

P.O. Box 119 GJOA HAVEN, NU X0B 1J0 Tel: (867) 360-6338

FAX: (867) 360-6369

NUNAVUT WATER BOARD NUNAVUT IMALIRIYIN KATIMAYINGI OFFICE DES EAUX DU NUNAVUT

File No.: 1BR-LTU0608

August 21, 2006

Mike Molinski Environmental Affairs Transport Canada 3rd Floor- 344 Edmonton St. Winnipeg, MB R3C 0P6

RE: NWB Licence No. 1BR-LTU0608

Dear Mr. Molinski:

Please find attached Licence No. **1BR-LTU0608** issued to Transport Canada by the Nunavut Water 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*. The terms and conditions of the attached Licence related to waste disposal are an integral part of this approval.

Sincerely,

Philippe di Pizzo

Chief Administrative Officer

PDP/sg/rqd

Enclosure:

Licence No. 1BR-LTU0608

cc:

Carson Gillis

Nunavut Tungavik Incorporated

Colette Spagnuolo

Environment Canada

Doug Sitland

Government of Nunavut Community & Government Services

Earle Baddaloo

Government of Nunavut Department of Environment

Erin Calder

Nunavut Wildlife Management Board

Jim Rogers

Indian and Northern Affairs Canada

Peter Kusugak

Indian and Northern Affairs Canada

Salamonie Shoo

Qikiqtani Inuit Association

Tania Gordanier

Department of Fisheries & Oceans



P.O. Box 119 GJOA HAVEN, NU X0B 1J0 Tel: (867) 360-6338 FAX: (867) 360-6369 שב כי ΔL כת האי החבר ה NUNAVUT WATER BOARD NUNAVUT IMALIRIYIN KATIMAYINGI OFFICE DES EAUX DU NUNAVUT

DECISION

LICENCE NUMBER: 1BR-LTU0608

This is the decision of the Nunavut Water Board (NWB) with respect to an application for a new of a Water Licence dated May 4, 2006 made by:

TRANSPORT CANADA – ENVIRONMENTAL AFFAIRS

to allow for the disposal of waste during the construction and operation of a land treatment unit located within the Qikiqtani Region, Nunavut (contained within the geographical coordinates indicated in the application).

DECISION

After having been satisfied that the application was in conformity with the applicable Land Use Plan and exempt from the requirement for screening 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.

After reviewing the submission of the Applicant and 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*, decided to waive the requirement to hold a public hearing and furthermore to delegate its authority to approve the application to the Chief Administrative Officer pursuant to S. 13.7.5 of the *NLCA* and S. 49(a) of the *NWNSRTA*, and determined that:

Licence Number 1BR-LTU0608 be issued subject to the terms and conditions contained therein.

SIGNED this 21st day of August 2006 at Gjoa Haven, NU.

Philippe di Pizzo

CHIEF ADMINISTRATIVE OFFICER

LICENCE 1BR-LTU0608

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

_	TRANSPOR	TRANSPORT CANADA – ENVIRONMENTAL AFFAIRES			
- 6	(Licensee)				
of	3 rd Floor	344 Edmonton Street, Winnipeg, MB R3C 0P6			
-	(Mailing Address	s)			
	(1.1aming 1 tour ob)				
hereinafter carestrictions ar	alled the Licensee, to ad conditions contain	the right to alter, divert or otherwise use water for a period subject to ned within this Licence:			
TiNi		1BR-LTU0608			
Licence Num	oer				
Water Manag	ement Area	NUNAVUT 05			
		QIKIQTANI REGION, NUNAVUT			
Location		QIKIQIANI REGION, NUNAVUI			
					
Purpose		WASTE DISPOSAL			
Tarpose					
er		INDUSTRIAL – TYPE "B"			
Classification	of Undertaking				
		0 CUBIC METRES PER DAY			
Quantity of W	Vater Not to Exceed				
		ALICYICE 21, 2007			
Date of Licen	ce	AUGUST 21, 2006			
Expiry Date o	flicance	DECEMBER 31, 2008			
Expiry Date 0	1 Licence				
Dated this 21	st day of August 2	2006 at Gjoa Haven, NU.			
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-1/	11/200				
Philippe di Pri	zzo, Chief Administr	rative Officer			

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence allows for the use of water and the disposal of waste for an undertaking classified as Industrial as per the geographical coordinates indicated in the application.

- i. 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;
- ii. 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;

"<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;

"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 Nunavut Land Claims Agreement and the Nunavut Waters and Nunavut Surface Rights Tribunal Act;

"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;

- "Inspector" means an Inspector designated by the Minister under Section 85 (1) of the *Act*:
- <u>"Land Treatment Unit"</u> means the landfarm facility licensed to be constructed and operated under this Licence as described in the application;
- "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;
- "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;
- <u>"Project Drawing"</u> means the KGS Group drawing number 06-1344-01 stamped by a professional engineer that was submitted with the application;
- "Regulations" means the Northwest Territories Water Regulations sor/93-303 8th June, 1993;
- "Spill Contingency Plan" means a Plan developed to deal with unforeseen petroleum and chemical events that may occur during the operations conducted under the Licence;
- "Treatment Objective" means the treatment objective for the Land Treatment Unit, which is the Canadian Council of Ministers of the Environment (CCME), 2001 Canada Wide Standard for Petroleum Hydrocarbon in Soil, for Industrial land use; 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

- i. 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*;
- ii. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*; and

iii. 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. Water use fees are not required for this Licence as per S. 7 of the Act.
- 2. 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:
 - i. A summary report of waste disposal activities, including photographic records of the waste disposal facilities;
 - ii. A list of unauthorized discharges and a summary of follow-up actions taken;
 - iii. A up-to-date copy of the Spill Contingency Plan;
 - iv. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
 - v. Results of the Monitoring Program; and
 - vi. Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.
- 3. 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.
- 4. 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. The NWB recommends that an application for the renewal of this Licence be filed at least three months before the Licence expiry date.
- 5. If this Licence requires an amendment, a public hearing may be required. 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 may vary depending on the scope of the amendment requested.

The Licensee shall ensure a copy of this Licence is maintained at the site of operations at 6. all times. Any communication with respect to this Licence shall be made in writing to the attention of:

(i) Manager of Licensing:

Nunavut Water Board P.O. Box 119 Gjoa Haven, NU X0B 1J0 Telephone: (867) 360-6338 Fax: (867) 360-6369

(ii) Inspector Contact:

Water Resources Officer, INAC Nunavut District, Nunavut Region P.O. Box 100 Igaluit, NU X0A 0H0 Telephone:

(867) 975-4295

Fax:

(867) 979-6445

- 7. 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.
- It is the responsibility of the Licensee to ensure that any documents or correspondence 8. submitted by the Licensee to the Board have been acknowledged by the Manager of Licensing.
- 9. This Licence is not assignable except as provided in Section 44 of the Act.

PART C: **CONDITIONS APPLYING TO THE PROTECTION OF WATER**

- The Licensee shall not remove any material from below the ordinary high water mark of 1. any water body.
- 2. 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.
- Sediment and erosion control measures shall be implemented prior to and maintained 3. during the operation to prevent entry of sediment into water.

PART D: **CONDITIONS APPLYING TO WASTE DISPOSAL**

1. 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.

- 2. The Licensee shall provide at least 15 days written notice to the Inspector prior to any planned discharges from the sump in the Land Treatment Unit. The notice shall include the volume proposed for discharge.
- 3. Any planned discharge from the sump in the Land Treatment Unit to the environment shall meet the following wastewater discharge criteria:

Parameter	Maximum Allowable Concentration (μg/l)	
Oil & Grease	5000	
Lead	1	
Benzyene	370	
Toluene	2	
Ethylbenzene	90	

- 4. The Licensee shall select a discharge location that is to the satisfaction of an Inspector for any discharge as described in Part D Items 2 and 3.
- 5. The Licensee shall maintain the Land Treatment Unit to the satisfaction of an Inspector.

<u>PART E:</u> <u>CONDITIONS FOR CONSTRUCTION AND OPERATION</u>

- 1. 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.
- 2. With respect to earthworks, the deposition of debris or sediment into any water body is prohibited. These materials shall be disposed at a distance of at least thirty (30) metres from the ordinary high water mark in such a fashion that they do not enter the water.
- 3. The Licensee shall construct the Land Treatment Unit as per the Project Drawing and as described in the project application.
- 4. The Licensee shall provide to the Board, within 90 days of completion of the construction of any dams, dykes or structures intended to contain, withhold, divert or retain water or waste, including facilities or systems for the treatment and disposal of hydrocarbon contaminated soil, all respective design drawings and construction reports, including all as-built drawings, documentation of field decisions that deviate from original plans and any data used to support these decisions.

5. The Licensee shall submit for Board approval, within 90 days of the issuance of the Licence, an operation and maintenance manual for the Land Treatment Unit.

6. If, by the expiry of this Licence, the soil within the land treatment facility does not meet the Treatment Objectives the Licensee shall submit a plan for Board approval.

PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS

1. The Licensee is authorized to drill and install the monitoring wells as shown in the Project Drawing.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

- 1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this License and the following requirements are met:
 - i. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - ii. such Modifications do not place the Licensee in contravention of the License or the *Act*;
 - iii. 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
 - iv. 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 License 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. In accordance with section 6(2)(g)(i) and (ii) of the Regulations, the Licensee shall,

within thirty (30) days of issuance of this Licence, keep on the site of operations a Spill Contingency Plan that will describe how petroleum products and hazardous materials will be handled, stored and disposed of, as well as how they will be contained and cleaned-up in the event of a spill. This Plan shall include, but not be limited to, the following:

- i. The name, address and contact number for the person in charge, management or control of the contaminant (in this case, fuel oil and any other chemicals associated with the program);
- ii. The name and address and telephone number of the employer;
- iii. The name, job title and 24 hour contact number for the person or persons responsible for activating the spill plan;
- iv. 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;
- v. A description of the type and amount of contaminants stored on site;
- vi. A description of the spill prevention measures to be undertaken in the handling, storage and disposal of petroleum products and hazardous materials;
- vii. Steps taken to report, contain, clean up and dispose of a spill;
- viii. A site map of sufficiently large scale to show the location of buildings, contaminants storage areas, sensitive areas such as water bodies, probable pathways of contaminant flow and general topography;
- ix. A description of the spill response training provided to employees who will respond to a spill;
- x. An inventory and location of the response and clean up equipment available to the spill clean up team;
- xi. The means by which the spill plan is activated; and
- xii. The date that the spill plan was prepared.
- 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. The Plan and any revisions shall be submitted 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 and fuel caches 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:
 - i. Employ the Spill Contingency Plan;
 - ii. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to

the Inspector at (867) 975-4295; and

iii. 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 Licensee shall submit for Board approval an abandonment and restoration plan for the Land Treatment Unit six months prior to the expiry of this Licence or six months prior to the planned abandonment and restoration of the site, which ever occurs first.
- 2. If the Plan referred to in Part I, Item 1 is not accepted, the Licensee shall make the necessary changes and resubmit the addendum within thirty (30) days following notification from the Board.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

- 1. The Licensee shall measure and record the volume of all soil from all locations entering the Land Treatment Unit.
- 2. The Licensee shall assess and record the concentration of petroleum hydrocarbon contaminated soil, according to the CCME *Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil* F1-F4 fractions, entering the Land Treatment Unit from all sources and excavations.
- 3. The Licensee shall maintain Monitoring Stations as shown in Table 1.
- 4. An Inspector may impose additional monitoring requirements.
- 5. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board.
- 6. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
- 7. The Licensee shall, within 90 days of issuance of this Licence submit to the Board for approval a Quality Assurance/Quality Control (QA/QC) Plan.

8. The Licensee shall, within 30 days following the month being reported, submit to the Board all data and information required by the "Monitoring Program" in Table 1, including the results of the approved QA/QC Plan.

9. The Licensee shall include in the Annual Report required under Part B, Item 2 all data and information required by this Part.

Table 1 Monitoring Requirements for 1BR-LTU0608

Station	Location	Parameter ¹	Frequency
LTU-1	Discharge from the	TPH	Representative sample
	sump	BTEX	prior to each
		HM	discharge
		PAH	
LTU-MW1	Monitoring well	TPH	Twice per year (after
	upgradient of the	BTEX	freshet and at the end
	Land Treatment Unit	HM	of the treatment
		PAH	season)
LTU-MW2	Monitoring well	TPH	Twice per year (after
	downgradient of the	BTEX	freshet and at the end
	Land Treatment Unit	HM	of the treatment
		PAH	season)
LTU-MW3	Monitoring well down	TPH	Twice per year (after
	gradient of the Land	BTEX	freshet and at the end
	Treatment Unit	HM	of the treatment
·		PAH	season)

Parameters: TPH (Total Petroleum Hydrocarbons)

PAH (Polycyclic Aromatic Hydrocarbons)

BTEX (Benzene, Toluene, Ethylbenzene, Xylene)

HM (Heavy Metals, Al, As, Cd, Co, Cu, Fe, Pb, Mo, Ni, Se, Ag, Tl, Zn)