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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No: **1BR-RAN0914**

January 30, 2009

Brian Duguay
Government of Nunavut
Community and Government Services,
Box 490, Oomilik Building
Rankin Inlet, NU,
X0C 0G0

Email: BDuguay@GOV.NU.CA

RE: NWB LICENCE No. 1BR-RAN0914

Dear Mr. Purdy:

Please find attached Licence No. **1BR-RAN0914** issued to the Government of Nunavut, Community and Government Services, Rankin Inlet by the Nunavut Water Board (NWB) under **Motion No. 2008-10-L07** 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*. The terms and conditions of the attached Licence related to water use and waste disposal 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 will be in contravention of the *Nunavut Land Claims Agreement* (NLCA) and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSTRA). 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 months prior to the Licence expiry date.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, 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 by interested persons on issues identified¹. This information is attached for your consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read 'T. Kabloona', with a long horizontal flourish extending to the right.

Thomas Kabloona
Nunavut Water Board
Chair

TK/db/pb

Enclosure: Licence No. 1BR-RAN0914
Comments: INAC, GN-DoE, EC, NIRB

Cc: Kivalliq Dist. List

¹ Indian and Northern Affairs Canada (INAC) dated September 3, 2008, Government of Nunavut Department of Environment (GN-DoE) dated August 21, 2008, Environment Canada (EC) dated August 12, 2008 and the Nunavut Impact Review Board (NIRB) dated May 15, 2008.



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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

DECISION

LICENCE NUMBER: 1BR-RAN0914

This is the decision of the Nunavut Water Board (NWB) with respect to an application received by the NWB on April 8, 2008 for a new Water Licence made by the:

Government of Nunavut, Community and Government Services, Rankin Inlet, NU

to allow for the use of water and disposal of waste during Landfarm Facility operations within the municipal boundaries of the Hamlet of Rankin Inlet, Kivalliq Region, Nunavut located at the geographic coordinates as follows:

Latitude: 62° 49' 49" N Longitude: 92° 10' 28" W

DECISION

After determining that the application did not require a conformity decision as decided by the Nunavut Planning Commission and subject to a 12.4.4(a) Screening Decision by the Nunavut Impact Review Board in accordance with Schedule 12.1, Paragraph 5 of the *Nunavut Land Claim Agreement* (NLCA), the NWB decided that the application could proceed through the regulatory process. In accordance with S.55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA) and Article 13 of the *NLCA*, public notice of the application was given and interested persons were invited to make representations to the NWB.

The Applicant stated on the Licence Application that no water was required for landfarm operations, however it was stated in the supplementary questionnaire that water may be used for dust suppression. INAC stated in their submission that the only water allowed into the landfarm should be from precipitation. The NWB agrees with this recommendation and has therefore decided that no water use for any purpose is to be allowed under this Licence. An application for amendment will be required for any changes to the current Licence conditions.

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 *NLCA* and of the *NWNSRTA*, waived the requirement to hold a public hearing, and determined that:

Licence Number 1BR-RAN0914 be issued subject to the terms and conditions contained therein. (Motion #: 2008-10-L07)

SIGNED this 30th day of January 2009 at Gjoa Haven, NU.

A handwritten signature in dark ink, appearing to read 'T. Kabloona', with a long horizontal flourish extending to the right.

Thomas Kabloona
Nunavut Water Board
Chair

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I. INTRODUCTION

The community of Rankin Inlet is located within the Kivalliq Region, Nunavut, at Latitude 62° 49' 49" N and Longitude 92° 10' 28" W, on the west coast of Hudson Bay.

Rankin Inlet is situated on Precambrian intrusive, volcanic and metamorphosed rocks upon which have been deposited glacial and glaciofluvial forms. The community is located in a zone of continuous permafrost, which has an active layer of approximately one metre.

Rankin Inlet receives an average annual rainfall of 16.0 cm and 119.7 cm of snowfall. Mean annual equivalent precipitation totals 27.8 cm. July mean high and low temperatures are 13.1°C and 4.5°C, respectively. January mean high and low temperatures are -27.9°C and -35.2°C, respectively. Winds are generally from the north-west and average 24 km/h.

Upgrades to the fuel storage facilities in Rankin Inlet are currently underway. During the upgrades contaminated soil on the site was identified and a landfarm was proposed as a treatment method. The quantity of soil needing remediation was estimated to be up to 6,000 cubic metres in volume. The Community is planning to construct a Landfarm facility adjacent to the current municipal landfill where the soil will be remediated and used for construction purposes.

II. PROCEDURAL HISTORY

A water Licence application which would permit the operation of a landfarm facility within the community of Rankin Inlet was received by the NWB on April 8, 2008.

The Application was distributed to interested persons for review on July 31, 2008. The deadline for comments was set to August 31, 2008. Submissions were received from Indian and Northern Affairs Canada (INAC), Environment Canada (EC) and the Government of Nunavut Department of the Environment (GN-DoE).

III. GENERAL CONSIDERATIONS

A. Term of the Licence

In accordance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* S. 45, the NWB may issue a licence for a term not exceeding twenty-five years. The Applicant requested a term of approximately six years, through to November 2014. No concerns were expressed during the review of the application and the NWB concurs with the Applicant that a term of approximately six (6) years is appropriate. The licence term will allow the Licensee to properly carry out the terms and conditions of the Licence and will ensure that sufficient time is given to permit the Licensee to develop, submit and implement the plans required under the Licence to the satisfaction of the NWB.

B. Deposit of Waste

Solid Waste

The Licensee has indicated that contaminated soil will be placed in an appropriately designed engineered Landfarm Facility. The Landfarm Facility shall accept only Type B Soil, soil contaminated with hydrocarbons in which the primary petroleum product present in the soil as determined by laboratory analysis consists of fuel oil and/or diesel fuel and/or gasoline. Type A Soils, soils contaminated by hydrocarbons that are resistant to, or preclude biological treatment by landfarming, shall not be accepted.

The Board, having duly considered these issues and the submission of the Applicant, has set the terms and conditions in the water licence, which govern the segregation and treatment of hydrocarbon contaminated soil for eventual re-use for industrial purposes during the proposed undertaking, accordingly.

C. Annual Report

The requirements imposed on the Licensee in this Licence are for the purpose of ensuring that the NWB has an accurate annual update of water use and the deposition of waste during a calendar year. This information is maintained on the public registry and is available to interested persons upon request. The requirements of this Annual Report can be found in Part B, Item 1 of the Licence. A standard form for annual reporting under Part B, Item 1, can be downloaded from the NWB ftp site at <ftp://ftp.nunavut.ca/nwb/> in the administration folder.

D. Spill Contingency Planning

The Board requires that all Licensees prepare a comprehensive, site-specific Spill Contingency Plan to establish a state of readiness that ensures a prompt and effective response to possible spills or system failure events. The site-specific Spill Contingency Plan will assist the Licensee in responding to emergencies, such that the impact to water in particular and the environment and public health in general, are minimized. The Spill Contingency Plan submitted with the application was reviewed and found to be technically deficient. The NWB has imposed the requirement on the Licensee that the Spill Contingency Plan be revised and resubmitted to include the changes identified under Part H, Item 1, within sixty (60) days of the issuance of this Licence.

E. Abandonment and Restoration (A&R)

The Board requires that all Licensees prepare a comprehensive Abandonment and Restoration Plan to ensure that after operations have ceased the site will be restored to its previous undisturbed state. The site-specific Abandonment and Restoration Plan will assist the Licensee in planning and preparing for the site's eventual restoration while ensuring that post-closure

functionality of the site is not compromised. The Abandonment and Restoration Plan submitted with the application was reviewed and found to deficient in several areas. The NWB has imposed the requirement on the Licensee that the Abandonment and Restoration Plan be revised and resubmitted to include the changes identified under Part I, Item 1, within sixty (60) days of the issuance of this Licence.

F. Landfarm Operation and Maintenance Plan

To ensure that the landfarm is being operated in a way that is consistent with the requirements of the Licence, the NWB requires the Licensee prepare and submit an Operation and Maintenance (O&M) Plan. This plan shall be submitted within sixty (60) days of the issuance of this Licence and include the requirements under Part E, Item 7 of this Licence.

LICENCE 1BR-RAN0914

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

**GOVERNMENT OF NUNAVUT, COMMUNITY AND GOVERNMENT SERVICES
RANKIN INLET, NU**

(Licensee)

of

BOX 490, OOMILIK BUILDING RANKIN INLET, NUNAVUT, X0C 0G0
(Mailing Address)

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

1BR-RAN0914

Licence Number

NUNAVUT 06

Water Management Area

RANKIN INLET, KIVALLIQ REGION, NUNAVUT

Location

WASTE DISPOSAL

Purpose

INDUSTRIAL – TYPE “B”

Classification of Undertaking

ZERO (0) CUBIC METRES

Quantity of Water Not to Exceed

JANUARY 30, 2009

Date of Licence

NOVEMBER 1, 2014

Expiry Date of Licence

Dated this 30th day of January 2009 at Gjoa Haven, NU.



Thomas Kabloona
Nunavut Water Board
Chair

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence allows for the disposal of waste for an undertaking classified as Industrial, as per Schedule II of the *Regulations*, at a Landfarm Facility in the Community of Rankin Inlet, located within the Kivalliq Region, Nunavut, at Latitude 62° 49' 49" N and Longitude 92° 10' 28" W.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new *Regulations* are made or existing *Regulations* are amended by the 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
- a. 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

In this Licence: **1BR-RAN0914**

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

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

“**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*;

“**Chair**” means the Chairperson of the Nunavut Water Board as described under sections 14 and 22 of the *Act*;

“**Effluent**” means treated or untreated liquid waste material that is discharged into the environment from a structure such as a landfarm or following a treatment process;

“Engineer” means a professional engineer registered to practice in Nunavut in accordance with the Engineering, Geological and Geophysical Act (Nunavut) S.N.W.T. 1998, c.38, s.5;

“Final Discharge Point” means the point at which the Licensee no longer exerts care and/or control over the quality and/or quantity of the effluent from a treatment process;

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

“Landfarm Facility” means an area designed to biologically treat Type B soils as described in the Application for Water Licence dated March 31, 2008;

“Licensee” means the individual or organization to which Licence 1BR-RAN0914 Type “B” is issued or assigned;

“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;

“Hazardous waste” means waste classified as “hazardous” by Nunavut Territorial or Federal Legislation, or as “dangerous goods” under the *Transportation of Dangerous Goods Act* at the time of clean-up;

“Monitoring Program” means a program established to collect data on surface water and groundwater quality to assess impacts to the 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;

“Treatment Objective” means the treatment objective for the Landfarm Facility which is the Canadian Council of Ministers of the Environment (CCME), 2001 *Canada – Wide Standard for Petroleum Hydrocarbon in Soil*, for Industrial land use;

“Type A Soil” means soil contaminated with hydrocarbons in which the primary petroleum product present in the soil as determined by laboratory analysis consists of lubricating oil and grease;

“Type B Soil” means soil contaminated with hydrocarbons in which the primary

petroleum product present in the soil as determined by laboratory analysis consists of fuel oil and/or diesel fuel and /or gasoline; and

“Waste” means as defined in S.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.

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. 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 which shall contain the following information:
 - a. A summary of any construction work, modification and major maintenance work (including as-built diagrams) carried out on the Landfarm Facilities, including all associated structures;
 - b. Tabular summaries for all data and information generated under the “Monitoring Program”;
 - c. An analysis of data collected during the “Monitoring Program” and a brief description of any future studies planned by the Licensee;
 - d. A summary of any abandonment and restoration work undertaken during the year and an outline of any work anticipated for the next year;
 - e. A summary of any studies requested by the Board that relate to waste disposal or reclamation, and a brief description of any future studies planned;
 - f. A list of unauthorized discharges and summary of follow-up actions taken;
 - g. Any revisions to an approved Spill Contingency Plan;

- h. If applicable, a description of any trenches and sumps excavated, including but not limited to the following: GPS coordinates, dimensions, depth below active layer, and secondary containment features;
 - i. A public consultation/participation report describing consultation with local organizations and the residents of the nearby communities;
 - j. A brief summary of work done to address concerns or deficiencies listed in the inspection reports and/or compliance reports prepared by an Inspector;
 - k. An analysis of the progress achieved in remediating the contaminated soil in the landfarm;
 - l. An executive summary in English and Inuktitut of all plans, reports, or studies conducted under this Licence; and
 - m. Any other details on 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, 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.
 - 4. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
 - 5. 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 conditions 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.
 - 6. The Licensee shall, within sixty (60) days of issuance of this Licence, post signs in the appropriate area to inform the public of the location of the Landfarm Facility, and the stations of the "Monitoring Program". All postings shall be in the Official Languages of Nunavut and located and maintained to the satisfaction of an Inspector.
 - 7. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:

(a) **Licensing Manager**
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) 975-4298
Fax: (867) 979-6445

(c) Analyst Contact:
Taiga Laboratories
Department of Indian and Northern Affairs
4601 – 52 Avenue, P.O. Box 1500
Yellowknife, NT X1A 2R3
Telephone: (867) 669-2781
Fax: (867) 669-2718

8. The Licensee shall submit one paper copy and one 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.
9. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.
10. This Licence is not assignable except as provided in Section 44 of the *Act*.

PART C: CONDITIONS APPLYING TO THE PROTECTION OF WATER

1. The taking of freshwater for any purpose is not permitted.
2. The Licensee shall not remove any material from below the ordinary high water mark of any water body.
3. The Licensee shall not do anything that will cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
4. The Licensee shall implement sediment and erosion control measures to prevent the deposition of dust and/or sediment arising from contractor activities or on-site vehicular

travel, into water.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall treat, to the Treatment Objective, Type B Soil in the Landfarm Facility constructed and operated in a manner in accordance with the Plans and drawings contained in the Application submitted to the Board by the Licensee on April 8, 2008.
2. The Licensee shall locate areas designated for waste disposal at a minimum distance of thirty (30) metres from the ordinary high water mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise authorized by the Board.
3. The Licensee shall provide at least fifteen (15) days written notice to the Inspector prior to any planned discharges from the sump in the Landfarm Facility. The notice shall include an estimated discharge volume and proposed location for the discharge.
4. All water from within the perimeter of the Landfarm Facility and/or any other liquid effluent shall meet the following wastewater discharge limits prior to being released onto land at monitoring station RLF-2:

Parameter	Maximum Allowable Concentration (µg/L)
pH	6 to 9 (units)
Oil and Grease	5000
Arsenic (total)	100
Cadmium (dissolved)	10
Chromium (dissolved)	100
Cobalt (dissolved)	50
Copper (dissolved)	200
Lead (dissolved)	50
Mercury (total)	0.6
Nickel (dissolved)	200
PCB (total)	1000
Phenols	20
Zinc (total)	500
Benzene	370
Toluene	2
Xylene	90

5. If effluent does not meet the wastewater discharge criteria (Part D, Item 4), it shall be

considered hazardous waste and disposed off-site at an approved facility.

6. The discharge location for all treated effluents described in Part D Items 4 shall be to the satisfaction of an Inspector and shall be located at a minimum of thirty (30) metres from the ordinary high water mark from any water body and where direct or indirect flow into a water body is not possible and no additional impacts are created.
7. The Licensee shall dispose of soils containing contaminants in excess of the Treatment Objectives and the Canadian (CCME) Guidelines, off site at an approved treatment facility.
8. The Licensee shall, prior to the removal of any treated soil from the Landfarm Facility, confirm with the Government of Nunavut, Environmental Protection Service that the soils have been treated so as to meet all legislatively-required treatment objectives.

PART E: CONDITIONS APPLYING TO THE UNDERTAKING

1. The Licensee shall construct the Landfarm Facility, roads including stream crossings, active layer monitoring wells and any other associated structures in such a way that is consistent with the plans received within the Application on April 8, 2008.
2. The Licensee shall, upon the failure of any constructed facilities, immediately repair such facilities to the satisfaction of an Inspector or to the design specifications of a qualified engineer.
3. The Licensee shall conduct all activities so as to minimize impacts on surface drainage and immediately undertake any corrective measures in the event of any impacts on surface drainage.
4. All sites affected by construction or removal activities shall be stabilized, landscaped as necessary, and suitable erosion control measures implemented to minimize sediment deposition into watercourses located on or adjacent to the site, to the satisfaction of an Inspector.
5. The Licensee shall not deposit any waste in any body of water, or on the banks thereof, which may impair the quality, quantity, or flow of water.
6. The Licensee shall submit for Board approval, a Landfarm Operation and Maintenance Plan, within sixty (60) days of the issuance of this Licence. The Landfarm Operation and Maintenance Plan shall include the following:
 - a. Operation and maintenance protocols for the facility;

- b. Runoff management;
 - c. Mitigation measures in place to prevent seepage from entering waterways;
 - d. Soil Quality Remediation Objectives; and a
 - e. Monitoring program.
7. The Licensee shall annually review the Plan referred to in this Part and if needed, modify it to reflect changes in operation and/or technology. Revisions to the Plan are to be submitted in the form of an Addendum to be included with the Annual Report

PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS

1. The Licensee is authorized to drill and install monitoring wells in accordance with the Project Drawings and Specifications contained in the application received by the Board on April 8, 2008.
2. The Licensee shall not conduct any land based drilling within thirty (30) metres of the ordinary high water mark of any water body, unless otherwise approved by the Board in writing.
3. The Licensee shall ensure that all drill waste, including water, chips, muds and salts (CaCl_2) in any quantity or concentration, from land-based drilling, shall be disposed of in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty (30) metres from the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.
4. If artesian flow is encountered, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface waters. The Licensee shall report all artesian flow occurrences within the Annual Report, including the location (GPS coordinates) and dates.
5. Where drilling activity has penetrated below the permafrost layer, the NWB requests that the proponent record the depth of permafrost and location of the drill hole to be included within the Annual Report.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications to the Landfarm 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;
 - b. such 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.
- 2. Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.
- 3. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

- 1. The Spill Contingency Plan submitted as part of the application to the NWB was reviewed and found to be insufficient in meeting the minimum requirements and format for a Spill Contingency Plan as set out in the Government of Nunavut, *Consolidation of Spill Contingency Planning and Reporting Regulations R-068-93*. The Licensee shall resubmit to the Board for approval, within sixty (60) days of issuance of the Licence, a revised Spill Contingency Plan. This Plan shall include the following:
 - a. The plan must be site-specific and a stand-alone document;
 - b. A title page including the company's name, the date of the plan's creation and effective period, as well as who created the plan;
 - c. A table of contents;
 - d. The name, job title and 24 hour contact number of the person in charge on site;
 - e. The name, address and telephone number for the Licensee;
 - f. A detailed description of the facility, including its geographic location – in UTM coordinates (map sheet number, Eastings and Northings) and geographic coordinates (Lat/Long) – size and storage capacity;
 - g. A description of the type and amount of fuels, chemicals and other hazardous materials used or stored on site;
 - h. A description of the spill prevention measures to be undertaken in the handling, storage and disposal of each of the fuels, chemicals and other hazardous materials used or stored on site;
 - i. Steps taken to report, contain, clean up and dispose of a spill specific to the type of fuel, chemical or hazardous material and spill location;

- j. A site map of sufficiently large scale to show the location of facilities, sensitive areas such as water bodies, probable pathways of contaminant flow and general topography;
 - k. A description of the spill response training provided to employees who will respond to a spill;
 - l. An inventory and location of spill kits and all equipment available for spill clean up;
 - m. The means by which the spill plan is activated;
 - n. A copy of the NT-NU Spill Report Form;
 - o. A list of emergency contacts in the event of a spill including; INAC, GN-DoE, KIAs, EC; and
 - p. MSDS sheets for all fuels, chemicals and hazardous materials stored or used on site.
2. The Licensee shall annually review the Plan referred to in this Part and if needed, modify it to reflect changes in operation and/or technology. Revisions to the Plan are to be submitted in the form of an Addendum to be included with the Annual Report.
3. The Licensee shall ensure that any chemicals, petroleum products or wastes associated with the project do not enter water. All sumps shall be located at a distance of at least thirty (30) metres from the ordinary high water mark of any adjacent water body and inspected on a regular basis.
4. The Licensee shall ensure that any equipment maintenance and servicing be conducted only in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other waste and contain potential spills.
5. 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 Spill Contingency Plan, or in the absence of an approved Plan, undertake such measures as are reasonable and prudent and that demonstrate the due diligence of the Licensee in this regard, so as to prevent the spill from occurring or to mitigate the health, safety and environmental risks and consequences of the spill,;
 - b. Report the spill immediately to the 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, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.

PART I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

1. The Abandonment and Restoration Plan submitted as part of the application to the NWB was reviewed and found to be insufficient in meeting the minimal requirements for an Abandonment and Restoration Plan. The Licensee shall resubmit to the Board for approval, within sixty (60) days of issuance of the Licence, a revised Abandonment and Restoration Plan to include the following:
 - a. The plan must be site-specific and a stand-alone document;
 - b. A title page including the company's name, the date of the plan's creation and effective period, as well as who created the plan;
 - c. A table of contents;
 - d. A detailed description of the facility, including its geographic location – in UTM coordinates (map sheet number, Eastings and Northings) and geographic coordinates (Lat/Long) – size and storage capacity;
 - e. A detailed discussion on how the landfarm will be decommissioned including the berms, rockpad, liners, and all other materials used on site;
 - f. Plans for the extensive testing of the soil beneath and surrounding the landfarm for contamination;
 - g. Discussion on how disturbed areas will be returned to their natural state including regrading and revegetation; and
 - h. Plans to document, inspect and report reclamation efforts to the NWB and all other interested parties.
2. The Licensee shall review the Plan referred to in this Part as required by changes in operation and/or technology and modify the Plan accordingly. Revisions to the Plan are to be submitted in the form of an Addendum to be included with the Annual Report.
3. The Licensee shall complete all restoration work prior to the expiry of this Licence.
4. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.
5. The Licensee shall backfill and restore all sumps to the pre-existing natural contours of the land.
6. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, water pumps and lines, material and equipment prior to the expiry of this Licence.

7. All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.
8. All culverts shall be removed and the drainage opened up to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
9. 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.
10. 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, January 2002. The use of reclaimed soils for the purpose of backfill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.
11. All disturbed areas shall be contoured and stabilized upon completion of work and restored to a pre-disturbed state.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

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

Monitoring Program Station Number	Description
RLF-1	Soil entering Landfarm Facility
RLF-2	Discharge from the Landfarm Facility
RLF-3	Monitoring well located up gradient of the Landfarm Facilities
RLF-4	Monitoring well located down gradient of the Landfarm Facilities

2. The Licensee shall measure and record the volume of all soil, from all locations entering the Landfarm Facility (RLF-1).
3. The Licensee shall assess and record the concentration of petroleum hydrocarbon contaminated soil entering the Landfarm Facility from all sources, as *per* the CCME *Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil*.
4. The Licensee shall monitor compliance with respect to Part D, Item 4, by collection of a

representative composite sample of the total volume to be released from the Final Discharge Point of the Landfarm Facility at monitoring program station (RLF-2).

5. The Licensee shall install groundwater monitoring wells at the Landfarm Facility. These wells shall be located with at least one located up gradient of the facility for background data collection (RLF-3) and at least one down gradient of the facility (RLF-4).
6. The Licensee shall sample at Monitoring Program Stations RLF-3 and RLF-4 once annually in the summer, giving consideration to adequate ground thaw and obtaining a representative groundwater sample. Samples shall be analyzed for the following parameters:

BOD	Faecal Coliforms
pH	Conductivity
Total	Suspended Solids
Ammonia	Nitrogen
Nitrate-Nitrite	Oil and Grease
Total Phenols	Total Alkalinity
Total Hardness	Calcium
Magnesium	Potassium
Sodium	Sulphate
Total Arsenic	Total Cadmium
Total Copper	Total Chromium
Total Iron	Total Lead
Total Mercury	Total Nickel
TPH (Total Petroleum Hydrocarbons)	
PAH (Polycyclic Aromatic Hydrocarbons)	
BTEX (Benzene, Toluene, Ethylbenzene, Xylene)	

7. An Inspector may impose additional monitoring requirements.
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 submit a Quality Assurance/Quality Control Plan, prepared in accordance with the INAC document "*Quality Assurance (QA) and Quality Control (QC) Guidelines for use by Class "B" Licensees in Collecting Representative Water Samples in the Field, 1996*" to an Analyst for approval within three (3) months of the issuance of the licence. The plan shall include analysis of field blanks and certified

reference material, and replicate sampling in order to assess accuracy, precision and field contamination.

11. The Licensee shall annually review the approved Quality Assurance/Quality Control plan and modify it as necessary. Proposed modifications shall be submitted to an Analyst for approval.
12. The approved Quality Assurance/Quality Control Plan shall be submitted to the Board for review and implemented as approved by an Analyst.
13. The Licensee shall include in the Annual Report required under Part B, Item 2 all data, monitoring results and information required by this Part.