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July 31, 2008

VIA COURIER

Northwest Territories Water Board P.O. Box 1326 5114 - 49 Street CJCD Building Yellowknife, NT X1A 2N9

Attention: Executive Director

Dear Sir:

RE: Water Licence Application

West Langley Drilling, Completion, Testing and Abandonment

Project: 2008-2011

MGM Energy Corp. (MGM) hereby submits the Water Licence Application and Project Description for the West Langley Drilling, Completion, Testing and Abandonment Project: 2008-2011. The following documents are attached for your review and further handling:

- Water licence application Schedule III (original);
- · Water licence application questionnaire for oil and gas exploration: drilling
- Water licence application fee and first year payment, cheque # 00002169 in the amount of \$60.00:
- Project Description for the West Langley Drilling, Completion, Testing and Abandonment Project: 2008-2011 – 12 paper copies and 1 electronic copy (CD).

We trust that you will find the enclosed application and project description to be in order. If you have any questions or concerns, please don't hesitate to contact me at either shirley.maaskant@mgmenergy.com or (403) 781-7840.

Yours truly,

MGM Energy Corp.

Zolaso M &

Shirley Maaskant

Manager, Regulatory & Community Affairs

Encl.



ERRITORIE Schedule III (Subsection 6(1))

# APPLICATION FOR LICENCE, AMENDMENT OF LICENCE, OR RENEWAL OF LICENCE

AUG - 7 2008

	92	5)	APPLICATION/LICENCE NO:
1.	Name and Mailing Address of Applicant OWKNIFE	2. Address of Hea	nd office in Canada if incorporated
	MGM Energy Corp. Suite 4100 3650 7 <sup>th</sup> Avenue SW Calgary, AB T2P 3N9	Same as left	
Те	lephone: 403-781-7800 Fax: 403-781-7801	Telephone:	Fax:
3.	Location of Undertaking (describe and attach a map, indicating wa	atercourses and location of ar	y proposed waste deposits)
	The Project consists of ice road and staging site con located off Langley Island within the nearshore wate land in the Inuvialuit Settlement Region (ISR) within	rs of the Beaufort Sea.	The project area is located on Crown

4. Description of Undertaking (describe and attach plans)

routes within the Project area are illustrated in Figure 4-2.

MGM Energy Corp. (MGM) is proposing a winter drilling, completion, testing and abandonment project for 2008-2011 in the nearshore Beaufort Sea (the Project). No sumps are planned as part of the Project. The Project scope includes:

- drilling, completion, testing and abandonment of one well from an existing artificial island or an engineered ice island.
- use of barge landing and staging sites for the storage of equipment and supplies (Figure 4-2). A barge landing site means a site where barges are offloaded and/or moored in place and frozen in with the equipment and materials remaining onboard. A staging site means a site where equipment and materials can be off-loaded from barges and/or trucks and stored. The chosen barge landing and staging sites will be at, or close to, the proposed wellsite. If advance barge staging is not employed, all equipment and supplies may be mobilized from permanent land bases (e.g., Inuvik and/or Tuktoyaktuk) using ice roads.
- construction of ice roads over water and on land to provide equipment and vehicle access between the wellsite, campsites and barge landing and staging sites (see Table 5-1, Construction).

Refer to the attached MGM Energy Corp. West Langley Drilling, Completion, Testing and Abandonment Project: 2008-2011 Project Description (PD) for a detailed description of the undertaking (Section 5 - Development Summary, Section

	6 - Development Timetable)				
5.	7.	X	4. Power	6. Conservation	
	0 10 1 111		5. Agriculture	7. Recreation	
	8. Miscellaneous (describe)	_			

5.	Water Use			
	To obtain water To cross a watercourse To modify the bed or bank of a watercourse	_X	Flood Control To divert water To alter the flow of, or store, water	
	Other (describe)		25	

7. Quantity of Water Involved (liters per second, liters per day or cubic metres per year, including both quantity to be used and quality to be returned to source)

Table. Construction and Camp Water Requirements

Activity	Estimated Maximum Daily Volume (m³)
Ice road/island construction <sup>1, 2</sup>	1200
Construction camp	200
Drilling camp	300
Drilling, Completions, Testing, and Abandonment operations	200
Total	2500

#### NOTES:

Water withdrawals from the Mackenzie River, associated channels and other suitable waterbodies will be required for the construction of ice roads, ice pads, camp use and make-up water for the drilling, completion and testing operations. Fish screens meeting Department of Fisheries and Oceans Canada (DFO) guidelines (DFO 1995) will be used on all suction hoses. Potable water will be treated onsite, or supplied from the Town of Inuvik for domestic use in the camp(s). Bottled water may also be provided for consumption purposes (plastic bottles will be kept for disposal or recycling; Section 5.3.4.10).

Maximum daily withdrawal during access and well site construction is expected to be 2500 m<sup>3</sup>. After construction is completed, daily water requirements will be substantially reduced. Estimated daily water use, as outlined inTable 5-3, will vary during construction, operations and demobilization for the Project.

Of the total daily water use, 95% or more is expected to be returned to source.

8. Waste Deposited (quantity, quality, treatment and disposal)

More detailed information for all waste deposited can be found in the attached MGM Energy Corp. West Langley Drilling, Completion, Testing and Abandonment Project: 2008-2011 Project Description (PD).

#### Drilling Waste

MGM will use a high-efficiency solids control system to minimize the total volume of drilling fluids. Shale shaker systems, centrifuges and associated solids control equipment will be used to separate the solid drill cuttings from the liquid drilling fluid. An evaporation method may be used to reduce the volume of liquids. The re-use of the drilling fluid while drilling individual hole sections minimizes the amount of free liquid remaining at the end of drilling. Though fluid can be recycled to a certain extent during operations, these drilling fluids cannot be used on subsequent projects.

Solids (drill cuttings) will be collected, contained and transported to an approved disposal site by truck and/or barge or to an injection facility.

An in-ground sump for drill cuttings and fluids will not be used.

Drilling mud (fluids) will be re-injected into the wellbore at the end of the drilling process and transported to an approved disposal facility or to an injection facility by truck and/or barge.

The estimated volume for this well is 600 m<sup>3</sup> of cuttings (fine gravel and sand, along with a stiff clay-like "overflow" from the centrifuges), and about 1200 – 2000 m<sup>3</sup> of mud (unforeseen hole or mechanical problems could increase this substantially). This would represent approximately 40-50 truckloads (volumes of solids per truck are limited by weight).

<sup>&</sup>lt;sup>1</sup> Does not include ice road construction water volumes withdrawn from a Mackenzie River channel for development of roads on channels.

<sup>&</sup>lt;sup>2</sup> Does not include water taken from the Beaufort Sea or Mackenzie River channel for spray ice for island building.

Options being considered include (as described below and in Section 8.2):

- storage and transportation of the cuttings in bins or containers, and trucking and/or barging it to an approved site
  and/or cuttings and fluids injection well (cuttings may be partially or completely dried prior to shipping)
- freezing the drill cuttings and fluids in blocks for transport during the winter
- freezing cuttings and fluids on a temporary storage area, breaking it up and shipping the resulting material by truck in the winter, or placing it within leak-proof containers on barges for hauling out in the summer
- de-watering the cuttings and fluids through an evaporation process (partially or completely) using flocculation, centrifuges, thermal desorber or evaporator processes, prior to shipping it in leak-proof containers by truck or by barge
- a combination of these options

Although not currently available, should an approved injection well become available during the project lifetime, MGM would consider using cuttings and fluids injection as a method of disposal (Section 8.2.2).

### Wastewater Treatment

Two 400 barrel (63.6 m³) heated tanks will be used to store effluent during the start up and testing period (prior to discharge). It is expected that the camp will be outfitted with a membrane filtration wastewater system as used successfully during MGM's 2007-2008 drilling program. Incinolet toilets (waste incinerator toilets) may be used if supplied with the camp. Technical details of the treatment systems are provided in Appendix E of the PD.

Wastewater, including grey water and sewage, will be processed by the on-site sewage treatment system normally provided with each camp. Once water quality discharge criteria have been met, treated effluent will be released to land or will be spread on ice roads or the wellsite. MGM will follow all terms and conditions for release as outlined in the Project's Water Licence and Land Use Permit.

In the event that the treatment system cannot meet expected licensed performance (discharge) criteria, effluent will be hauled by vacuum tank truck to the municipal treatment facility in Inuvik for disposal. This contingency assumes that authorization is granted by the Town of Inuvik, and sufficient treatment capacity is available.

If the access route to Inuvik is restricted (e.g., due to poor weather), treated effluent may be collected in contained forms, then stored in a bermed ice pad to be hauled to the Inuvik facility as frozen effluent when conditions are more favourable. Alternatively, wastewater may be temporarily stored onsite in the heated tanks used during start-up.

#### Solid Waste Management

An on-site waste segregation system will be used for metals, plastics, refined oils and oily waste. The camps will have two, dual chambered diesel-fired forced air incinerators. The incinerators operate with more than one second residency time in the secondary chamber at temperatures above 1000 degree Celsius to ensure dioxins, furan destruction and emission standards for mercury. Combustible materials and food wastes will be incinerated onsite on a daily basis. Incinerator ash will be trucked out and disposed of at an appropriate disposal facility. Industrial and hazardous wastes will be transported to an approved waste management facility. Contaminated snow will be collected and melted and evaporated in a diesel-fired evaporator. Beverage containers will be recycled through local community recycling programs.

9. Other Persons or Properties Affected By This Undertaking (give name, mailing address and location; attach list if necessary)

N/A

10. Predi cted Environmental Impacts of Undertaking and Proposed Mitigation

Please, refer to Section 12 of the attached Project Description.

11. Contractor and Sub -Contractors (names, addresses and functions)

To be determined

## 12. Studies U ndertaken to Date (attach list if necessary)

Related Project Descriptions that have been successfully screened by the EISC are:

- MGM Energy Corp. Ellice, Langley and Olivier Drilling, Completion and Testing Project Winters 2007-2008, 2008-2009 and 2009-2010 (prepared by KAVIK-AXYS in 2007)
- MGM Energy Corp. Ogruknang 2D Seismic Project Winter 2007-2008, 2008-2009 or 2009-2010 (prepared by IMG-Golder in 2007)
- MGM Energy Corp. North Ellice and Olivier 3D Seismic Project Winter 2007-2008, 2008-2009 or 2009-2010 (prepared by IMG-Golder in 2007)
- MGM Energy Corp. Summer Field Assessment and Advance Barging and Staging Project 2008-2011 (prepared by KAVIK-AXYS in 2008)
- MGM Energy Corp. West Delta Winter Drilling, Completions and Testing Project 2008-2011 (prepared by KAVIK-AXYS in 2008)
- MGM Energy Corp. Cuttings and Fluid Injection Facility at Aput C-43, Winter 2008-2011 (prepared by KAVIK-AXYS in 2008)
- MGM Energy Corp. Umiak Seismic Project: 2008-2011 (prepared by IMG-Golder in 2008)

Related Project descriptions currently under review by the EISC and submitted under separate cover include:

MGM Energy Corp. Umiak Drilling, Completions, and Testing Project: 2008-2011 (prepared by KAVIK-AXYS in 2008)

## 13. Pro posed Time Schedule

Schedule for Project Activies (yearly)

- Barge Mobilization July to October 15, no activity in KIBS prior to 15 September
- Construction November to April
  - Site access November
  - Ice island December and January
- Operations (drilling, completion, and testing) January to April
- Decommissioning (drill site) April
- **Equipment Staging** 
  - Barge freeze-in sites October to May
  - Staging sites April to November
- Demobilization (ice roads) early to late April
- Demobilization (barges) after spring break-up (June 1 early July, dependent on barge company)
- Inspection/Monitoring (barges) September November (barge mobilization dependent) and May June (depending on spring breakup)

September 1, 2008 Completion date: April 20, 2009 Year 1 Start date: Completion date: April 20, 2010 Year 2 Start date: September 1, 2009 April 20, 2011 Year 3 Start date: September 1, 2010 Completion date:

Manager, Regulatory Shirley Maaskant & Community Affairs

Cano 4/08 Moraper SIGNATURE NAME TITLE

## FOR OFFICE USE ONLY

 APPLICATION FEE
 Amount:
 \$ 30.00
 Receipt No.:

 WATER USE DEPOSIT
 Amount:
 \$ 30.00
 Receipt No.: