

P.O. Box 119 GJOA HAVEN, NU X0B 1J0

TEL: (867) 360-6338 FAX: (867) 360-6369  $\Delta a \Rightarrow c \Delta L \subset \Lambda^{2c} b D L \Rightarrow \infty$ 

NUNAVUT WATER BOARD NUNAVUT IMALIRIYIN KATIMAYINGI

NWB2COR0204

File No: NWB2COR0205

June 17, 2002

Attention: Doug Smith Stornoway Ventures 860-625 Howe Street Vancouver, BC V6C 2T6

RE: NWB Licence No. NWB2COR0205

Dear Mr. Smith:

Please find attached Licence No. NWB2COR0205 issued to Stornoway Ventures by the Nunavut Water Board (Motion #: 2002-02) 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.

The Nunavut Water Board approved the "Abandonment and Restoration Plan", submitted on March 15, 2002, as a preliminary plan for the Coronation Gulf Project.

**Executive Director** 

Enclosure:

Licence No. NWB2COR0205

cc:

Paul Smith, DIAND Igaluit C. Bodykevich, DIAND Inspector Jack Kaniak, Kitikmeot Inuit Association Gladys Joudrey, Nunavut Impact Review Board Josce Gallipeau, Nunavut Wildlife Management Board

P. Pacholek, Environment Canada

P. Partridge, Department of Sustainable Development

J. DeGroot, Department of Fisheries and Oceans

# APPROVAL FOR WATER USE AND WASTE DISPOSAL

Pursuant to Article 13 of 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 Stornoway Ventures authorization to use water and dispose of waste into water for a camp, exploration and drilling activities, subject to the terms and conditions outlined herein and in the applicable land use permits.

APPLICATION NO:	NWB2COR0205
LICENSEE:	Stornoway Ventures
	860-625 Howe Street
	Vancouver, BC V6C 2T6
	Phone: (604)687-7545
	Fax: (604)669-5041
	E-mail: nvr dsmith@telus.net; nvr_karmstrong@telus.net
START DATE:	May 6, 2002
EXPIRY DATE:	October 31, 2005
PURPOSE:	Water Use and Waste disposal associated with exploration and drilling activities
LOCATION:	Coronation Gulf Area, Kitikmeot Region, Nunavut General Latitude and Longitude of Camps: 66°20' and 113°20'; 67°20' and 113°20'; 67°20' and 112°20' NTS Map: 860, 86P.

This approval issued and recorded at Gjoa Haven includes and is subject to the annexed conditions.

Philippe di Pizzo **Executive Director** 

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## PART A: SCOPE, DEFINITIONS & ENFORCEMENT

- 1. Compliance with the terms and conditions of this approval does not absolve the Licensee from responsibility for compliance with all applicable legislation, guidelines, or directives.
- 2. This approval 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, and with respect to any other impacts of the Licensee's activities on water quality, quantity or flow, including surface drainage.

#### 3. Definitions:

- "Sump" means a man-made pit, trench hollow or cavity in the earth's surface used for the purpose of depositing waste material therein;
- "Drill waste" means all materials or chemicals, solid or liquid, associated with drilling of bore holes and includes bore hole cuttings; and
- "Combustible waste" means paper, non-treated wood products, kitchen food waste, and sewage waste.
- 4. The Licensee shall maintain a copy of this Licence at the sites of operation at all times.

## 5. Enforcement:

- i. Failure to comply with this Licence will be a violation of the *Nunavut Water and Nunavut Surface Rights Tribunal Act*, exposing 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 Nunavut Water and Nunavut Surface Rights Tribunal Act.
- iii. Inspectors appointed under the Nunavut Water and Nunavut Surface Rights Tribunal Act enjoy-with respect to this Licence, and for the purpose of enforcing this Licence, and with respect to the use of water and deposit or discharge of waste by the licensee-all powers, privileges and protections that are conferred upon them by the Nunavut Water and Nunavut Surface Rights Tribunal Act or by other applicable law.

### PART B: GENERAL CONDITIONS

1. The Licensee shall file a report with the Board no later than March 31 of the year following the calendar year reported, which shall contain the following information:

- i. A summary report of water use and waste disposal activities;
- ii. A list of unauthorized discharges and a summary of follow-up actions taken;
- iii. Revision to the Contingency Plan;
- iv. Revisions to the Abandonment and Restoration Plan;
- v. Progressive reclamation work undertaken;
- vi. Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.
- 2. The NWB shall be notified 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 submit to the Board, at least sixty (60) days written notice prior to the commencement of any drilling activities. The notification shall include but not be limited to: the location of the drill holes; types of drill additives used; types of waste generated; methods of waste disposal and environmental monitoring.

## PART C: CONDITIONS FOR THE USE AND PROTECTION OF WATER

- 1. The Licensee shall obtain water from the Kikerk Lake, Kiglikkavik Lake and West of Tree River for domestic purposes up to a total maximum of fifty (50) cubic metres per day.
- 2. The Licensee shall equip all water intake hoses with a screen with an appropriate mesh size to ensure that there is no entrapment of fish.
- 3. The Licensee shall not remove any material from below the ordinary high water mark of any water body.
- 4. The Licensee shall not do anything that will cause erosion of the banks of any body of water on or adjacent to the land and shall provide necessary controls to prevent such erosion.
- 5. Sediment and crosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into water.
- 6. If the drilling requires water in sufficient volume that the source water body may be drawn down the Licensee shall, at least 30 days prior to commencement of drilling, submit to the Board for approval the following: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures. The use of streams is not recommend as a water source.

# PART D: CONDITIONS APPLYING TO DRILLING OPERATIONS

- All drill waste shall be disposed of and contained on land in a sump located at least thirty (30)
  metres from the high water mark of any water body at a site where direct flow into a water body
  is not possible and no additional impacts are created.
- 2. No land-based drilling is to be done within thirty (30) metres of the high water mark of any water body. Drill waste from land-based drilling shall be disposed of in a sump such that they do not enter any water body.

- 3. Drilling additives or muds shall not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water, or are demonstrated to be non-toxic.
- 4. If artesian flow is encountered, drill holes shall be plugged and permanently scaled upon project termination.
- 5. The Licensee shall:
  - i. Ensure that during their summer drill program, all drill cuttings and any return water and sludge that cannot be re-circulated be disposed of in a properly constructed sump or an appropriate natural depression that does not drain into a water body; and
  - ii. For their winter drill program collect drill cuttings and store them in barrels for removal to an approved waste disposal site.
- 6. The Licensee shall follow the *Interim Guidelines for On-Ice Drilling in the NWT* for all on-ice drilling operations. These are:
  - i. All drill cuttings shall be removed from the ice surface.
  - ii. The release of total suspended solids in the receiving environment shall be in compliance with the Guidelines for Total Suspended Solids contained in the Canadian Council of Ministers of the Environment's (CCME) Canadian Water Quality Guidelines, Chapter 3 Freshwater Aquatic Life.
  - iii. For kimberlite targets, non-toxicity must be demonstrated; toxicity testing shall be done on the effluent from the drilling operation and the results shall be submitted to the Board and/or an Inspector upon request.
- 7. The Licensee shall establish baseline water quality conditions before drilling through lake icc.

## PART E: CONDITIONS APPLYING TO WASTE DISPOSAL

- 1. Areas designated for waste disposal that may impair the quality, quantity, or flow of water shall not be located within thirty (30) metres of the ordinary high water mark of any body of water, unless otherwise authorized by the Board.
- 2. The Licensee shall not discharge sewage effluent.
- 3. The Licensee shall discharge and contain all greywater in a sump located at least thirty (30) metres from the high water mark of any water body at a site where direct flow into a water body is not possible and no additional impacts are created.
- 4. The Licensee shall incinerate all combustible waste, and shall ensure that all hazardous wastes and non-combustible waste generated through the course of the operation are backhauled and disposed of in an approved waste disposal site.
- 5. The Licensee shall not landfill any waste except for greywater and drill wastes in accordance with Part D.

# PART F: CONDITIONS FOR CAMPS AND ACCESS INFRASTRUCTURES

- 1. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
- 2. 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.
- 3. Winter lake and stream crossings, including ice bridges, shall be constructed entirely of water, ice or snow; stream crossings shall be removed or notched prior to spring break-up.
- 4. With respect to access road and pad construction or other earthworks, the deposition of debris or sediment into any water body is prohibited. These materials shall be disposed of above the high water mark in such a fashion that they do not enter the water.

# PART G: CONDITIONS APPLYING TO SPILL PREVENTION AND CONTINGENCY PLANNING

- 1. The Licensee shall ensure that any chemicals, fuel or wastes associated with the project do not enter water. All sumps and fuel caches shall be located a minimum of thirty (30) metres from the normal high water mark and in such a manner that no fuel can enter any such water body.
- 2. The Licensee shall revise the approved "Stornoway Ventures Spill Response Plan, March 2002" annually to reflect changes in operation and/or technology or as directed by the Board.
- 3. If, during the duration of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
  - i. Employ the Contingency Plan;
  - ii. Report any spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the DIAND Water Resources Inspector at (867) 975-4298; and
  - iii. Submit to the DIAND Water Resources Inspector a detailed report on each occurrence no later than thirty (30) days after initially reporting the event.

#### PART H: CONDITIONS APPLYING TO MODIFICATIONS

- 1. The Licensee may, without written approval from the Board, carry out modification 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:
  - 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 Licence and/or 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 that sixty (60) days; and
- iv. the Board has not rejected the proposed modification.
- 2. Modifications for which all of the conditions referred to in Part H, Item 1 have not been met may be carried out only with written approval from the Board.
- 3. The Licensee shall provide to the Board as-built plans and drawings of the modifications referred to in Part H, Item 1 within ninety (90) days of completion of the modifications.

## PART I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

- 1. The Licensee shall update the approved preliminary "Abandonment and Restoration Plan" for the camp facility and sites affected by this project, annually to reflect changes in operation and/or technology and shall be submitted as required in accordance with Part B, Item 1.
- 2. The Licensee shall backfill and restore to the satisfaction of the Inspector all sumps back to the natural surrounding contours of the land prior to the expiry of this permit.
- 3. The Licensee shall undertake progressive restoration for any components of the project, which are no longer required for the Licensee's operations.
- 4. All disturbed areas shall be stabilized and re-vegetated as required, upon completion of work and restored to a pre-disturbed state.

# GENERAL CONDITIONS FOR THE ADMINISTRATION OF LICENCES ISSUED BY THE NUNAVUT WATER BOARD (NWB)

The following conditions form an integral part of Licence No. NWB2COR0204:

- 1. At the time of issuance, a copy of the Licence is placed on the Water Register in the NWB Head Office in Gjoa Haven. Documents in the Register are available to the public.
- 2. If the Licensee contemplates the renewal of Licence No. NWB2COR0204 it is its responsibility 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 Licence No. NWB2COR0204 be filed at least three months before the Licence's expiry date.
- 3. If Licence No. NWB2COR0204 requires amendment, then a public hearing may be required. The Licensce 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.
- 4. Any communication with respect to this Licence shall be made in writing to the attention of:

Philippe di Pizzo Executive Director Nunavut Water Board P. O. Box 119

Gjoa Haven, NU X0B 1J0

Telephone: (867) 360-6338

Fax:

(867) 360-6369

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

5. The Licensee shall submit two paper copies 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.