## Northwest Territories Water Board Reasons for Decisions

Issued pursuant to section 26 of the Northwest Territories Waters Act, Chap 39, R.S.C.

Water Licence Number: N7L1-1828 (Type A)

This is the decision of the Northwest Territories Water Board for an application for a Water Licence dated April 8, 2008, made by:

MGM Energy Corp. 4100, 350 – 7<sup>th</sup> Avenue SW Calgary AB

MGM Energy Corp. applied for a Water Licence for municipal and industrial undertakings in the Mackenzie Delta for the recompletion of the Aput C-43 well and the establishment and winter operation of the Cuttings and Fluids Injection Facility located at Latitude 69° 02' 02.5" North and Longitude 135° 41' 48.6" West as described in the Water Licence Application, the Project Description and the record of this proceeding.

#### Background:

MGM Energy Corp. applied to the Northwest Territories Water Board (the Board) for a three-year Water Licence to use water and deposit waste associated with the Aput C-43 Cuttings and Fluid Injection Facility. The application for this undertaking was filed with the Board on May 27, 2008.

The Aput C-43 well site is located on federal Crown land on Ellice Island in the outer Mackenzie Delta of the Inuvialuit Settlement Region (ISR), Northwest Territories. The Aput C-43 well was originally drilled in the winter of 2007-2008 and subsequently abandoned as an oil and gas prospect. MGM Energy Corp. characterizes the Cuttings and Fluid Injection Facility (CFI) as proven technology and an effective alternative to the use of sumps and long haul transportation for the handling of drill cuttings and fluids for several MGM Energy Corp.'s wells proposed to be drilled from 2008 to 2011.

Once established, the CFI facility will accept drill cuttings and fluids from the proponent's other drilling sites for slurry preparation and injection into an underground formation.

#### The Project would include:

- mobilization of camp, equipment and personnel to the Project area;
- annual construction and equipment installation of the CFI facility at the Aput C-43 site:
- well bore re-completion in preparation for injection;
- operation of the CFI facility to inject drill cuttings and fluids from various MGM wells;
- demobilization of CFI facility equipment between drilling seasons; and
- annual inspection and monitoring.

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MGM Energy Corp. applied for water use of 1,500 cubic metres per day for facility ice pad construction, aircraft landing strip, camp use, completion of the Aput C-43 wellsite and facility operations. The source of this water is the Mackenzle River, associated channels and other suitable water bodies and lakes in the Delta.

An ice pad will be used for the camp located at, or immediately adjacent to, the CFI facility, and will be approximately two hectares. The camp will accommodate up to 40 people.

MGM Energy Corp.'s application describes an untested drilling waste disposal technique for the Inuvialuit Settlement Region (ISR) and the NWT involving injection of drilling wastes into a previously drilled, and currently 'dry', well. The MGM Energy Corp.'s project description was submitted to the Environmental Impact Screening Committee (EISC), as per section 11 of the Inuvialuit Final Agreement (IFA), for determination of potential environmental impacts. The EISC determined on June 20th, 2008 that the project as described poses no significant threat to the environment to the ISR. The Board accepted the Application as complete.

An environmental screening of the proposed project as required by the Canadian Environmental Assessment Act (CEAA) was completed by the National Energy Board (NEB) as the Federal Environmental Assessment Coordinator (FEAC). The screening was completed by the NEB on behalf of INAC-NMDO and NWTWB.

The Water Licence Application was distributed to interested parties for a 10 day review period (July 29 - August 12, 2008). The interested parties included Indian and Northern Affairs Canada (INAC) – North Mackenzie District Office (INAC – NDMO). INAC - Water Resources Division (INAC - WRD), National Energy Board (NEB), Environment Canada (EC), Department of Fisheries and Oceans (DFO), Environment and Natural Resources – Government of the Northwest Territories (ENR – GNWT), Health and Social Services - GNWT and the Inuvialuit Land Administration (ILA). Comments on the application were received from INAC-WRD and ENR-GNWT.

Schedule IV of the NWTWA requires a Type 'A' licence be issued for disposal of oil and gas drilling wastes to anything but an in-ground sump. The Board gave notice, in accordance with subsections 23 (1)(a) and 23 (1)(b) of the Northwest Territories Waters Act, that it received a Type A Water Licence Application from MGM Energy Corp. on June 2, 2008 to use water and deposit waste. The Board advertised a notice of a Public Hearing in the Canada Gazette on July 28, 2008 in accordance with subsection 23(2)(b). The Public Hearing was scheduled for Inuvik on September 28, 2008. The Board did not receive any notification from organizations or individuals wanting to be heard as a result of the Application. The deadline for notification was September 9, 2008. The Board cancelled the Public Hearing on September 10, 2008.

The Board submitted a draft water licence to the Applicant, INAC - NMDO, INAC -WRD, DFO, EC, ENR-GNWT and NEB on February 11-13, 2009. Comments were received from the Applicant, INAC – WRD (with input from NMDO), NEB, EC and ENR. DFO did not specifically comment but provided information on DFO protocols concerning water intake from fresh water bodies. The Board considered all submitted comments at a meeting held in Inuvik NT, March 18-20, 2009. Following a

teleconference held May 5, 2009, the Board determined the Water Licence as drafted can be submitted to the Minister of the Department of Indian and Northern Development (DIAND) for approval.

#### Requirements of the Northwest Territories Waters Act:

The Board, as required by section 5 of the *Northwest Territories Waters Act*, has notified the Applicant of their obligation to comply by other legislation associated with this Water Licence.

The Board is in accordance with subsection 14(4)(a) of the *Northwest Territories*Waters Act by ensuring that the granting of the Water Licence to MGM Energy Corp.

will not adversely affect, in a significant way, any existing Licensee, providing the conditions of the Licence are met. There are no other applicants with precedence.

The Board does not believe that any users or persons listed in subsection 14(4)(b) of the *Northwest Territories Waters Act* will be adversely affected by the use of waters or the deposit of waste proposed by the Licensee provided that the Licensee operates in accordance with the terms and conditions of the Water Licence.

The Board is of the view that compliance with the Water Licence Terms and Conditions will ensure that the waste produced by the undertaking will be treated and deposited in a manner that will maintain water quality in the area and will be consistent with applicable water quality standards in accordance with subsection 14(4)(c) (i) of the Northwest Territories Waters Act.

The Board is satisfied that the effluent standards set out in the Terms and Conditions of the Water Licence are consistent with subsection 14(4)(c)(ii) of the *Northwest Territories Waters Act* and will protect the receiving waters and environment.

MGM Energy Corp. has provided the Board with its Schedule 3 application and supporting information for its consideration as required by section 16 of the *Northwest Territories Waters Act*.

#### Scope of the Licence:

Upon review of the application and evidence in the public registry, the Board has determined that the scope of the undertakings covered by the Water Licence includes water withdrawal for CFI facility construction and operations, water withdrawal for domestic purposes, CFI facility construction and operation solid waste disposal, operation of a sewage treatment facility, general site maintenance, and progressive site reclamation.

# Requirements of Section 14 of the NWTWA Existing Licensees:

After reviewing the submissions made to the public registry, the Board is satisfied that according to subsection 14(4)(a) of the NWTWA, the granting of the Licence to the Applicant will not adversely affect, in a significant way, any existing licensee, providing the conditions of the Licence are met. There are no other applicants with precedence.

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#### **Existing Water Users:**

Subsection 14(4)(b) of the NWTWA prohibits the issuance of a licence unless the Board is satisfied that appropriate compensation has been or will be paid by the Applicant to members of the classes of water users and persons listed in that Section of the Act who have claimed compensation within the period specified in the notice of the application. The Board did not receive any claims for compensation during the licensing process. Provided that compliance with the Licence conditions is achieved, the Board does not believe that any users or persons listed in subsection 14(4)(b) of the NWTWA will be adversely affected by the use of waters or the deposit of waste proposed by the Applicant.

## Water Quality Standards:

The Board has determined that in accordance with subsection 14(4)(c)(i) of the NWTWA, the Water Licence terms and conditions will ensure that the waste produced by this undertaking will be treated and disposed of in a manner to maintain water quality in the Mackenzie River, associated channels and other suitable waterbodies and will be consistent with applicable water quality standards. More specifically, the Board is also satisfied that the effluent standards it has developed and set out in the Part D of the Water Licence are acceptable and will protect the receiving waters and environment. These are further discussed below under part D: Conditions Applying to Waste Disposal.

#### REQUIREMENTS OF SUBSECTION 15(2) OF THE NWTWA

The Board has determined that adherence to the terms and conditions of the Water Licence by MGM Energy Corp. will minimize any potential adverse effects on other water users that might arise as a result of the issuance of the Water Licence.

#### REQUIREMENTS OF SECTION 17 OF THE NWTWA

The NWTWB has determined that pursuant to subsection 17(1) of the NWTWA, the granting of the Licence requires security to be posted with the Minister of Indian Affairs and Northern Development. The amount of the security deposit to be filed 30 days before commencement of operations is \$176,000 dollars.

Pursuant to section 30 of the NWTWA, a water user adversely affected as the result of the issuance of a licence, or the use of water or deposit of waste authorized by the regulations, is entitled to compensation for that adverse affect, and may sue in a court of law to recover compensation. It is clear to the Board that the requirement to post a security deposit may be important to parties other than an applicant because they may also be affected by the activities authorized by a licence. Further details on the rationale for the security required by the Board are discussed below under part B: General Conditions.

#### WATER LICENCE N7L1-1828 TERMS AND CONDITIONS

#### Licence Term

When determining the term of the Water Licence, the Board considered the three year term applied for and also a ten-year period as requested by MGM Energy Corp in a letter submitted to the Board dated April 27<sup>th</sup>, 2009. The Board considered the type of activity and reasonable anticipated CFI facility use in the foreseeable future. The Board determined the proposed technique, if successful, would be an improved means of

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exploration drilling waste disposal as compared with truck hauling to facilities in Alberta and British Columbia, or to an in-ground sump. It was also recognized that CFI technology is new to the region and as such requires that the Board exercise prudence when setting the licence term. The Board therefore determined an appropriate licence term as five years.

#### Part A: Scope and Definitions

The Board feels the scope captured in Schedule IV (Industrial undertakings) of the NWTWA regulations does not adequately cover camp requirements. The Board has included reference to Municipal undertakings in the scope as the project requires a camp be constructed that will generate municipal-type wastes.

#### Part B: General Conditions

The General Conditions stipulate the types of data to be reported to the Board in the form of an annual report. The Board uses the annual reports to monitor compliance with water use and waste disposal limits, and water quality requirements. By requiring MGM to properly install and maintain monitoring equipment, the Board is ensured that the data it receives are reliable. Having a clear and accurate description of the activities occurring on site also allows the Board to more effectively regulate the licensed undertakings. This includes modifying the Surveillance Network Program where appropriate and necessary.

The Board received a security requirement estimate provided by INAC-WRD. WRD uses a recognized computer model RECLAIM to determine security deposit requirements for most applications considered by the NWTWB. The Board is confident the RECLAIM estimate represents an appropriate figure to ensure potential environmental liabilities encountered during construction and operation of the CFI facility can be addressed.

#### Part C: Conditions Applying to Water Use

The Water Licence authorizes the proponent to obtain water from the Mackenzie River. associated channels or other suitable water bodies as approved by an INAC Inspector for industrial, domestic, and associated activities not to exceed 1500 cubic meter per day. The Board has also included terms and conditions in the Water Licence that reflect DFO guidelines concerning volume extractions. The Board is satisfied that these conditions should ensure that water levels in the Mackenzie River, associated channels or other suitable water bodies are adequate to protect aquatic life and water uses within the Mackenzie River Delta.

#### Part D: Conditions Applying to Waste Disposal

The Board has included conditions applying to waste disposal and waste facilities in part D of the Water Licence These conditions are based on recommendations and comments submitted during review of the Water Licence application and draft Water Licence. The Board has given considerable attention to a Waste Management Plan required by the applicant. The Board, along with INAC-NMDO representatives, has determined that the inclusion of a Waste Management Plan in the Water Licence is appropriate and represents a positive step towards effective waste management in the ISR. The Board has considered the information provided by all of the technical reviewers and has determined, after reviewing that evidence with its own technical advisors, that the criteria set out in part D are sufficiently stringent, and technically

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achievable, to prevent any adverse effects on the environment from the wastes created by this undertaking.

### Part E: Conditions Applying to Modifications

Conditions are included in the Licence that allows MGM Energy Corp. to carry out alterations to CFI facility infrastructure that do not after the purpose or function of the infrastructure and that are consistent with the terms of the Licence and the NWTWA. These alterations are termed "modifications" and can either introduce new structures or eliminate existing structures. The Board feels these conditions are necessary because unpredicted situations may arise or new technology may be developed that may require MGM Energy Corp. modify CFI facility components to improve the effectiveness, efficiency or safety of those components. Before carrying out any modifications the Licensee must notify the Board in writing of the proposed modifications. This allows the Board to remain informed of all activities on site as well as provides the Board with the discretion to require further study or review of any proposed modifications

#### Part F: Conditions Applying to Stream and Water Body Crossings

The Board has determined that the conditions found in this part will help prevent damage to stream and water body crossings.

## Part G: Conditions Applying to Contingency Planning

Subsection 6(2)(g) of the Regulations to the NWTWA requires a licensee to provide a plan for the safe handling, storage and disposal of petroleum products or hazardous materials and a contingency plan for their containment and clean-up in the event of a spill.

# Part H: Conditions Applying to Abandonment and Reclamation

Subsection 15(1)(e) of the NWTWA and subsection 6(2)(g) of the Regulations to the Act authorizes the Board to include in a Water Licence conditions relating to any future closing or abandonment of any undertakings.

#### Decision to Issue:

The use of water proposed by the Licensee is of a nature contemplated by the Northwest Territories Waters Act.

No objection by any person to the issuance of this Licence was made known to the Board.

Water Licence Number N7L1-1828 contains Terms and Conditions the Board feels necessary to ensure compliance with the Northwest Territories Waters Act and the Northwest Territories Waters Regulations, and to provide appropriate safeguards for MGM Energy Corp.'s use of the water and deposit of waste associated with the proposed undertaking.

The Board can issue this Water Licence in accordance with subsection 14(6)(b)(i) of the Northwest Territories Waters Act.

The Board is satisfied that the project had been screened pursuant to the Canadian Environmental Assessment Act, and that any potentially adverse environmental effects are deemed to be insignificant or mitigable with known technology and, as such, the application could proceed through the regulatory process.

The Board has reviewed the Water Licence Application and the written comments received by the Board. Upon consideration of the facts and circumstances, the ments of the submissions made to it and the purpose, scope and intent of the *Northwest Territories Waters Act* and the *Northwest Territories Waters Regulations*, the Board has determined that it can issue the Water Licence N1L7-1828 to MGM Energy Corp. subject to the Terms and Conditions of the Type A Water Licence approved by the Minister.

For all of the above reasons the Board has determined, with the approval of the Minister, to issue Water Licence N1L7-1828 to MGM Energy Corp. in accordance with section 15 of the *Northwest Territories Waters Act* for the use of water and the deposit of wastes.

#### Term of the Water Licence:

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Although MGM Energy Corp. requested a Water Licence for a ten year period for the Aput C-43 Cuttings and Injection Facility, the Board has determined, as per the reasons mentioned above, that the term of the Water Licence will be for five years.

SIGNED this 6th day of May, 2009 on behalf of the Northwest Territories Water Board.

Chairman, Northwest Territories Water Board