

NORTHWEST
TERRITORIES
WATER BOARD



NUNAPPA
SIVUNIUKPAIT
IMMAKUN

May 6, 2009

Ms. Shirley Maaskant
MGM Energy
4100, 350 - 7th Avenue SW
Calgary, Alberta T2P 3N9
Canada

Dear Ms. Maaskant:

ISSUANCE OF TYPE B WATER LICENCE: UMLAK SEISMIC

Attached is Water Licence N7L1-1826 granted by the Northwest Territories Water Board (NWTWB or the Board) in accordance with the *Northwest Territories Waters Act*. A copy of this Licence has been filed in the Public Registry at the NWTWB office. Water Licence N7L1-1826 has been approved for a period of three (3) years commencing May 6, 2009 and expiring May 5, 2012. Also attached are the general procedures for the administration of Licences in the Northwest Territories. Please review these carefully and address any questions to the Board's office.

This letter, with attached procedures, all Inspection Reports and correspondence related thereto are part of the Public Registry and are intended to keep all interested parties informed of the manner in which the Licence requirements are being met. All Public Registry material will be considered if an amendment to the Licence is requested.

The full cooperation of MGM Energy Corp. is anticipated and appreciated. Should you have any further questions or concerns, please telephone (867) 678-2942.

Yours sincerely,

Eddie Dillon
Chair

Attachments

Copied to: Carol Mills, Manager, Water Resources, INAC;
Distribution List of Reviewers

NORTHWEST TERRITORIES WATER BOARD

Pursuant to the *Northwest Territories Water Act* and Regulations, the Northwest Territories Water Board, hereinafter referred to as the Board, hereby grants to:


MGM Energy Corp
(Licencee)
of 4100, 350 – 7th Avenue SW
Calgary AB
(Mailing Address)

Hereinafter called the Licencee, 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: N7L1-1826
Licence Type: B
Water Management Area: NORTHWEST TERRITORIES 07
Location: Latitude 69.24° to 69.60°N
Longitude 134.00° to 134.90°W
MACKENZIE DELTA
Purpose: WATER USE AND WASTE DISPOSAL
FOR AN INDUSTRIAL AND MUNICIPAL
UNDERTAKING
Quantity of water not to be exceeded: 3500 CUBIC METRES PER DAY
Effective Date of Licence: MAY 6, 2009
Expiry Date of Licence: MAY 5, 2012

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

NORTHWEST TERRITORIES WATER BOARD



Witness



Chair

**GENERAL PROCEDURES FOR THE ADMINISTRATION OF LICENCES
ISSUED UNDER THE NORTHWEST TERRITORIES WATERS ACT
IN THE NORTHWEST TERRITORIES**

1. At the time of issuance, a copy of the Licence is placed on the Water Register in the Offices of the Northwest Territories Water Board in Yellowknife and Inuvik, and is then available to the public.
2. To enforce the terms and conditions of the Licence, the Minister of Indian Affairs and Northern Development has appointed Inspectors in accordance with Section 35(1) of the *Northwest Territories Waters Act*. The Inspectors coordinate their activities with officials of the Water Resources Division of the Department of Indian Affairs and Northern Development. The Inspector responsible for Licence No. N7L1-1826 is located in the North Mackenzie Inuvik District Office.
3. To keep the Water Board and members of the public informed of the Licensee's conformity to Licence conditions, the Inspectors prepare reports which detail observations on how each item in the Licence has been met. These reports are forwarded to the Licensee with a covering letter indicating what action, if any, should be taken. The inspection reports and covering letters are placed on the public Water Register, as are any responses received from the Licensee pertaining to the inspection reports. It is therefore of prime importance that you react in all areas of concern regarding all inspection reports so that these concerns may be clarified.
4. If the renewal of Licence No. N7L1-1826 is contemplated it is the responsibility of the Licensee to apply to the Water Board for renewal of the Licence. The past performance of the Licensee, new documentation and information, and points raised during a public hearing, if required, will be used to determine the terms and conditions of any Licence renewal. Please note that if the Licence expires and another has not been issued, then water and waste disposal must cease, or you, the Licensee, would be in contravention of the *Northwest Territories Waters Act*. It is suggested that an application for renewal of Licence No. N7L1-1826 be made at least eight months in advance of the Licence expiry date.
5. If, for some reason, Licence No. N7L1-1826 requires amendment, then a public hearing may be required. You are reminded that applications for amendments should be submitted as soon as possible to provide the Water Board with ample time to go through the amendment process. The process may take up to six (6) months or more depending on the scope of the amendment requested.

The Surveillance Network Program annexed to the Licence can be modified at the discretion of the Board and does not require a public hearing. A request for any proposed change to the Surveillance Network Program should be forwarded to the Board in writing, including a rationale for the change.2

6. Specific clauses of your Licence make reference to the Board, Analyst or Inspector. The contact person, address, phone and fax number of each is:

BOARD: Executive Director
Northwest Territories Water Board
P.O. Box 1326
Yellowknife, NT

Phone No: (867) 765-0106
Fax No: (867) 765-0114

ANALYST: Analyst
Water Laboratory
Northern Affairs Program
Department of Indian Affairs & Northern Development
P.O. Box 1500 4601 - 52nd Avenue
YELLOWKNIFE, NT X1A 2R3

Phone No: (867) 669-2780
Fax No: (867) 669-2718

INSPECTOR: Inspector
North Mackenzie-Inuvik District Office
Department of Indian & Northern Development
P.O. Box 2100
INUVIK, NT X0E 0T0

Phone No: (867) 777-3361
Fax No: (867) 777-2090

7. Your Licence requires a security deposit be submitted. Should the security deposit be submitted in the form of a "letter of credit", recommended wording is outlined below. It is advised that a "draft" letter of credit be forwarded to Water Resources Division for review. The contact person, address, phone and fax number of the individual administering security deposits is:

Office Administrator
Water Resources Division
Department of Indian & Northern Development
P.O. Box 1500
YELLOWKNIFE, NT X1A 2R3

Phone No: (867) 669-2651
Fax No: (867) 669-2716

PART A: SCOPE AND DEFINITIONS

1. Scope

- a) This Licence entitles MGM Energy Corp. to use Water and dispose of Waste for municipal and industrial undertakings in the Mackenzie Delta in relation to the Project Description for the Umiak Seismic Program located at Latitude 69.24 to 69.60 degrees North and Longitude 134.00 to 134.90 degrees West as described in the Application, the Project Description and the record of this proceeding.

2. Definitions

In this Licence: **N7L1-1826**

"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*;

"Application" means the application filed on April 8, 2008 by MGM Energy Corp. and all supporting materials as amended during this proceeding;

"Board" means the Northwest Territories Water Board established under Section 10 of the *Northwest Territories Waters 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 Licence;

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

"Maximum Average Concentration" means the running average of any four consecutive analytical results, or if less than four analytical results collected, and submitted to the Inspector in accordance with the sampling and analysis requirements specified in the "Surveillance Network Program;"

"Modification" means an alteration to a physical work that introduces a new structure or replaces an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

"Project Description" refers to the report titled "MGM Energy Corp. Umiak Seismic Program: 2008 - 2011," dated March, 2008, prepared by MGM Energy Corp. and IMG-Golder Corporation and any supplementary materials filed during the course of this licence proceeding;

Water Licence N7L1- 1826 MGM Energy Umiak Seismic Program

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

"Sewage Treatment Facility" comprises the engineered structures that are designed to contain and treat Sewage;

"Sewage" means all toilet waste and greywater;

"Waste" means waste as defined by Section 2 of the *Northwest Territories Waters Act*;

"Waters" means waters as defined by Section 2 of the *Northwest Territories Waters Act*;

PART B: GENERAL CONDITIONS

1. This Licence is issued subject to the conditions contained herein with respect to the Use of Waters as prescribed in Section 8 of the Act and the Deposit of Waste to any Waters as prescribed in Section 9 of the Act.
2. 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 deposited or under which any such Waste may be deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be automatically amended to conform with such Regulations.
3. Compliance with the terms and conditions of this Licence has no effect on the Licensee's obligation to comply with the requirements of all applicable Federal, Territorial and Municipal legislation.
4. The Licensee shall file an Annual Report with the Board and an Inspector not later than March 31st of the year following the calendar year reported that shall contain the following information:
 - a) the total quantity in cubic metres of fresh Water obtained from each Water source(s);
 - b) the total quantities in cubic metres of each and all Waste discharged;
 - c) the location and direction of flow of all Waste discharged to the land or Water;
 - d) a summary of Modifications carried out on the Water Supply and Sewage Treatment Facility;
 - e) details on the abandonment and restoration of any structures associated with the Umiak Seismic Project;
 - f) a list of spills and unauthorized discharges;
 - g) results from this Water Licence monitoring programs; and

Water Licence N7L1- 1826 MGM Energy Umiak Seismic Program

- h) any other details on Water use or Waste disposal requested by the Board within forty-five (45) days before the final report is due.
5. 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.
 6. The Licensee shall comply with the "Surveillance Network Program" annexed to this Licence, and any amendment to the "Surveillance Network Program" as may be made from time to time by the Board, pursuant to the conditions of this Licence.
 7. The "Surveillance Network Program" and compliance dates specified in the Licence may be modified at the discretion of the Board.
 8. All Water Licence monitoring data shall be submitted in printed form and electronically in spreadsheet format on a diskette or other electronic forms acceptable to the Board.
 9. All reports shall be submitted to the Board in printed format accompanied by an electronic copy in a common word processing format on diskette or other electronic forms acceptable to the Board.
 10. The Licensee shall notify the Board and an Inspector thirty (30) days before commencement of the seismic program, of the exact locations of staging area(s), the seismic camp and access roads that have been selected.
 11. The Licensee, pursuant to Section 17(1) of the Act and Section 12 of the Regulations, shall post thirty (30) before commencement of the seismic program and shall maintain a security deposit of Four Hundred and Twenty Thousand (\$420,000) dollars in a form suitable to the Minister.
 12. Subject to Section 17 of the Act and Section 12 of the Regulations made pursuant thereto, the security deposit shall be maintained in good standing until the Minister is satisfied that all relevant undertakings of the Project have been permanently closed or permanently abandoned.
 13. The Licensee shall ensure a copy of this Licence is maintained at the site of operation at all times.
 14. The Licensee shall comply with any plans and submissions approved by the Board.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain Water from the Mackenzie River, associated channels and other suitable waterbodies as otherwise approved by an Inspector.
2. The Licensee shall obtain a representative dissolved oxygen and temperature profile for each lake used as a Water source before initial withdrawal and before demobilization of the project for the year.
3. The Licensee is not permitted to remove more than ten (10)% of the available under-ice Water volume at any lake used as a Water source as calculated using a maximum expected ice thickness of two (2) metres during a single winter season.
4. The daily quantity of Water used for all purposes shall not exceed 3500 cubic metres.
5. The water intake hose used on all water pumps shall be equipped with a screen with a mesh size sufficient to ensure no entrainment of fish (2.54 mm).

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall submit to the Board and an Inspector for approval, thirty (30) days before commencement of operations, a Wastewater and Sewage Treatment Plan that includes the following:
 - a) specifications of the Sewage Treatment Facility including engineering drawings and design performance standards,;
 - b) operations, maintenance and monitoring programs for the Sewage Treatment Facility including maintenance schedules;
 - c) sludge management program including the disposal of sludge generated at the Sewage Treatment Facility;
 - d) contingency measures for sewage effluent disposal including location of any alternative disposal sites; and
 - e) operator training standards.
2. All Sewage shall be directed to the Sewage Treatment Facility.

3. All Waste discharged from the Sewage Treatment Facility shall meet the following effluent quality requirements:

Sample Parameter	Maximum Average Concentration
Biological Oxygen Demand (BOD ₅)	80.0 mg/L
Total Suspended Solids (TSS)	100.0 mg/L
Faecal Coliforms	10E4 CFU/dL
Oil and Grease	5.0 mg/L
Total Residual Chlorine (TRC)	0.1 mg/L

The Waste discharged shall have a pH between 6 and 9.

4. Introduction of Water to Sewage Waste for the purpose of achieving effluent quality requirements as outlined in Part D, Item 3 is prohibited.
5. All Waste discharged from the Sewage Treatment Facility shall be directed to the land surface or to a channel of the Mackenzie River at a location approved by an Inspector.
6. There shall be no discharge of floating solids, garbage, grease, free oil or foam.
7. The Licensee shall direct all Sewage Wastes that do not meet the requirements in Part D, Item 3 to a Sewage Treatment Facility approved by an Inspector.
8. The Licensee shall submit to the Board and an Inspector for approval, thirty (30) days before commencement of operations, a Waste Management Plan that includes the following:
- a) types and estimated quantities of Wastes generated;
 - b) specifications of the on-site Waste treatment and disposal facilities and infrastructure including engineering drawings and design performance standards;
 - c) on-site waste segregation, storage, treatment and disposal methods;
 - d) incinerator fly and bottom ash collection, treatment and disposal methods;
 - e) operations and maintenance programs including maintenance schedules;
 - f) off-site transportation and disposal of Waste including facility name, location and owner-operator;
 - g) contingency measures; and
 - h) operator training standards.

9. The Licensee shall provide to the Board, thirty (30) days before commencement of operations, letters outlining agreements between third parties to harbour, transport or dispose of Wastes. Such letters shall include details including, but not limited to, type of Waste, quantities of Waste, treatment methods and ultimate disposal location, if Waste is to be transported away from the site.

PART E: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written approval from the Board, carry out Modifications to the planned undertakings provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a) the Licensee has notified an Inspector and the Board in writing of such proposed Modifications at least five (5) days before commencement of the Modifications;
 - b) such Modifications do not place the Licensee in contravention of either this Licence or the Act;
 - c) an Inspector or the Board has not, during the five (5) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than five (5) days; and
 - d) an Inspector or 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 may be carried out only with written approval from an Inspector.
3. The Licensee shall provide to the Board as-built plans and drawings stamped and approved by the Licensee for any Modifications referred to in this Licence within ninety (90) days of completion of the Modifications.

PART F: CONDITIONS APPLYING TO STREAM AND WATER BODY CROSSINGS

1. The Licensee shall ensure that only clean snow and ice are used on all stream or water body crossings and that no debris is left on the surface of the crossings.
2. Stream or water body crossings shall be notched or removed before spring break-up to facilitate natural flow.
3. The removal of naturally occurring material from the bed or banks of any stream or water body below the ordinary high water mark is not permitted.

PART G: CONDITIONS APPLYING TO CONTINGENCY PLANNING

1. The Licensee will maintain a copy of the Mackenzie Delta Emergency Response Plan, as approved by the Board, onsite in a readily available location to the satisfaction of an Inspector.
2. The Licensee shall review annually, by December 1st, the approved Mackenzie Delta Emergency Response Plan and submit any required revisions to the Board for approval.
3. The Licensee shall ensure that all petroleum products, hazardous material and other Wastes associated with the project do not enter any Waters.
4. The Licensee shall ensure that all containment berms are constructed of an impermeable material to the satisfaction of an Inspector.
5. If, during the period of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a) report the incident immediately to the 24 Hour Spill Reporting Line (867) 920-8130 as outlined in the Spill Reporting Protocol; and
 - b) submit to an Inspector a detailed report on each occurrence not later than thirty (30) days after initially reporting the incident.

PART H: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION

1. The Licensee shall submit to the Board thirty (30) days after receipt of this licence a Preliminary Abandonment and Restoration Plan for the Umiak Seismic Project site that includes but is not limited to the following:
 - a) the fuel storage area;
 - b) the Sewage Treatment Facility;
 - c) seismic camp(s);
 - d) solid waste management systems;
 - e) barge staging areas; and
 - f) an abandonment and restoration monitoring plan.

Water Licence N7L1- 1826 MGM Energy Umiak Seismic Program

2. The Licensee shall re-submit to the Board for approval a Final Abandonment and Restoration Plan sixty (60) days before the anticipated completion of all activities that includes but is not limited to the following:
 - a) the fuel storage area;
 - b) the Sewage Treatment Facility;
 - c) seismic camp(s);
 - d) solid waste management systems;
 - e) barge staging areas; and
 - f) an abandonment and restoration monitoring plan.
3. The Licensee shall, upon completion of all activities, ensure that all equipment and materials are removed from the site. Other final restoration activities as outlined in the approved Abandonment and Restoration Plan shall be implemented to the satisfaction of an Inspector.
4. The Licensee shall prior to expiry of the Licence, provide the Board with a report describing the abandonment and restoration activities undertaken during the term of the Licence, including all monitoring and analytical data related to the effectiveness of the activities undertaken.

NORTHWEST TERRITORIES WATER BOARD



Chairman



Witness

NORTHWEST TERRITORIES WATER BOARD

LICENSEE: MGM Energy Corp.

LICENCE NUMBER: N7L1- 1826

EFFECTIVE DATE OF LICENCE: May 6th, 2009

**EFFECTIVE DATE OF
SURVEILLANCE NETWORK PROGRAM:** May 6th, 2009

SURVEILLANCE NETWORK PROGRAM

A. Location of Sampling Stations

Station Number	Description
1826-1	Discharge from the Sewage Treatment Facility

B. Sampling and Analysis Requirements

1. Water at Station Number 1826-1 shall be sampled every week during decant, and analyzed for the following parameters:

BOD ₅	Total Suspended Solids
Oil and Grease	Faecal Coliforms
Total Residual Chlorine	Ammonia
pH	
2. More frequent sample collection may be required at the request of an Inspector.
3. 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 an Analyst.
4. All analysis shall be performed in a laboratory approved by an Analyst.
5. The Licensee shall, by thirty (30) days after receipt of this Licence, submit to an Analyst for approval a Quality Assurance/Quality Control Plan.
6. The plan referred to in Part B, Item 5 shall be implemented as approved by an Analyst.

Water Licence N7L1- 1826 MGM Energy Umiak Seismic Program

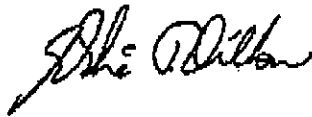
C. Flow and Volume Measurement Requirements

1. The daily and monthly quantities of Water obtained from each Water source shall be measured and recorded in cubic metres.

D. Reports

1. The Licensee shall, within thirty (30) days following the month being reported, submit to the Board and an Inspector all data and information required by the "Surveillance Network Program" including the results of the approved Quality Assurance Plan.

NORTHWEST TERRITORIES WATER BOARD



Chairman



Witness