of all hazardous wastes, including waste oil, generated through the course of the operation at a licensed waste disposal site; and (3) maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste.

In addition, EC commented in its March 25, 2011 submission on the Licensee's plans to burn domestic wastes noting that it strongly discourages open burning of municipal wastes due to the spread of toxic

compounds and generation of fine particulate matter. EC recommended the use of an approved incinerator for the disposal of combustible wastes including submission of an incineration management plan for its review prior to implementation. EC also recommended specific wastes suitable for open burning noting that all residual wastes from open burning should be thoroughly collected, removed and disposed of at a suitable facility. The Board is not aware of any plans on behalf of the Licensee for the use of an incinerator at this time, and notes that the Government of Nunavut's (GN) *Environmental Guideline for the Burning and Incineration of Solid Waste*, dated October 2010 provides guidance regarding wastes suitable for open burning. As such, the Board has set restrictions on the types of materials permitted for open burning as a condition in Part D Item 11 of the Licence renewal.

Final Discharge Points

Part D Item 8 of expired water licence 3BM-SAN0308 required the Licensee to submit to the Board for review within six (6) months of the issuance of the licence a report identifying each final discharge point including: (1) plans, specifications, and a general description together with its specific geo-referenced location; and (2) a description of how each final discharge point is designed and maintained. In its November 8, 2010 correspondence, GN-CGS provided coordinates for the sewage lagoon final discharge point indicating that it is tentatively established at the end of the lagoon on the wetlands prior to mixing and diluting with the surface water of the Eskimo Harbour more than two (2) km from the lagoon.

In their submissions dated March 25, 2011, both INAC and EC commented that greater detail is required to satisfy the requirements of the licence condition. Parties recommended that the Licensee submit a short report including an annotated map of the final discharge points for both the Sewage and Solid Waste Disposal Facilities labeling them according to the monitoring program. The Board agrees with the parties and has updated and carried forward this condition to Part D Item 13 of the Licence renewal.

Operational Plans

Part F Item 1 of expired water licence 3BM-SAN0308 required the Licensee to submit to the Board for approval a Plan for the Operation and Maintenance (O&M) of the Sewage and Solid Waste Disposal Facilities specifically addressing the inappropriate trucked sewage discharge location, hazardous waste disposal, and operational issues related to airborne litter depositions into water at the Solid Waste Disposal Facility which were identified in the June 22, 2002 DIAND inspection report. In its November 8, 2010 correspondence GN-CGS indicated that O&M manuals for the Sewage and Solid Waste Disposal Facilities were not available.

In their submissions dated March 25, 2011, both INAC and EC commented on the need for an O&M manual for **all infrastructure that is currently in use**. The Board agrees with the parties and has updated and carried forward this condition to Part F Item 1 of the Licence renewal requiring the Licensee to submit to the Board for approval within ninety (90) days of issuance of this Licence renewal, an O&M Manual including the following plans: (1) O&M manual for the Water Supply Facilities; (2) O&M manual for the Sewage Disposal Facilities; (3) O&M manual for the Solid Waste Disposal Facility; (4) Hazardous Waste Management Plan; (5) Spill Contingency Plan; and (6) Monitoring Program Quality Assurance / Quality Control Plan (QA/QC). This requirement is consistent with other municipal water Licenses issued by the Board. The purpose of the O&M Manual is to assist the Licensee and its contractors in carrying out the procedures relating to the on-site facilities. The O&M Manual should demonstrate to the NWB that the Licensee is capable of operating and maintaining the infrastructure related to water use and waste disposal and of meeting the requirements of the Licence.

Abandonment and Restoration

Part G Item 1 of expired water licence 3BM-SAN0308 required the Licensee to submit to the Board for approval an Abandonment and Restoration Plan at least six months prior to abandoning any facilities and the construction of new facilities to replace existing ones. The Board is continuing to require this Plan to ensure that all existing end-of-life facilities are reclaimed in an appropriate manner.

Unauthorized Disposal Areas

As noted by INAC in its March 25, 2011 submission, both the August 17, 2010 INAC inspector report and the GN-CGS July 24, 2010 inspection report, indicate that approximately sixty (60) - 220 L abandoned barrels containing waste oil, glycol, and unknown substances are positioned near the Hamlet's Solid Waste Disposal Facility, with evidence of leaking from some barrels. The GN-CGS inspector report further noted that runoff from this area drains through a nearby pile of demolition debris before entering the Sewage Disposal Facility. INAC recommended that the Hamlet should properly dispose of these barrels and remediate contaminated soils.

The Board agrees with INAC and is additionally concerned about the effects of contaminated runoff from the unauthorized disposal areas on the Sewage Disposal Facility's treatment efficiency. As such, the Board is requiring as conditions in Part G Items 3, 4, and 5 of this Licence renewal that (1) the Licensee take immediate steps in consultation with the Inspector to clean-up and remediate the unauthorized disposal areas taking into consideration measures to manage runoff from the areas and any additional monitoring program requirements to assess the effect of runoff on the Sewage Disposal Facility; (2) the Licensee submit to the Board for review within thirty (30) days of Licence issuance, a detailed report outlining the extents of the areas and the immediate measures taken; and (3) the Licensee submit to the Board for approval within ninety (90) days of Licence issuance, a Work Plan to assess and remediate the areas.

Monitoring

As noted above, results of the monitoring program required by expired water licence 3BM-SAN0308 have not been submitted. This is an area of non-compliance that the NWB anticipates will be improved upon over the two (2) year term of the new Licence.

The Board has updated the conditions in Part H of this Licence renewal, applying to the Monitoring Program, to be consistent with other recently issued municipal licences. Of particular note, the NWB has included as a condition in Part H Item 10 of this Licence renewal, the requirement for the Licensee to submit to the Board a Quality Assurance/Quality Control (QA/QC) Plan. This Plan is to be included in the Operations and Maintenance Plan required under Part F Item l. The QA/QC plan shall be accompanied by an approval letter from an accredited laboratory.

NUNAVUT WATER BOARD
WATER LICENCE

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

HAMLET OF SANIKILUAQ

(Licensee)

P.O. Box 157, SANIKILUAQ, NUNAVUT, X0A 0W0

(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:

Licence Number/Type:	3BM-SAN1214 TYPE "B"
Water Management Area:	NUNAVUT 04
Location:	SANIKILUAQ, NUNAVUT
Classification:	MUNICIPAL UNDERTAKING
Purpose:	DIRECT WATER USE AND DEPOSIT OF WASTE
Quantity of Water use not to Exceed:	FORTY THOUSAND (40,000) CUBIC METRES PER ANNUM
Date of Licence Issuance:	FEBRUARY 28, 2012
Expiry of Licence:	MARCH 1, 2014

This Licence, issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

Thomas Kabloona,
Nunavut Water Board, Chair

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. SCOPE

a. This Licence allows for the use of Water and disposal of Waste including operation of a Water Supply Facility, Sewage Disposal Facility, and Solid Waste Disposal Facility at the Hamlet of Sanikiluaq, Nunavut for a municipal undertaking (Latitude 56°32'N and Longitude 79°14W');

b. This Licence is issued subject to 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 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 to be subject to such requirements; and

c. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with all applicable legislation, guidelines and directives.

2. DEFINITIONS

In this Licence: **3BM-SAN1214**

"Act" means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act;*

"Amendment" means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence and/or modifications inconsistent with the terms of the set terms and conditions of the Licence;

"Analyst" means an Analyst designated by the Minister under Section 85 (1) of the Act;

"Applicant" means the Licensee;

"Appurtenant Undertaking" means an undertaking in relation to which a use of Waters or a deposit of Waste is permitted by a licence issued by the Board;

"Board" means the Nunavut Water Board established under the *Nunavut Land Claims Agreement*;

"Effluent" means treated or untreated liquid waste material that is discharged into the environment from a structure such as a settling pond or a treatment facility;

"**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*;

"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;

"Freeboard" means the vertical distance between water line and the designed maximum operating height on the crest of a dam or dyke's upstream slope;

"Geotechnical 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 with the engineering properties of earth materials in dealing with man-made structures and earthworks that will be built on a site. These can include shallow and deep foundations, retaining walls, dams, and embankments;

"Grab Sample" means a single Water or wastewater sample taken at a time and place representative of the total discharge;

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

"Hazardous Waste" means waste classified as "hazardous" by Nunavut Territorial or Federal legislation, or as "dangerous goods" under the *Transportation of Dangerous Goods Act*;

"**Inspector**" means an Inspector designated by the Minister under Section 85 (1) of the Act;

"Licensee" means the holder of this Licence;

"Licensed Facilities" means the Water Supply Facility, Sewage Disposal Facility; and Solid Waste Disposal Facility;

"Modification" means an alteration to a physical work that introduces new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion, and changes to the operating system that are consistent with the terms of this Licence and do not require amendment;

"Monitoring Program" means a monitoring program established to collect data on surface water and groundwater quality to assess impacts to the freshwater aquatic environment of an appurtenant undertaking;

"Nunavut Land Claims Agreement" (NLCA) 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;

"Sewage" means all Toilet Wastes and Greywater;

"**Sewage Disposal Facility**" comprises the area at Annak Lake and decant structures designed to contain and treat sewage as described in the Application for Water Licence filed by the Applicant on February 19, 2003 and illustrated in Drawing No. 2002-1000-056;

"Solid Waste Disposal Facility" comprises the area and associated structures designed to contain solid waste as described in the Application for Water Licence filed by the Applicant on February 19, 2003 and illustrated in Drawing No. 2002-1000-056;

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

"Waste" means, as defined in section 4 of the Act, any substance that, by itself or in combination with other substances found in Water, would have the effect of altering the quality of any Water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any Water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means;

"Water" means water as defined in section 4 of the Act;

"Water Supply Facilities" comprises the area and associated intake infrastructure at Sanikiluaq Lake, as described in the Application for Water Licence filed by the Applicant on February 19, 2003, and illustrated in Drawing No. 2002-1000-056, as well as the rehabilitations described in the Application for Water Licence renewal filed by the Applicant on November 8, 2010.

3. ENFORCEMENT

a. Failure to comply with this Licence will be a violation of the Act, subjecting the Licensee to the enforcement measures and the penalties provided for in the Act;

b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the Act;

c. For the purpose of enforcing this Licence and with respect to the use of Water and deposit or discharge of Waste by the Licensee, Inspectors appointed under the Act, hold all powers, privileges and protections that are conferred upon them by the Act or by other applicable law.

d. The Licensee shall have in place, a Plan for Compliance to achieve full compliance with the conditions of this Licence, approved by the Board in writing as per Part B, Item 6.

PART B: GENERAL CONDITIONS

1. The Licensee shall file an Annual Report with the Board for review, no later than March 31st of the year following the calendar year being reported, which shall contain the following information collected during that period:

   a. Tabular summaries of all data generated under the Monitoring Program;
   b. The monthly and annual quantities of freshwater obtained from all sources;
   c. The monthly and annual quantities of Wastes removed for disposal from Licensed Facilities;
   d. A summary of modifications and/or major maintenance work carried out on the Water

Supply Facility, Sewage Disposal Facility and Solid Waste Disposal Facility, including all associated structures and facilities;

e. A list of unauthorized discharges and summary of follow-up action taken;

f. A summary of any abandonment and restoration work completed during the year, including the remediation work carried out under Part G, Item 3, and an outline of any work anticipated for the next year;

g. Any revisions to approved plans and manuals as required by Part B, Item 11, submitted in the form of an addendum;

h. A summary of any studies or reports requested by the Board that relate to Water use and Waste disposal or restoration, and a brief description of any future studies planned; and

i. Any other details on Water use or Waste disposal requested by the Board by November 1st of the year being reported.

2. The Licensee shall comply with the Monitoring Program described in this Licence, and any amendments to the Monitoring Program as may be made from time to time, pursuant to the conditions of this Licence.

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

4. The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of water volumes or waste discharges as required by this Licence, installed, operated and maintained by the Licensee to the satisfaction of an Inspector.

5. The Licensee shall, within ninety (90) days after the first visit by the Inspector following issuance of this Licence, post the necessary signs to identify the stations of the Monitoring Program. All signage postings shall be in English and Inuktitut.

6. The Licensee shall submit to the Board for approval, within ninety (90) days following the issuance of this Licence, a Plan for Compliance that clearly demonstrates the measures the Licensee will undertake, including an implementation schedule, to achieve full compliance with the conditions of this Licence, including issues raised in the Inspector's Reports.

7. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.

8. In the event that a Plan is not found acceptable to the Board, the Licensee shall, within thirty (30) days of notification by the Board provide a revised version to the Board for review or approval in writing.

9. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.

10. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a

part of this Licence, and any additional terms and condition imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.

11. The Licensee shall review the Plans referred to in this Licence as required by changes in operation and/or technology and modify the Plans or Manuals accordingly. Revisions to the Plans or Manuals are to be submitted in the form of an addendum to be included with the Annual Report required by Part B, Item 1(g), complete with a revisions list detailing where significant content changes are made.

12. The Licensee shall post signs in the appropriate areas to inform the public of the location of the Water Supply Facilities, Sewage Disposal Facility, Solid Waste Disposal Facility and Final Discharge Point of the Sewage Disposal Facility. All signage postings shall be in English and Inuktitut.

13. The Licensee shall ensure a copy of this Licence is maintained onsite at all times.

14. Any communication with respect to this Licence shall be made in writing to the attention of:

(a) 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@nunavutwaterboard.org

(b) Inspector Contact:
Water Resources Officer
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445

15. The Licensee shall submit one (1) paper copy and one (1) electronic copy of all reports, studies, and plans to the Board, or as otherwise requested by the Board. Reports or studies submitted to the Board by the Licensee shall include an executive summary in English and Inuktitut.

16. 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.

17. This Licence is assignable as provided in Section 44 of the Act.

18. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.

PART C: CONDITIONS APPLYING TO WATER USE AND MANAGEMENT

1. The Licensee shall obtain all freshwater from Sanikiluaq Lake at Monitoring Program Station SAN-1 using the Water Supply Facilities or as otherwise approved by the Board in writing.

2. The annual quantity of Water, used for all purposes, shall not exceed forty thousand (40,000) cubic metres or as otherwise approved by the Board in writing.

3. The Licensee shall equip all Water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw Water at a rate such that fish do not become impinged on the screen.

4. The Licensee shall maintain the Water Supply Facilities to the satisfaction of the Inspector.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT

1. The Licensee shall direct all Sewage to the Sewage Disposal Facility or as otherwise approved by the Board in writing.

2. All Effluent discharged from the Sewage Disposal Facility at Monitoring Program Station SAN-4 shall not exceed the following Effluent quality limits, or as otherwise approved by the Board in writing

Parameter	Maximum Concentration of any Grab Sample
Faecal Coliforms	1×10^6 CFU/dl
BOD_5	120 mg/L
Total Suspended Solids	180 mg/L
Oil and Grease	No visible sheen
pH	Between 6 and 9

3. The Licensee shall maintain a Freeboard limit of at least 1.0 metre, or as recommended by a qualified Geotechnical Engineer and as approved by the Board in writing, at all dams, dykes, or structures intended to contain, withhold, divert, or retain Waters or Wastes.

4. The Licensee shall provide at least ten (10) days notification to an Inspector, prior to initiating any planned discharges from the Sewage Disposal Facility.

5. The Sewage Disposal Facility shall be maintained and operated in such a manner as to prevent structural failure.

6. The Licensee shall dispose of and contain all solid Wastes at the Solid Waste Disposal Facility or as otherwise approved by the Board in writing.

7. The Licensee shall implement measures to ensure Hazardous Waste and/or leachate from the

Solid Waste Disposal Facility does not enter Water.

8. The Licensee shall segregate and store all Hazardous Wastes including waste oil, within the Solid Waste Disposal Facility to prevent the deposit of deleterious substances into any water, until such a time as disposal arrangements are made to a licensed facility.

9. The Licensee shall dispose of all Hazardous Waste, including waste oil, generated through the course of the licensed activities, at a licensed waste disposal site.

10. The Licensee shall maintain records of all Waste backhauled and records of confirmation of the proper disposal of Hazardous Waste shipped. These records shall be made available to an Inspector upon request.

11. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, styrofoam, asbestos or painted wood to prevent the deposition of Waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.

12. The Licensee shall maintain the Sewage Disposal Facility and Solid Waste Disposal Facility to the satisfaction of an Inspector.

13. The Licensee shall submit to the Board for review within thirty (30) days of issuance of this Licence, a report identifying each Final Discharge Point. The report shall include:

    a. Plans, specifications and a general description of each Final Discharge Point together with its specific geo-referenced location;
    b. A description of how each Final Discharge Point is designed and maintained; and
    c. An annotated map of the Final Discharge Points for both the Sewage and Solid Waste Disposal Facilities labeled according to the Monitoring Program.

14. If, during the term of this Licence, additional Final Discharge Points are identified, the Licensee shall submit the information required by Part D, Item 13 for each new Final Discharge Point within thirty (30) days after the discharge point is identified and at least sixty (60) days prior to depositing Effluent from the new Final Discharge Point, or upon proposed changes made to a Final Discharge Point.

PART E: CONDITIONS APPLYING TO MODIFICATIONS AND CONSTRUCTION

1. The Licensee shall submit to the Board for approval in writing, construction drawings stamped and signed by an Engineer, prior to the construction of any dams, dykes or structures intended to contain, withhold, divert or retain Water or Wastes.

2. The Licensee may, without written approval from the Board, carry out Modifications to the Water Supply Facilities, Sewage Disposal Facility and Solid Waste Disposal Facility provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:

a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the modifications and shall to include;
   i. A description of the facilities and/or works to be constructed;
   ii. The proposed location of the structure(s);
   iii. Identification of any potential impacts to the receiving environment;
   iv. A description of any monitoring required, including sampling locations, parameters measured and frequencies of sampling;
   v. Schedule for construction;
   vi. Drawings of engineered structures signed and stamped by an Engineer; and
   vii. Proposed sediment and erosion control measures.
b. the proposed Modifications do not place the Licensee in contravention of 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.

3. Modifications for which all of the conditions referred to in Part E, Item 2, have not been met, may only be carried out upon approval from the Board in writing.

4. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence, including the rehabilitated Water Supply Facility, within ninety (90) days of completion of the Modification, or, if already completed, within ninety (90) days of issuance of this Licence. These plans and drawings shall be stamped by an Engineer.

5. 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.

PART F: CONDITIONS APPLYING TO OPERATION AND MAINTENANCE

1. The Licensee shall submit to the Board for approval in writing, within ninety (90) days of issuance of this Licence, an Operation and Maintenance (O&M) Manual for the Licensed Facilities. This Manual shall be developed in accordance with the Government of Northwest Territories *Guidelines for the Planning, Design, Operation and Maintenance of Modified Solid Waste Sites in the Northwest Territories*, 2003, and the *Guidelines for the Preparation of an Operations and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories*, 1996. The Manual shall take into consideration the comments received during the application review process as well as the issues identified in inspection reports. The Manual shall contain the following plans:

   a. O&M Plan for the Water Supply Facility;
   b. O&M Plan for the Sewage Disposal Facility;
   c. O&M Plan for Solid Waste Disposal Facility;
   d. Hazardous Waste Management Plan;
   e. Spill Contingency Plan; and

f. Monitoring Program Quality Assurance/Quality Control (QA/QC) Plan required by Part H, Item 10 of the Licence.

2. If, during the period of this Licence, an unauthorized discharge of Effluent and/or Waste occurs, or if such a discharge is foreseeable, the Licensee shall:

a. Employ the appropriate contingency measures as described in an approved Spill Contingency Plan;
b. Report the incident immediately via the 24-Hour Spill Reporting Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
c. For each spill occurrence, submit a detailed report to the Inspector, no later than thirty (30) days after initially reporting the event, which includes the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain, clean up and restore the spill site.

3. In the absence of an approved Spill Contingency Plan contained within an approved Operations and Maintenance Manual, required by Part F, Item 1 of this Licence, should, during the period of this Licence, an unauthorized discharge of Waste and/or Effluent occur, or if such a discharge is foreseeable, the Licensee shall:

a. Take whatever steps are immediately practicable to protect human life, health, and the environment;
b. Without delay, seek guidance from the Government of Nunavut with regards to mitigation and remedial actions required to address the discharge;
c. Report the incident immediately via the 24-Hour Spill Reporting Line at 867-920-8130 and to an Inspector; and
d. Submit to an Inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the event.

PART G: CONDITIONS APPLYING TO ABANDONMENT, RESTORATION AND CLOSURE

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 existing ones, submit to the Board, for approval in writing, an Abandonment and Restoration Plan for the facilities being decommissioned. The Plan shall incorporate, where applicable, information on the following:

a. Water intake facilities;
b. The waste treatment and sewage treatment sites and facilities;
c. Petroleum and chemical storage areas;
d. Any site affected by waste spills;
e. Leachate prevention;
f. An implementation schedule;
g. Maps delineating all disturbed areas, and site facilities;
h. Consideration of altered drainage patterns;
i. Type and source of cover materials;
j. Future area use;

k. Hazardous wastes; and
l. A proposal identifying measures by which restoration costs will be financed by the Licensee upon abandonment.

2. The Licensee shall complete the restoration work within the time schedule specified in an approved Abandonment and Restoration Plan, or as subsequently revised and approved by the Board.

3. The Licensee shall take immediate steps, upon issuance of this Licence and in consultation with the Inspector, to clean-up the unauthorized disposal areas identified in the Application document entitled "*Sanikiluaq Landfill and Sewage Lagoon Report*" dated July 24, 2010, including the area near the Solid Waste Disposal Facility where barrels have been improperly disposed, and the area near the Sewage Disposal Facility where construction debris has been improperly disposed. The Licensee, in consultation with the Inspector, shall consider:

   a. Measures to manage runoff from the unauthorized disposal areas; and
   b. Additional monitoring requirements.

4. The Licensee shall submit to the Board for review, within thirty (30) days of issuance of this Licence, a detailed report including:

   a. Mapped GPS coordinates delineating the extents of the unauthorized disposal areas referred to in Part G, Item 3, relative to Licensed Facilities; and
   b. The immediate measures taken in consultation with the Inspector to clean-up the unauthorized disposal areas referred to in Part G, Item 3.

5. The Licensee shall submit to the Board for approval, within ninety (90) days of issuance of this Licence, a Work Plan to assess and remediate the unauthorized disposal areas referred to in Part G, Item 3.

PART H: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall maintain Monitoring Program stations at the following locations:

Monitoring Program Station Number	Description	Frequency	Status
SAN-1	Raw water supply at Sanikiluaq Lake prior to treatment	Monthly and annually	Active
SAN-2	Runoff from the Final Discharge Point of the Solid Waste Disposal Facilities	Monthly during the months of May to August	Active

SAN-3	Raw Sewage at truck offload point	Not Applicable	Not active
SAN-4	Effluent discharge from the Final Discharge Point of the Sewage Disposal Facilities at Annak Lake	Monthly during the months of May to August	Active

2. The Licensee shall provide the GPS coordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of Water are utilized for all purposes and at all Monitoring Program stations.

3. The Licensee shall confirm the locations and GPS coordinates for all Monitoring Program Stations referred to in Part H Item 1 with an Inspector.

4. The Licensee shall measure and record in cubic metres, the monthly and annual quantities of Water extracted for all purposes at Monitoring Program Station SAN-1.

5. The Licensee shall measure and record the monthly and annual volume of all Effluent discharged from the Sewage Disposal Facility at SAN-4.

6. The Licensee shall sample monthly at Monitoring Program Stations SAN-2 and SAN-4 during the months of May to August, inclusive. Samples shall be analyzed for the following parameters:

BOD_5	Faecal Coliforms
pH	Conductivity
Total Suspended Solids	Ammonia Nitrogen
Nitrate – Nitrite	Oil and Grease (visual)
Total Phenols	Sulphate
Sodium	Potassium
Magnesium	Calcium
Total Arsenic	Total Cadmium
Total Copper	Total Chromium
Total Iron	Total Lead
Total Mercury	Total Nickel
Total Zinc	Total Phosphorous

7. The Licensee shall measure and record the annual quantities of sewage solids removed from the Sewage Disposal Facility.

8. 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 the Board.

9. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025.

The accreditation shall be current and in good standing.

10. The Licensee shall within ninety (90) days following issuance of the Licence, submit to the Board a Quality Assurance/Quality Control (QA/QC) Plan. The Plan shall include up to date field sampling methods to all applicable standards, acceptable to an accredited laboratory as required by Part H, Item 8 and Part H, Item 9. The Plan shall include a covering letter from the accredited laboratory confirming acceptance of the Plan for analyses to be performed under this Licence.

11. The Licensee shall annually review the QA/QC plan submitted under Part H, Item 10 and modify it as necessary. Revised plans shall be submitted to the NWB with an approval letter from an accredited lab that meets standards set in Part H, Item 8 and Part H, Item 9.

12. The Licensee shall include in the Annual Report required under Part B, Item 1, all monitoring data and analysis and information required by this Part.

13. Modifications to the Monitoring Program may be made only upon written request and subsequent approval of the Board in writing.