



Mackenzie Valley Land and Water Board

7th Floor - 4910 50th Avenue • P.O. Box 2130
YELLOWKNIFE, NT X1A 2P6
Phone (867) 669-0506 • FAX (867) 873-6610

June 24, 2010

File: MV2001L3-0012

Ms. Rhonda Batchelor
Senior Environmental Affairs Analyst
GNWT - Department of Transportation
Box 1320
YELLOWKNIFE NT X1A 2L9

Fax: (867) 920-2565

Dear Ms. Batchelor:

Notification of Water Licence Modification

The Mackenzie Valley Land and Water Board (the Board) met on June 24, 2010 to review the current Water Licence. The Board has modified the Water Licence to reflect the construction of the new Glycol Retention Facility as per paragraph 18(b)(iii) of the *Northwest Territories Waters Act*.

The modified Water Licence and Surveillance Network Program have been attached to this letter. If you have any questions or concerns, please telephone (867) 669-0506 or email permits@mvlwb.com.

Yours sincerely,

A handwritten signature in black ink, appearing to read "W. Hagen".

Willard Hagen
MVLWB Chair

Copied to: Marty Sanderson, A/District Manager, South Mackenzie District,
INAC
Robert Jenkins, Water Resources Division, INAC
Tyree Mullaney, Regulatory Officer, MVLWB

Attachment



**Mackenzie Valley Land and Water Board
Water Licence**

Pursuant to the *Mackenzie Valley Resource Management Act* and Regulations, the Mackenzie Valley Land and Water Board, hereinafter referred to as the Board, hereby grants to:

Government of the Northwest Territories – Department of Transportation
(Licensee)

of Yellowknife Airport Manager's Office, Department of Transportation, Box 1320,
Yellowknife, NT X1A 2L9
(mailing address)

hereinafter called the Licensee, the right to alter, divert, or otherwise use water subject to the restrictions and conditions contained in the *Northwest Territories Waters Act* and Regulations made thereunder and subject to and in accordance with the conditions specified in this Licence.

Licence number: MV2001L3-0012

Licence type: B

Water Management Area: Northwest Territories 01

Location: Latitude 62°27'46"
Longitude 114°26'25"

Purpose: To use water and dispose of waste and associated uses

Description: Miscellaneous Undertaking

Quantity of water **not to be exceeded:** 20,000m³

Effective date of Licence: September 7, 2005

Expiry date of Licence: September 6, 2010

This Licence, issued and recorded at Yellowknife, includes and is subject to the annexed conditions.

Mackenzie Valley Land and Water Board

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Chair

A handwritten signature in black ink, appearing to be "A. G.", written over a horizontal line.

Witness

PART A: SCOPE AND DEFINITIONS

Scope

This License entitles the Government of Northwest Territories – Department of Transportation to use water and dispose of waste as a miscellaneous undertaking at the Yellowknife Airport, 62° 27' 46" N, 114° 26' 25" W, Northwest Territories.

This License 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 *Northwest Territories Waters 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 License shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations.

Compliance with the terms and conditions of this License does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

2. Definitions

In this License: **MV2001L3-0012**

"Act" means the Northwest Territories Waters Act;

"Analyst" means an Analyst designated by the Minister under Section 35(1) of the Northwest Territories Waters Act;

"Board" means the Mackenzie Valley Land and Water Board established in Part 4 of the *Mackenzie Valley Resource Management Act*;

"Inspector" means an Inspector designated by the Minister under Section 35 (1) of the Northwest Territories Waters Act;

"Licensee" means the holder of this License;

"Minister" means the Minister of Indian Affairs and Northern Development;

"Regulations" means Regulations proclaimed pursuant to Section 33 of the Northwest Territories Waters Act;

"Waste" means waste as defined by Section 2 of the North West Territories Waters Act;

"Geotechnical Engineer" means a professional engineer registered with the Association of Professional Engineers, Geologists, and Geophysicists of the Northwest Territories and whose principal field of specialization is the design and construction of earthworks in a permafrost environment.

"Glycol" includes ethylene, diethylene and propylene glycols.

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

"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;

"Sewage" means all toilet wastes and greywater;

"Sewage Disposal Facilities" comprises the area and engineered structures designed to contain sewage including the Maintenance Garage Oil/Water Separator and Septic System as identified in Drawing Number 59954-9, titled "Maintenance Shop", and the Airport Terminal Septic Holding Tank as identified in Drawing Number 67793 S1, titled "Structural Tank Plan and Details", as part of the Glycol Mitigation Operational Plan, Yellowknife Airport, 2004-2005 (Revised), Water License Renewal Application, date stamped April 15, 2005.

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

"Waste Disposal Facilities" means all facilities designated for the disposal of waste, and includes the Airport Terminal Building Septic Holding Tank, the Maintenance Garage Oil/Water Separator and Septic System, and the Glycol Retention Facility; and

"Water Supply Facilities" comprises the area and associated intake infrastructure as identified in Drawing Number 1 titled "Yellowknife Airport, Yellowknife N.W.T., Water License Renewal", and dated November 2001.

PART B: GENERAL CONDITIONS

1. The Licensee shall file an Annual Report with the Board not later than March 31st of the year following the calendar year reported which shall contain the following information:
 - a) the monthly and annual quantities in cubic metres of water obtained from all sources;
 - b) the annual quantities of de-icing fluid used for de-icing activities;
 - c) updates or revisions to the approved Glycol Mitigation Operational Plan;
 - d) the annual quantities of Sewage solids removed from the Sewage Disposal Facilities for disposal;
 - e) updates or revisions to the approved Waste Disposal Facilities Operation and Maintenance Plans;
 - f) updates or revisions to the approved Spill Contingency Plan;
 - g) a summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures;
 - h) a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;
 - i) a summary of any studies requested by the Board that relate to waste disposal, water use or reclamation, and a brief description of any future studies planned;
 - j) a list of unauthorized discharges;
 - k) any other details on water use or waste disposal requested by the Board by November 1st of the year being reported; and
 - l) a summary of airport expansion or development work completed during the year and an outline of work anticipated for the following year.
2. Meters, devices or other such methods used for measuring the volumes of water used and waste discharged shall be installed, operated and maintained by the Licensee to the satisfaction of an Inspector.
3. The Licensee shall comply with the *Surveillance Network Program* annexed to this License, and any amendment to the said *Surveillance Network Program* as may be made from time to time, pursuant to the conditions of this License.
4. The Licensee shall post and maintain signs to identify the stations listed in the attached *Surveillance Network Program*. All postings shall be located and maintained to the satisfaction of an Inspector.
5. The attached *Surveillance Network Program* and compliance dates specified in this License may be amended at the discretion of the Board.

6. The Licensee shall, within sixty (60) days of issuance of this License, post signs in the appropriate areas to inform the public of Water Supply and Waste Disposal Facilities. All postings shall be located and maintained to the satisfaction of an Inspector.
7. The Licensee shall immediately report to the 24 Hour Spill Report Line (867-920-8130) 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.
8. The Licensee shall ensure a copy of this License is maintained at the Yellowknife Airport Manager's Office at all times.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain all water from Long Lake using the Water Supply Facilities or as otherwise approved by the Board.
2. The annual quantity of water used for all purposes shall not exceed 20,000 cubic metres.
3. The water intake hose used on the water pumps shall be equipped with a screen with a mesh size sufficient to ensure no entrainment of fish.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall direct all Sewage to the Sewage Disposal Facilities or as otherwise approved by the Board.
2. The Licensee shall direct all glycol contaminated snow to the Glycol Retention Facility or as otherwise approved by the Board.
3. The Waste Disposal Facilities shall be maintained and operated in such a manner as to prevent structural failure.
4. The Licensee shall maintain the Waste Disposal Facilities to the satisfaction of an Inspector.
5. The Licensee shall ensure that any unauthorized wastes associated with this undertaking do not enter any waters.
6. a) The Licensee shall, within sixty (60) days of issuance of this License, submit to the Board for approval, a Glycol Mitigation Operational Plan which shall include, but not be limited to:
 - i) de-icing fluid handling and storage procedures;

- ii) options for the collection, treatment and disposal of de-icing residuals from the airport runway and apron system;
 - iii) options for reducing and mitigating the use of de-icing products;
 - iv) contingency measures to be implemented in the event that the glycol effluent quality criteria referred to in Part D, Item 9 is exceeded; and
 - v) any operational or structural modifications that may impact the Glycol Mitigation Operational Plan.
- b) The Licensee shall implement the Glycol Mitigation Operational Plan as approved by the Board.
 - c) The Licensee shall review, and amend as needed, the Approved Glycol Mitigation Operational Plan on an annual basis and shall advise the Board of any amendments in accordance with Part B, Item (1) of this License.
7. The Licensee shall submit to the Board, upon completion, the as-built drawings of the Glycol Retention Facility.
 8. The Licensee shall request approval from the Inspector at least ten (10) days prior to initiating the discharge of water from the Glycol Retention Facility.
 9. **Effluent Quality Criteria**
All water or waste discharged from Surveillance Network Stations S1, GRF-1, and GRF-D shall not exceed 100 mg/L for glycol, the results are to be submitted to the Inspector at least (10) days prior to initiating discharge from the identified stations.

PART E: CONDITIONS APPLYING TO MODIFICATIONS

1. 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 License 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 either the License 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 E, Item 1, have not been met, can 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 E, Item 1 within ninety (90) days of completion of the modifications.

PART F: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

1. The Licensee shall submit to the Board for approval an Abandonment and Restoration Plan at least six (6) months prior to abandoning any Waste Disposal Facilities. The Plan shall include, but not be limited to:
 - a) contaminated site remediation;
 - b) leachate prevention;
 - c) an implementation schedule;
 - d) maps delineating all disturbed areas and site facilities;
 - e) consideration of altered drainage patterns;
 - f) type and source of cover materials;
 - g) future area use;
 - h) hazardous wastes; and
 - i) details of the decommissioning of the previously used leach pit.
2. The Licensee shall implement the Plan specified in Part F, Item 1 as and when approved by the Board.

PART G: CONDITIONS APPLYING TO CONSTRUCTION

1. Prior to construction of any dams, dykes or control structures intended to contain, withhold, divert or retain water or wastes, the Licensee shall submit to the Board for approval, design drawings stamped by a qualified engineer registered in the Northwest Territories.
2. Construction of designed structures shall be carried out as approved by the Board.
3. The Licensee shall provide to the Board as-built plans and drawings of the constructed facilities referred to in Part G, Item 1 within ninety (90) days of completion of the facilities stamped by a qualified Geotechnical Engineer registered in the Northwest Territories.

