

APPENDIX D – Redlined Taloyoak Water License (3BM-TAL1926)



File No.: 3BM-TAL1926

December 06, 2019

Janice Anderson Senior Administrative Officer Hamlet of Taloyoak P.O. Box 8, Taloyoak, NU X0B 1B0

Email: sao@taloyoak.ca

Shah Alam, P.Eng. Municipal Planning Engineer Government of Nunavut – C&GS Bag 200 Cambridge Bay, NU X0B 0C0

Email: salam@gov.nu.ca

RE: NWB Amendment Renewal Water Licence No. 3BM-TAL1926

Dear Ms. Anderson and Mr. Alam:

Please find attached Licence No. **3BM-TAL1926** issued to the Hamlet of Taloyoak 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 Agreement). The terms and conditions of the attached Licence related to the use of Water and the deposit of Waste are an integral part of this approval.

If the Licensee contemplates the continuing of this Undertaking after the Water Licence expires, it is the responsibility of the Licensee to apply to the NWB for a renewal Water Licence. 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 the use of Water and deposit of Waste must cease, or the Licensee may be in contravention of the *Nunavut Land Claims Agreement* 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. It should be noted that in accordance with Section 75(1)(a) of the *Nunavut Planning and Project Assessment Act (NuPPAA)*, the Board is not allowed to issue a permit or authorization for any project proposal that has not been submitted to the Nunavut Planning Commission (NPC) in accordance with Section 76 of *NuPPAA*.

If the Licensee contemplates or requires an amendment to this Licence, the NWB may decide,

in the public's 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 are acknowledged by the Manager of Licensing.

The NWB strongly recommends that the Licensee consult the comments received from Crown-Indigenous Relations and Northern Affairs (CIRNA) on issues identified. This information is attached for your consideration.¹

Sincerely,

Lootie Toomasie Nunavut Water Board

Chair

LT/sk/kc

Enclosure: Amendment Renewal Licence No. **3BM-TAL1926**

Comments – CIRNA

Cc: Distribution List – Kitikmeot

¹ Email from G. Okonkwo, CIRNA, to K. Carter, NWB, Re: Application Acknowledgement for the Hamlet of Taloyoak Project – CIRNAC Comments on the Water Licence 3BM-TAL Renewal Application, November 25, 2019.

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I. BACKGROUND

The Hamlet of Taloyoak (Taloyoak or the Hamlet) is the northernmost community on Canada's mainland and is located on the southwestern coast of the Boothia Peninsula within the Kitikmeot Region of Nunavut approximately 460 km east of Cambridge Bay and 1,224 km northeast of Yellowknife. Taloyoak is situated within a zone of continuous permafrost on sand and gravel raised beaches with flat rolling terrain, numerous lakes and ponds, and with seasonal vegetation (Canadian Arctic Profiles – Indigenous Culture, 2006).

The surficial geology immediately surrounding the community is classified as a till veneer, with till deposits being patchy and generally less than 1m. The bedrock geology of the Taloyoak area comprises sedimentary rocks (carbonates, shale's and sandstones). Bedrock is generally exposed at sporadic locations close to sea level, comprises layers of dolomite and shale, that are jointed and frost shattered.

The thickness of active layer varies from 0.3 m in poorly drained areas to over 2 m in well drained areas. Excess ice contents of up to 10% have been reported in the subsurface soils.

The climate can be characterized by long cold winters and short cool summers. The average total annual precipitation is approximately 180mm, with about 95mm of snowfall and 85mm of rainfall. The July mean high is 12.3°C and mean low is 4.6°C. The January mean high is -25°C and mean low is -36°C. The prevalent wind direction is to the northwest at an annual average wind speed of 22km/h.

The community has a population of approximately 1029 people (2016), with the following relevant municipal infrastructure:

- Water Treatment Plant, which draws water from the Canso Lake, treats it through filters and chlorine, and transports it by truck to holding tanks in each building;
- Sewage Treatment Facility, which is a lagoon that receives trucked sewage from holding tanks in each building, holds raw sewage for approximately 360 days and discharges into an un-engineered Wetland Treatment Area (WTA) for natural remediation; and
- Solid Waste Facility, which includes a segregated area for general waste, bulky metals objects, hazardous waste, waste oil, and batteries.

II. FILE HISTORY

The Hamlet of Taloyoak has held Water Licences with the NWB since 2007, as outlined in Table 1.

Table 1. Project Licensing History

Licence No.	Date Issued	Comments
1BR-TAL0712	December 10, 2007	Authorization for operation of a landfarm
3BM-TAL0813	December 11, 2008	Water use 248 m ³ per day
3BM-TAL1419	December 08, 2014	Water use 60,000 m ³ per year/ 248 m ³ per day

III. APPLICATION PROCEDURAL HISTORY

On October 25, 2019, an Application to renew Licence No. 3BM-TAL1419 was submitted to the NWB by Government of Nunavut – Community and Government Services (GN-CGS) on behalf of the Hamlet of Taloyoak (the Applicant or Licensee). Following receipt, the NWB conducted a preliminary internal technical review of the full Application package and distributed it for public review with a deadline set at November 22, 2019. The Application to renew Licence No. 3BM-TAL1419 included the following documents:

- Cover Letter, dated October 22, 2019;
- Application for Water Licence Renewal signed by the SAO, dated October 17, 2019;
- Executive Summary of the Project Proposal in English and Inuktitut;
- Facilities Description;
- Taloyoak Wetland Assessment, Sewage Treatment Facility, dated January 28, 2016;
- Taloyoak Wastewater Treatment Feasibility Study, dated March 2016;
- Taloyoak Solid Waste Feasibility Study Presentation, dated 2019;
- KIA Comments, dated December 18, 2013;
- NPC Letter dated October 31, 2019.

Additionally, the Applicant indicated in their Cover Letter that the following plans and manuals will be updated and submitted to the Board during the review process:

- Operation and Maintenance Manual for Sewage and Solid Waste Operations;
- Quality Assurance/Quality Control Plan for Sewage and Waste; and
- Spill Contingency Plan.

On or before the deadline for comments, the NWB received a submission from Crown-Indigenous Relations and Northern Affairs (CIRNA).

IV ISSUES

Term of the Licence

The Licensee has requested a ten (10) year term for the Renewal Licence. In accordance with s. 45 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA* or the *Act*), the NWB may issue a Licence for a term not exceeding twenty-five (25) years. In determining an appropriate term for the Renewal Licence, the Board took into consideration several factors including intervener's comments, the Licensee's compliance history, and rationale included in the Application.

Given the Licensee's compliance disposition, the Board has decided to issue the Licence for a seven (7) year term, which the Board believes will provide the Applicant with adequate time to address all non-compliance issues associated with its Undertaking. The Board strongly recommends that all non-compliance issues raised by CIRNA to be addressed as a priority.

Further, the seven (7) year licence term will provide stakeholders and the Board with an opportunity to examine the overall performance of the Licensee over this time, and assess their performance prior to considering any future renewal licence that might include a longer term.

The Licensee should note that if it is determined that it is necessary to renew or amend the Licence, the Application for such a Renewal or Amendment should be filed at least <u>three (3)</u> <u>months</u> prior to the Licence expiry date so as to allow adequate time for the Board to complete the renewal process before the Licence expires.

Annual Reports

Under Part B, Item 1 of the Licence, the Licensee is required to submit Annual Reports for the purpose of ensuring that the NWB has an accurate annual update of municipal activities related to Water use and Waste disposal during each calendar year. This information is maintained on the Public Registry and is available to interested parties upon request. A "Standardized Form for Annual Reporting" is to be used by the Licensee and could be supplemented by additional monitoring documentation and Licensee's annual reporting forms. The NWB Standardized Form is available from the NWB file transfer protocol (FTP) site under the following Public Registry link at the NWB Website:

ftp://ftp.nwb-oen.ca/other documents/Standardized Forms/

The NWB has also taken this opportunity to review the Annual Reports submitted in recent years, and the following deficiencies in reporting have been identified:

- failure to submit Management Plans required by the Licence;
- failure to submit annual Engineer's reports for the engineered facilities;
- failure to provide records showing all volumes of water extracted from the source and sewage discharged at the Sewage Lagoon;
- failure to provide quantities of all Wastes disposed at the Solid Waste Facilities; and
- no results of acute toxicity testing.

The Board would like to remind the Licensee that the Annual Reporting requirements of the Licence should be adhered to so as to help maintain full compliance with respective terms and conditions in the Licence. The Board strongly recommends that for all subsequent annual submissions the Licensee provides monthly and annual volumes of Water drawn from the source and discharged at the Sewage Lagoon, submits annual Engineer's reports for all engineered structures, and provides results of acute toxicity testing.

Additionally, a number of compliance issues has been repeatedly identified by CIRNA Inspections over the past 4 years and provided within Water Licence Inspection Reports. The Board strongly recommends that the Licensee reviews these reports and addresses issues with applicable information in subsequent Annual Reports.

Water Use

The Hamlet of Taloyoak obtains all of its freshwater from the Canso Lake located approximately 1 km northwest of the community. The Water is pumped from the lake into the Water Treatment Plant using a submersible raw water pump (RWP1) rated at 28L/s. In the event that the main raw water pump fails, the system will automatically switch to the second intake pump (RWP2). A 75 micron pre-filter screen is installed prior to raw water entering the

filtration train. The filtration stream consists of four swing bolt filter cartridge housings. Water is stored in the water storage tank, and when there is a demand for Water from the Community, the solenoid valve (SV1) will open to initiate the flow of water stored in the water storage tank into the truck fill arm, which fills the water distribution truck. After every truck filling, SV1 opens to allow excess water to flow back into the intake pipe casing. This removes water from the climate-exposed truck fill arm, thereby protecting the treated water from freezing in the arm.

Water disinfection is done through chlorination using powdered calcium hypochlorite. Prechlorination is done before and after water goes through the filtration train. Chlorine is also injected prior to the water entering the truck fill arm and storage tank. Treated water goes into the water storage tank through the truck fill arm for distribution using water trucks.

The Licensee has requested to increase the allowable annual Water consumption from the previously approved 60,000 cubic metres to 70,000 cubic metres. The Board does not have any concerns with respect to the quantity of Water requested and has therefore set the maximum Water use for all purposes under this Licence at 70,000 cubic metres per year, or no more than 299 cubic metres per day, to allow for some flexibility, under Part C, Item 2 in the Licence. If the Licensee requires Water in quantities greater than that allowed under the Licence or from sources other than Canso Lake, the Licensee will be required to submit an Amendment Application to the Board for consideration.

Waste Deposit

The Application indicates that the Undertaking is expected to generate the following types of Waste: sewage and greywater, non-hazardous solid Waste, hazardous Waste, bulky items/scrap metal, animal Waste, Waste oil, sludge and contaminated soil. The following facilities have been developed to handle the Waste generated by the Hamlet:

i. Sewage Treatment Facility

The Hamlet's current Sewage Treatment Facility was developed in the early 1980's with a series of two natural lakes (used as a Two-cell Lagoon system) divided by a natural berm in between, and with a raised outlet from the secondary lake cell to a wide Wetland Treatment Area (WTA). The Lagoon system (Sewage Disposal Facility) is located approximately 3.2km from the community, with about 35,700 m³ capacity. The primary cell receives raw sewage from trucked discharge and holds it for the winter. Upon spring / summer melt, effluent and water flows over a semi-submerged berm into the secondary cell, from where it naturally discharges onto the WTA. The Licensee states that "meandering Wetland about 900m, enriched with seasonal vegetation, helps the effluent remediation process tremendously before the final ending into Stanner Harbour".

The Licensee states that the Lagoon is designed to receive municipal sewage and greywater only, and that the discharge of other types of liquid waste is prohibited unless it can be demonstrated that the waste quality does not have deleterious impact on the Sewage Treatment Facility. The Applicant also states that the policy is to operate the lagoon in adherence to the Environmental Guidelines for Industrial Waste Discharge in Nunavut (Government of Nunavut, 2002) that provides a Decision Flow Chart for managing an industrial waste discharge.

Additionally, the Licensee indicates that the Wastewater Treatment Feasibility Study was conducted in January 2016 and the Wetland Treatment Area Assessment Report was issued in March 2016. As a result of these studies, a new lined cell is planned to be added to the existing Sewage Lagoon in June 2021 – August 2022 to enhance overall Waste Water processing capability. The NWB would like to remind the Licensee that Part E, Item 1 of current Water Licence requires them to submit for construction, design drawings stamped by a qualified Engineer at least sixty (60) days prior to construction, and that the Construction Summary Report along with as-built plans and drawings should be submitted to the Board within ninety (90) days after construction, as per Part E, Item 4.

ii. Solid Waste Disposal Facility

The Hamlet's Solid Waste Disposal Facility located approximately 3.2km from the community has been in use for over 25 years. This facility consists of a non-engineered Landfill site and a Metal Dump site in one enclosed area protected by a fence.

The Landfill site receives domestic, construction, and hazardous Wastes, such as paint, solvents, waste oil, batteries, etc. Down from the Landfill, there is a wide Wetland Treatment Area (WTA) that receives snow melts and surface run-off from the Solid Waste Disposal Facility, and sewage effluent discharge from the Sewage Lagoon. Natural gradient of the area towards the WTA maintains drainage from the Facility.

The Metal Dump site consists of un-segregated bulky wastes and metal wastes including vehicles, heavy equipment, barrels, burnt steel from community houses, airport and construction debris, fuel tanks, and other metal wastes. Over the years, metal wastes from different sources have been piled up on the far side of the Metal Dump covering the sandy area.

The Board notes that the CIRNA Inspector expressed concern during the July 2019 inspection, over the current state of used battery storage, and strongly recommends the Licensee to address this issue as priority and provide a summary of work completed within the 2019 Annual Report.

Additionally, the NWB would like to remind the Licensee about a comment provided by Environment and Climate Change Canada (ECCC) during the previous Licence Application process recommending that "burning on site be discontinued, as the release of toxic by-products (including dioxins and furans) can lead to contamination of air, soil, and water, and subsequent uptake through the food chain".

The NWB understands that a Feasibility Study for the Solid Waste Facility Upgrade is currently in progress and that the design development proposal is expected to be completed within the next fiscal year. The Board would like to remind the Licensee that the Summary Report and all associated drawings should be submitted to the Board in accordance with the Licence requirements.

Management Plans and Manuals

The updated versions of the following Management Plans and Manuals required by the previous Water License have not been provided to the Board to date:

- Operation and Maintenance Manual for the Water Treatment Plant;
- Sewage Treatment Facility Operation and Maintenance Plan;
- Solid Waste Facility Operation and Maintenance Plan;
- Spill Contingency Plan; and
- Abandonment and Restoration Plan for the old Water Treatment Facility.

The NWB notes that the Proponent indicated that some of these Plans would be provided during the review process of the Licence Renewal Application. However, the Board understands the technical difficulties that the GN-CGS is currently dealing with, and has therefore included Licence conditions requiring submission of updated versions of the above mentioned documents with the 2019 Annual Report.

Monitoring Program

The NWB maintains the conditions pertaining to the Monitoring Program requirements outlined in Part H of previous Water Licence. The Licensee must ensure that the Monitoring Program requirements are fully implemented. It should also be noted that while minimum sampling requirements have been imposed, additional sampling may be required upon request by an Inspector.

Additionally, the Board notes that the acute toxicity testing at the Final Discharge Point of the Sewage Treatment Facility required by previous Water Licence has been carried forward into current Licence under Part D, Item 9.

The Quality Assurance / Quality Control (QA/QC) Plan entitled: "Hamlet of Taloyoak Quality Assurance / Quality Control Plan" completed by exp. Services Inc. in August 2013, was approved with the issuance of previous Water Licence. The Licensee was required to annually review and modify the Plan as necessary. The Board notes that the Monitoring Station descriptions in the QA/QC Plan do not match with those in the Water Licence and has therefore requested to revise current Plan and provide the updated version to the Board within the 2019 Annual Report submission.

CGS recommends this paragraph be adjusted to remove the acute lethality testing clause

DECISION

LICENCE NUMBER: 3BM-TAL1926

This is the decision of the Nunavut Water Board (NWB) with respect to a complete application received on October 25, 2019 for a renewal of a Water Licence made by:

HAMLET OF TALOYOAK

to allow for the use of Water and deposit of Waste during municipal activities by the Hamlet of Taloyoak located within the Kitikmeot Region, Nunavut at the following general geographical coordinates:

Latitude: 69° 32' 00" N Longitude: 93° 31' 00" W

DECISION

After having received confirmation from the Nunavut Planning Commission (NPC)¹ that the Application is for a project proposal that falls outside of an area with an approved land use plan, and, as such, a conformity determination is not required, and is exempt from the requirements for screening by the Nunavut Impact Review Board (NIRB)¹ as described within Section 12.4.3/ Schedule 12-1 of the *Nunavut Agreement*, the NWB decided that the application could proceed through the regulatory process. In accordance with Section 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (*NWNSRTA* or *Act*) and Article 13 of the *Nunavut Agreement*, public notice of the Application was given and interested persons were invited to make representations to the NWB.

After reviewing the submission of the Applicant and considering the representations made by interested persons, 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 *Nunavut Agreement* and of the *Act*, waived the requirement to hold a public hearing, and determined that:

Licence No. 3BM-TAL1419 be renewed as Licence No. 3BM-TAL1926 subject to the terms and conditions contained therein. (Motion #: 2019-B1-027)

Signed this 6th day of <u>DECEMBER 2019</u> at Gjoa Haven, NU.

Lootie Toomasie

Nunavut Water Board

Chair

TK/sk/kc

¹ Nunavut Planning Commission (NPC) Conformity Determination, October 31, 2019.



NUNAVUT WATER BOARD WATER LICENCE AMENDMENT RENEWAL

Licence No. 3BM-TAL1926

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 TALOYOAK

(Licensee)

P.O. BOX 8, TALOYOAK, NU X0B 1B0

(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: 3BM-TAL1926 / TYPE "B"

Water Management Area: RASMUSSEN/GULF OF BOOTHIA WATERSHEDS (33/34)

Location: **HAMLET OF TALOYOAK**

KITIKMEOT REGION, NUNAVUT

Classification: MUNICIPAL UNDERTAKING

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

Quantity of Water use not

to Exceed: **70,000 CUBIC METRES PER ANNUM**

OR 299 CUBIC METRES PER DAY

Effective Date: **DECEMBER 08, 2019**

Expiry of Licence: **DECEMBER 07, 2026**

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

Lootie Toomasie

Nunavut Water Board, Chair

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence allows for the use of Water and the deposit of Waste for a Municipal undertaking classified as per Schedule 1 of the *Regulations* at the Hamlet of Taloyoak located within the Kitikmeot Region, Nunavut.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of Water and the deposit 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 *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of Waste that may be so deposited or under which any such Waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and
- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

2. **Definitions**

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

"Addendum" means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report;

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

"Applicant" means the Licensee;

"<u>Application</u>" means the complete amendment-renewal application and supporting documents filed with the NWB by the Government of Nunavut – Community Government Services (GN-CGS) on behalf of Hamlet of Taloyoak on October 25, 2019;

"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 the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada and

the Nunavut Waters and Nunavut Surface Rights Tribunal Act;

- "<u>Effluent</u>" means treated or untreated liquid Waste material that is discharged into the environment from a structure such as a settling pond, landfarm 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;
- "<u>Final Discharge Point</u>" means an identifiable discharge point of a facility beyond which the Licensee no longer exercises control over the quality of the effluent;
- "<u>Freeboard</u>" 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 Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization 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 embankment;
- "<u>Grab Sample</u>" 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 all liquid Wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet Wastes;
- "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*;
- "Licensee" means the holder of this Licence;
- "Modification" means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;
- "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 the appurtenant undertaking;

- "<u>Nunavut Agreement</u>" 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;
- "Regulations" means the Nunavut Waters Regulations SOR/2013-69 18th April, 2013;
- "Sewage" means all toilet Wastes and greywater;
- "<u>Solid Waste Disposal Facility</u>" comprises the area and associated structures currently in use and designed to contain solid Waste (landfill site) as described in the Application for Water Licence Renewal filed by the Applicant;
- "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;
- "<u>Sump or Sumps</u>" A structure or depression that collects, controls, and filters liquid Waste before it is released to the environment. This structure should be designed to prevent erosion while allowing percolation of liquid Waste;
- <u>"Toilet Wastes"</u> 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;
- "Waste Disposal Facilities" means all facilities designated for the disposal of Waste, and includes the Sewage Disposal Facility and the Solid Waste Disposal Facility (including Hazardous Waste Management area), as described in the Application for Water Licence Renewal filed by the Applicant;
- "Water" or "Waters" means Waters as defined in Section 4 of the Act;
- "Water Supply Facility" comprises the area and associated intake infrastructure at Canso Lake, as described in the "Operation and Maintenance Manual for the Water Treatment Plant at Taloyoak, Nunavut" dated May 2012, and the Application for Water Licence Renewal filed by the Applicant.
- "Wetland Treatment Area (WTA)" comprises the area of land down gradient of the Waste Disposal Facilities that receives runoff and/or effluent from these facilities, and has been designated as part of the Waste Water treatment process.

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*; and
- 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.

PART B: GENERAL CONDITIONS

- 1. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31st of the year following the calendar year being reported, containing the following information:
 - a. Quantity of freshwater (in cubic metres per month and per year) obtained from all sources;
 - b. Quantity of each and all Waste discharged (in cubic metres per month and per year), including the hazardous and non-hazardous Waste accepted at the Solid Waste Disposal Facility;
 - c. Tabular summaries of all data generated under the "Monitoring Program";
 - d. Summary of modifications to the "Monitoring Program" in accordance with Part I, Item 14;
 - e. List of unauthorized discharges and summary of follow-up actions taken;
 - f. Summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures and facilities;
 - g. Any updates or revisions for manuals and plans (i.e., Operations and Maintenance, Abandonment and Restoration, QA/QC) as required by changes in operation and/or technology;
 - h. Summary of any studies, reports, and plans requested by the Board that relate to Water use, Waste disposal, or reclamation, and a brief description of any future studies planned;
 - i. Summary of any Abandonment and Restoration work completed during the year and an outline of any work anticipated for the following year;
 - j. 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 notify the NWB of any changes in Operating Plans or conditions associated with this project at least thirty (30) days prior to any such change.

- 3. 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.
- 4. The "Monitoring Program" and compliance dates specified in the Licence may be modified at the discretion of the Board.
- 5. The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of Water volumes as required under Part I, Item 3.
- 6. The Licensee shall post the necessary signs, where possible, to identify the stations of the "Monitoring Program." All signage postings shall be in the Official Languages of Nunavut and shall be located and maintained to the satisfaction of an Inspector.
- 7. The Licensee shall, for all Plans and Manuals submitted under this Licence, implement the Plans and Manuals as approved by the Board.
- 8. Every Plan and Manual 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 and/or Manual by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan and/or Manual where appropriate.
- 9. The Licensee shall, for all Plans, Manuals, and Reports submitted under this Licence, include a proposed timetable for implementation. Plans, Manuals, and Reports submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan or Manual if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan and/or Manual.
- 10. The Licensee shall review the Plans and Manuals referred to in this Licence, as required by changes in operation and/or technology, and modify the Plans and Manuals accordingly. Revisions to the Plans and Manuals shall be submitted in the form of an Addendum to be included with the Annual Report.
- 11. The Licensee shall immediately report any spills of Waste, which are reported to, or observed by the Licensee, within the municipal boundaries or in the areas of the Water Supply or Waste Disposal Facilities, to the NWT/NU 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295.
- 12. The Licensee shall ensure a copy of this Licence is maintained at the Municipal Office at all times. 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: <u>licensing@nwb-oen.ca</u>

(b) Inspector Contact:

Manager of Field Operations, CIRNA Nunavut District, Nunavut Region P.O. Box 100 Igaluit, NU X0A 0H0

Telephone: (867) 975-4295 Fax: (867) 979-6445

- 13. The Licensee shall submit an electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut.
- 14. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the NWB is received and acknowledged by the Manager of Licensing.
- 15. This Licence is assignable as provided for in Section 44 of the *Act*.
- 16. 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

- 1. The Licensee shall obtain all potable Water required for the Water Supply Facility and all other purposes from Canso Lake or as otherwise approved by the Board in writing.
- 2. The annual quantity of Water use for all purposes under this Licence shall not exceed seventy thousand (70,000) cubic metres per year, and shall not exceed 299 cubic metres per day.
- 3. Where the use of Water is of a sufficient volume that the source Water body may be drawn down, the Licensee shall submit to the Board for approval in writing the following: the volume required, a hydrological overview of the water body, details of impacts, and proposed mitigation measures.
- 4. The Licensee shall maintain the Water Supply Facilities to the satisfaction of the Inspector.

- 5. 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.
- 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 necessary controls to prevent such erosion.
- 8. Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into Water.
- 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.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

- 1. The Licensee shall direct all municipal Sewage generated by the Hamlet of Taloyoak to the Sewage Disposal Facility, or as otherwise approved by the Board in writing.
- 2. The Licensee shall provide notice to an Inspector at least ten (10) days prior to initiating any decant of the Sewage Disposal Facility and Hazardous Waste Storage Cell.
- 3. All Effluent discharged from the Sewage Disposal Facility at Monitoring Program Station TAL-3 shall not exceed the following Effluent quality limits:

Parameter	Units	Maximum Concentration of any Grab Sample
pH	_	6 – 9
Fecal Coliform	CFU/100mL	1×10^6
BOD ₅	mg/L	120
Total Suspended Solid	mg/L	180
Oil and Grease	mg/L	No visible sheen

4. All Effluent discharged from the Solid Waste Disposal Facilities, Run-off from Hazardous Waste Storage Cell at Monitoring Program Stations TAL-4 and TAL-5, respectively, shall meet the following effluent quality standards:

Parameter	Units	Maximum Concentration of any Grab Sample
рН	_	6 - 9
Total Suspended Solid	mg/L	15

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Oil and Grease	mg/L	No visible sheen
Aluminum	mg/L	1
Arsenic	mg/L	1
Barium	mg/L	1
Cadmium	mg/L	0.1
Chromium	mg/L	0.1
Iron	mg/L	1
Lead	mg/L	0.05
Zinc	mg/L	0.5

- 5. A freeboard of at least 1.0 metre, or as recommended by a qualified Geotechnical Engineer and as approved by the Board in writing, shall be maintained for all dams, dykes or other structures intended to contain, withhold, divert or retain Water or Wastes.
- 6. The Sewage Disposal Facility shall be maintained and operated to the satisfaction of an Inspector and in such a manner as to prevent structural failure.
- 7. The Licensee shall provide to the Board for approval, prior to the commissioning of the Enhanced Wetland Treatment Area as an integral component of the sewage treatment or within ninety (90) days of completion, whichever occurs first, a Wetland Treatment Area assessment that includes, but is not limited to:
 - i. Location of the Final Discharge Point required to complete monitoring requirements under Part D, Items 8 and 9;
 - ii. Ecological/vegetative assessment of the area to be used, including a prediction of the time required to achieve the effluent quality as described in the Application for Water Licence renewal;
 - iii. Description of the gradient, holding capacity, and verification of the total area utilized, which has been predicted as required to attain the proposed effluent quality, describing any discrepancies and the affects it will have on the predictive model outcome along with contingencies.
- 8. All effluent discharged from the Wetland Treatment Area Final Discharge Point, at Monitoring Program Station TAL-6 shall meet the following Effluent quality standards:

Parameter	Units	Maximum Concentration of any Grab Sample
pН	_	6 - 9
Fecal Coliform	CFU/100mL	1×10^4
CBOD	mg/L	25
Total Suspended Solid	mg/L	25
Un-ionized Ammonia (NH ₃)	mg/L	1.25, as nitrogen (N) at $15^{\circ}\text{C} \pm 1^{\circ}\text{C}$
Oil and Grease	mg/L	No visible sheen

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9. All Effluent discharged from the Wetland Treatment Area Final Discharge Point at Monitoring Program Station TAL-6 shall be demonstrated to be Not Acutely Toxic under the following tests to be conducted once annually approximately mid-way through discharge:

- i. Acute lethality to Rainbow Trout, *Oncorhynchus mykiss* (as per ECCC's Environmental Protection Series Biological Test Method EPS/1/RM/13).
- 10. The Licensee shall dispose of and permanently contain all solid Wastes generated by the Hamlet under this Licence at the Solid Waste Disposal Facility or as otherwise approved by the Board in writing.
- 11. The Licensee shall segregate and securely store all hazardous materials and/or hazardous Waste, including Waste oil, within the Solid Waste Disposal Facility in such a manner as to prevent the deposit of deleterious substances into any Water and until such time that proper disposal arrangements are made.
- 12. The Licensee shall implement measures to prevent hazardous materials and/or leachate from the Solid Waste Disposal Facility from entering Water.
- 13. The Licensee shall implement measures to control wind-blown litter at the Solid Waste Disposal Facility.
- 14. The Licensee shall ensure that sediment and erosion control measures are implemented prior to and maintained during activities carried out under this Part to prevent the release of sediment and minimize erosion.

PART E: CONDITIONS APPLYING TO MODIFICATIONS AND CONSTRUCTION

- 1. The Licensee shall submit to the Board for approval, for construction design drawings stamped by a qualified Engineer registered in Nunavut, sixty (60) days prior to the construction of any dams, dykes or structures intended to contain, withhold, divert or retain Water or Waste.
- 2. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
 - c. such Modifications are consistent with the NIRB Screening Decision;

- 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.
- 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 written approval from the Board.
- 4. The Licensee shall, within ninety (90) days of completion of Modification or Construction of facilities and/or infrastructure associated with the project, submit to the Board a Construction Summary Report along with as-built plans and drawings stamped by an Engineer, providing explanation to reflect any deviations from for construction drawings and taking into account construction and field decisions and how they may affect the performance of the engineered facilities.
- 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.
- 6. The Licensee shall implement and maintain erosion control measures during activities carried out under this Part, to prevent impacts to Water resulting from the release of sediment and minimize erosion.
- 7. 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.
- 8. The construction or disturbance of any stream/lake bed or banks of any definable Water course are not permitted, unless authorized by the Board in writing.
- 9. The Licensee shall use fill material for construction, operation and maintenance only from approved sources that have been demonstrated, by appropriate geochemical analyses, to not produce acid rock drainage and to be non-metal leaching and free of contaminants.
- 10. The Licensee shall submit to the Board for approval, sixty (60) days prior to the initiation of any quarrying activities, a Quarry Management Plan that includes the following:
 - a. Confirmation that the quarry material does not produce acid rock drainage and is non-metal leaching;
 - b. An assessment of any potential impacts to freshwater quality; and
 - c. Mitigation measures.

PART F: CONDITIONS APPLYING TO OPERATIONS AND MAINTENANCE

- 1. The Licensee shall implement the Manual entitled "Operation and Maintenance Manual for the Water Treatment Plant at Taloyoak, Nunavut", dated May 2012 that was approved by the Board with the issuance of the previous Water Licence. The Licensee shall submit an updated version of this Manual for Board review with the 2019 Annual Report to take into consideration, at a minimum, the requirements imposed by the previous Water Licence, such as updated contact information.
- 2. The Licensee shall implement the Plan entitled "Hamlet of Taloyoak, Nunavut, Sewage Treatment Facility Operation and Maintenance (O&M) Plan", dated August 10, 2014 that was approved by the Board with the issuance of the previous Water Licence. The Licensee shall submit an updated version of this Plan for Board review with the 2019 Annual Report to take into consideration, at a minimum, the requirements imposed by the previous Water Licence, such as making the Plan consistent with the Licence Monitoring Program requirements and updating contact information.
- 3. The Licensee shall implement the Plan entitled "Hamlet of Taloyoak, Nunavut, Solid Waste Facility Operation and Maintenance (O&M) Plan", dated October 24, 2014 that was approved by the Board with the issuance of the previous Water Licence. The Licensee shall submit an updated version of this Plan for Board review with the 2019 Annual Report to take into consideration, at a minimum, the requirements imposed by the previous Water Licence, such as making the Plan consistent with the Licence Monitoring Program requirements and providing detailed management plan and procedures regarding the Hazardous Waste.
- 4. The Licensee shall review the Manuals and Plans 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.
- 5. An inspection of all engineered facilities related to the management of Water and Waste shall be carried out at least 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.
- 6. The Licensee shall perform more frequent inspections of the engineered facilities at the request of an Inspector.

PART G: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

- 1. The Licensee shall develop a standalone *Spill Contingency Plan* and submit it to the Board for approval in writing with the 2019 Annual Report.
- 2. 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.
- 3. 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.
- 4. If, during the term of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a. employ the appropriate contingency measures outlined in the Spill Contingency Plan referred to in Part G, Item1; 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.
- 5. The Licensee shall, in addition to Part G, Item 4, 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 H: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

- 1. The Licensee shall submit to the Board for approval in writing, an Abandonment and Restoration Plan at least six (6) months prior to abandoning any facilities or upon submission of the final design drawings for the construction of new facilities to replace existing ones. Where applicable, the Plan shall include information on the following:
 - a. Water intake facilities;
 - b. Water treatment and Waste disposal sites and facilities;
 - c. Petroleum and chemical storage areas;
 - d. Any site affected by Waste spills;
 - e. Leachate prevention;

- f. Implementation schedule;
- g. Maps delineating all disturbed areas, and site facilities;
- h. Stream crossings;
- i. Consideration of altered drainage patterns;
- j. Type and source of cover materials;
- k. Future use of affected area;
- 1. Hazardous Wastes; and
- m. Proposal identifying measures by which restoration costs will be financed by the Licensee upon abandonment.
- 2. If the Plan referred to in Part H, Item 1 is not approved, the Licensee shall make the necessary revisions and resubmit the Plan within thirty (30) days following notification from the Board.
- 3. The Licensee shall complete all restoration work within the time schedule specified in the Plan, or as subsequently revised and approved by the Board.
- 4. The Licensee shall submit to the Board for approval an *Abandonment and Restoration* (A&R) Plan for the old Water Treatment Facility with the 2019 Annual Report.
- 5. The Licensee shall practice progressive reclamation of the abandoned quarry in accordance with the restoration guidelines outlined in INAC's document entitled *Environmental Guidelines for Pits and Quarries*, 2010.
- 6. For site reclamation purposes, the Licensee shall salvage topsoil during any construction activities, for future restoration of the site to promote re-vegetation.
- 7. 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.
- 8. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the *Government of Nunavut's Environmental Guideline for Site Remediation, 2010.* 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.

PART I: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall implement the Plan entitled "Hamlet of Taloyoak Quality Assurance/ Quality Control (QA/QC) Plan", dated August 2013 that was approved by the Board with the issuance of the previous Water Licence. The Licensee shall submit an updated version of this Plan for Board review with the 2019 Annual Report to ensure consistency with the Monitoring Program Stations listed in Part I, Item 2.

2. The Licensee shall maintain Monitoring Program Stations at the following locations and implement the following Program:

Monitoring Station ID	Description	Frequency	Status
TAL-1	Raw Water intake at Canso Lake	Volume Daily, Monthly and Annually	Active (Volume)
TAL-2	Raw Sewage from pump-out truck	Volume Daily, Monthly and Annually	Active (Volume)
TAL-3	Effluent Discharge from Lagoon to the Wetland area	Water Quality Monthly (June/July to August/September)	Active (Water Quality)
TAL-4	Run-off from the Solid Waste Disposal Facility	Water Quality Annually during periods of run-off or seepage	Active (Water Quality)
TAL-5	Hazardous Waste Storage Cell Run-off Retention	Water Quality Prior to decanting	Active (Water Quality)
TAL-6	Effluent Final Discharge Point from Wetland area to Ocean	Water Quality Monthly (June/July to August/September)	Active (Water Quality)

- 3. The Licensee shall measure and record, in cubic metres, the daily, monthly and annual quantities of Water pumped for all purposes at Monitoring Program Station TAL-1.
- 4. The Licensee shall measure and record, in cubic metres, the daily, monthly and annual quantities of raw sewage offloaded from trucks for all purposes, at Monitoring Program Station TAL-2, and the number of days the Sewage Lagoon was in use.
- 5. The Licensee shall sample Water quality at Monitoring Program Station TAL-3 once at the beginning, middle and near the end of discharge. Samples shall be analyzed for the following parameters:

Biochemical Oxygen Demand – BOD ₅	Faecal Coliforms
Total Suspended Solids	pН
Conductivity	Nitrate-Nitrite
Oil and Grease (visual)	Total Phenols
Magnesium	Calcium
Sodium	Potassium
Chloride	Sulphate
Total Hardness	Total Alkalinity
Ammonia Nitrogen	Total Zinc

Total Cadmium
Total Cobalt
Total Chromium
Total Copper
Total Aluminum
Total Mercury

Total Iron
Total Manganese
Total Nickel
Total Lead
Total Arsenic

Total Organic Carbon (TOC)

6. The Licensee shall sample at Monitoring Program Stations TAL-4, TAL-5 and TAL-6 annually during periods of runoff or seepage, prior to decanting and once at the beginning, middle and near the end of discharge, respectively. Samples shall be analyzed for the following parameters:

TPH (Total Petroleum Hydrocarbons)
PAH (Polycyclic Aromatic Hydrocarbons)

BTEX (Benzene, Toluene, Ethylbenzene, Xylene)

BOD Faecal Coliforms pH Conductivity

Total Suspended Solids

Nitrate-Nitrite

Oil and Grease (visual)

Ammonia Nitrogen

ChlorideSulphateSodiumPotassiumMagnesiumCalcium

Total Hardness
Total Alkalinity
Total Phenols
Total Arsenic
Total Aluminum
Total Cadmium
Total Copper
Total Copper
Total Chromium
Total Iron
Total Mercury
Total Mercury
Total Nickel

Total Zinc Total Organic Carbon

7 The Licensee shall report all results of acute toxicity testing as required under Part D, Item 9 within the Annual Report as per Part B, Item 1.

- 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 in writing.
- 9. All analyses shall be performed by a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
- 10. The Licensee shall annually review the QA/QC Plan and modify it as necessary. Revised QA/QC Plan shall be submitted to the Board with a current approval letter from an accredited laboratory and shall meet the standards set out in Part I, Item 8 and Part I, Item 9.

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- 11. The Licensee shall measure and record the annual quantities of Sewage solids removed from the Sewage Disposal Facility.
- 12. Additional monitoring stations, sampling and analysis may be requested by an Inspector.
- 13. The Licensee shall include all of the data and information required by the Monitoring Program within the Licensee's Annual Report, as required under Part B, Item 1, or as requested by an Inspector.
- 14. Modifications to the Monitoring Program including the Monitoring Program Stations and parameters may be made only upon written approval from the Board.