



SAHTU Land & Water Board
Land Use Permit
Assignment – Sep 26 2018

Permit Class	Class A Land Use Permit	Permit No. S03A-008
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Subject to the Mackenzie Valley Land Use Regulations and the terms and conditions in this permit, authority is hereby granted to:

MGM Energy.

Permittee

To proceed with the land use operation described in the application of:

Signature: David Calvert	Date: October 16, 2003
Type of Land Use Operations: Exploratory Drilling Project Tunago – Nogha Wellsites K-14, B-23, E-44	
Location: 54 - 73 Km South of the community of Colville Lake, NT and North of Tunago Lake	

This permit may be assigned, extended, discontinued, suspended or cancelled pursuant to the Mackenzie Valley Land Use Regulations.

Dated at: Fort Good Hope, NT This 26th Day of September Year: 2018

Witness 


Larry Wallace (Chairman)
SAHTU Land & Water Board

Commencement Date: December 13, 2003 Expiry Date: December 12, 2008

NOTE

IT IS A CONDITION OF THIS PERMIT THAT THE PERMITTEE COMPLY WITH ANY OTHER APPLICABLE ACT, REGULATION, ORDINANCE, BY-LAW OR ORDER, DEFAULT HEREOF MAY RESULT IN SUSPENSION OR CANCELLATION OF THIS PERMIT.

THIS PERMIT SHALL BE POSTED OR BE AVAILABLE ON SITE.

If you have any questions please call the SAHTU Land & Water Board at
(867) 598-2413

**CONDITIONS ANNEXED TO AND FORMING PART OF
LAND USE PERMIT NUMBER S03A-008**

26 (1) (A) - LOCATION AND AREA

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| 1.1 | The Permittee shall not conduct this land use operation on any lands not designated in the accepted application, unless otherwise authorized in writing by the S.L.W.B. | PLANS |
| 1.2 | The Permittee shall not conduct any part of the land use operation within three hundred (300) metres of any privately owned land or structure, unless otherwise authorized in writing by the S.L.W.B. | PRIVATE
PROPERTY |

26 (1) (B) - TIME

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| 2.1 | The Permittee's Field Supervisor shall contact or meet with a Land Use Inspector at the Norman Wells office of the Department of Indian Affairs and Northern Development, telephone number (867) 587 - 2911, at least 48 hours prior to the commencement of this land use operation. | CONTACT
INSPECTOR |
| 2.2 | The Permittee shall advise the Land Use Inspector at least ten (10) days prior to the completion of the land use operation of (a) his plan for removal or storage of equipment and materials, and (b) when final clean-up and restoration of the lands used will be completed. | REPORTS
BEFORE
REMOVAL |
| 2.4 | The Permittee shall notify the Land Use Inspector at least ten (10) days prior to backfilling any sump. | BACKFILLING
NOTIFICATION |
| 2.5 | The Permittee shall not conduct any overland movement of equipment or vehicles before 0800 hours local time on November 30, unless otherwise authorized in writing by a Land Use Inspector. | START-UP
DATE |
| 2.6 | The Permittee shall not conduct any over land movement of equipment and vehicles after 0800 hours local time on March 31, unless otherwise authorized in writing by a Land Use Inspector. | SHUT-DOWN
DATE |
| 2.9 | The S.L.W.B., for the purpose of this operation, designates March 31, as spring break-up. | SPRING
BREAK-UP |

2.11 The Permittee shall remove all snow fills from stream crossings prior to spring break-up or completion of the land use operation, unless otherwise approved in writing by a Land Use Inspector **REMOVE SNOW FILLS**

NEW The Permittee shall use only clean snow in the construction of crossings. **CLEAN SNOW**

2.12 The Permittee shall restore all sumps prior to spring break-up, unless otherwise authorized in writing by the Land Use Inspector. **SUMPS/SPRING BREAK-UP**

2.13 The S.L.W.B. reserves the right to impose closure of any area to the Permittee in periods when dangers to natural resources are severe. **CLOSURE**

2.14 The Permittee shall complete all clean-up and restoration of the lands used prior to the expiry date of this Permit. **CLEAN-UP**

26 (1) (C) - EQUIPMENT

3.1 The Permittee shall not use any equipment except of the type, size, and number that is listed in the accepted application, unless otherwise authorized in writing by the Land Use Inspector. **ONLY APPROVED EQUIPMENT**

3.2 The Permittee shall equip bulldozer blades used in this operation with "mushroom" type shoes or a similar type of device which shall be extended 15 centimetres below the cutting edge of the blade. **BULLDOZER BLADES AND SHOES**

3.3 The Permittee shall use a forced-air, fuel-fired incinerator to incinerate all combustible garbage and debris. **INCINERATORS**

26 (1) (D) - METHODS AND TECHNIQUES

4.2 The Permittee shall construct and maintain winter roads with a minimum of ten (10) centimetres packed snow at all times during this land use operation. If this cannot be done, then the Permittee shall construct Ice Roads in a manner approved by a Land Use Inspector. **SNOW ROADS/ ICE ROADS**

4.13	The Permittee shall not erect camps or store material on the surface ice of streams.	STORAGE ON ICE
26 (1) (E) - TYPE, LOCATION, CAPACITY AND OPERATION OF FACILITIES		
5.1	The Permittee shall not locate any sump within one hundred (100) metres of the normal high water mark of any stream.	SUMPS FROM WATER
5.2	The Permittee shall maintain all drill wastes at least 1.2 metres below the active soil layer at all times.	SUMPS FREEBOARD
5.3	The Permittee shall backfill and restore all sumps prior to the expiry date of this Permit.	BACKFILL SUMPS
5.4	The Permittee shall backfill all sumps in such a manner that drill waste is maintained below the 1.2 metre freeboard.	BACKFILL SUMPS-HOW
5.5	The Permittee shall: <ul style="list-style-type: none"> (a) Place all excavated material over the sump area to ensure ponding does not occur. (b) Overlap the material a minimum of two (2) metres beyond the edges of the existing sump wall. 	BACKFILL SUMP OVERLAP
5.7	The Permittee shall ensure that the land use area is kept clean and tidy at all times.	CLEAN WORK AREA
26 (1) (F) - CONTROL OR PREVENTION OF FLOODING, EROSION AND SUBSIDENCE OF LAND		
6.2	The Permittee shall remove any obstruction to natural drainage caused by any part of this land use operation.	NATURAL DRAINAGE
6.3	The Permittee shall not cut any stream bank unless authorized in writing by the Land Use Inspector.	STREAM BANKS
6.4	The Permittee shall not use any material other than water in the construction of ice bridges	ICE BRIDGE MATERIAL

6.5	The Permittee shall not allow any ice bridge to hinder the flow of water in any stream.	ICE BRIDGE
6.6	The Permittee shall install culverts or bridges as construction of the road progresses, unless otherwise authorized in writing by the Land Use Inspector.	INSTALLATION CULVERTS BRIDGES
6.7	The Permittee shall not use the bed of streams for access routes except for the purpose of crossing the streams, unless otherwise authorized by the Land Use Inspector.	STREAM BEDS - ACCESS
6.8	The Permittee shall locate all lines, trails and rights-of-way to be constructed parallel to streams a minimum of thirty (30) metres from any stream except at crossings, unless otherwise authorized in writing by the Land Use Inspector.	PARALLELLING STREAMS
NEW	All culverts placed in crossings must be marked with a pole which extrudes from the crossing surface to a minimum of 8 feet.	
NEW	All locations of culverts must be reported to the Inspector within 48 hours of their placement.	
NEW	All culverts must be removed prior to the demobilization of men and equipment from the permitted area.	
6.10	The Permittee shall not ford wet streams, unless authorized in writing by a Land Use Inspector	NO FORDING OF STREAMS
6.20	The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.	VEHICLES MOVEMENT FREEZE-UP
6.21	The Permittee shall suspend overland travel of equipment or vehicles if rutting occurs.	SUSPEND OVERLAND TRAVEL
6.23	The Permittee shall place the trees and debris in a windrow on the downhill side of the clearing.	WINDROW PLACEMENT

26 (1) (G) - USE, STORAGE, HANDLING AND DISPOSAL OF CHEMICAL OR TOXIC MATERIAL

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| 7.2 | The Permittee shall not use the following materials during the drilling operation without the prior written approval of the S.L.W.B.: | PROHIBITED CHEMICALS |
| | Chlorinated phenols (Dowicide B, etc.)
Compounds composed primarily of heavy metals Asbestos | |
| 7.3 | The Permittee shall submit to the S.L.W.B. a contingency plan, for chemical spills, for use during the construction and operation of the winter road and associated facilities. | CONTINGENCY PLAN |
| NEW | The Permittee shall deposit all gel/chem. waste into a sump | DRILL WASTE DISPOSAL |
| NEW | All Oil Based Muds and cuttings produced during the use of this mud must be removed for disposal to an approved waste disposal facility. | |
| NEW | The Permittee shall not deposit at any time Oil Based drill waste into a sump. | DRILL WASTE |
| NEW | The Permittee shall not allow any drilling waste to escape containment. | DRILL WASTE CONTAINMENT |
| 7.7 | The Permittee shall dispose of all toxic or persistent substances in a manner as approved, in writing, by the S.L.W.B. | WASTE CHEMICAL DISPOSAL |
| NEW | The Permittee shall remove all fluids used to wash machinery and equipment. | RIG WASH DISPOSAL |
| 7.9 | The Permittee shall report all spills immediately in accordance with instructions contained in "Spill Report" form N.W.T. 1086(10/79). 24 hour spill report line (867)920-8130. | REPORT CHEMICAL AND PETROLEUM |
| 7.10 | The Permittee, prior to the discharge of fluids from any sump, shall carry out any analysis of the fluid in a manner prescribed by the S.L.W.B. and obtain their written approval to discharge. | SUMP DISCHARGE |

26 (1) (H) - WILDLIFE AND FISHERIES HABITAT

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| 8.1 | The Permittee shall not unnecessarily damage wildlife habitat in conducting this land use operation. | HABITAT
DAMAGE |
| 8.6 | The Permittee shall not destroy or damage beaver dams. | BEAVER DAMS |
| 8.7 | The Permittee shall not destroy or damage muskrat lodges. | MUSKRAT
LODGES |

**26 (1) (I) THE STORAGE, HANDLING, AND DISPOSAL OF
REFUSE OR SEWAGE**

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| 9.1 | The Permittee shall deposit all sewage into a sump or as directed by a Land Use Inspector | SEWAGE
DISPOSAL |
| 9.4 | The Permittee shall keep all garbage and debris in a covered metal container until disposed of. This container shall be marked with the Permittee's name. | GARBAGE
CONTAINERS |
| 9.5 | The Permittee shall burn all garbage and debris at least daily. | GARBAGE
DISPOSAL |
| 9.7 | The Permittee shall remove all noncombustible garbage and debris from the land use area to a disposal site approved in writing by a Land Use Inspector | REMOVE
GARBAGE |
| 9.11 | The Permittee shall remove from the "Mackenzie Valley", all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material. | REMOVE
WASTE
MATERIAL |
| 9.12 | The Permittee shall dispose of all combustible waste petroleum products by incineration or removal. | WASTE
PETROLEUM
DISPOSAL |

**26 (1) (J) - HISTORICAL AND ARCHAEOLOGICAL SITES
AND BURIAL GROUNDS**

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| 10.1 | The Permittee shall not operate any machinery or equipment within (150) metres of any known Historical or Archaeological Site and Burial Ground. | NO
ACTIVITY |
| 10.2 | The Permittee shall make every effort to ensure that no Historical or Archaeological Site or Burial Ground will be affected by this operation. | SITES
PROTECTION |

NEW The Permittee shall conduct a follow-up effects monitoring program designed to assess impacts to archaeological resources and focused on all project areas (including, but not limited to, drill sites, storage locations, access routes) involved in this coming winter's exploration, or in past Apache Canada exploration programs. **ARCHEOLOGICAL FOLLOW-UP EFFECTS MONITORING PROGRAM**

NEW The Permittee shall undertake an archaeological impact assessment in areas identified for future exploration the following summer. The Prince of Wales Northern Heritage Centre should be contacted prior to the assessment. **ARCHEOLOGICAL ASSESSMENT**

26 (1) (L) - SECURITY DEPOSIT

12.1 The operator shall deposit with the S.L.W.B. a security deposit in the amount of nil pursuant to Section 26 (1) (L) of the Mackenzie Valley Land Use Regulations. **SECURITY DEPOSIT**

12.2 The Permittee shall be liable for any cost of damages over and above the amount of the security deposit. **LIABILITY FOR DAMAGES**

26 (1) (M) - PETROLEUM FUEL STORAGE

13.1 The Permittee shall report in writing to the Land Use Inspector the location and quantity of all petroleum fuel caches within ten (10) days after the establishment. **REPORT FUEL LOCATION**

13.2 The Permittee shall not place any petroleum fuel storage containers within one hundred (100) metres of the normal high water mark of any stream. **FUEL BY STREAM**

NEW The Permittee shall locate mobile fuel facilities on land. **FUEL ON LAND**

13.4 The Permittee shall not allow petroleum products to spread to surrounding lands or into water bodies. **FUEL CONTAINMENT**

NEW Any fuel storage container or group of containers (sloops) that do not have secondary containment shall have one extra fuel storage container on site equal to, or greater than, the size of the largest fuel container. This does not include 45 gallon drums. **FUEL/EXTRA CONTAINER**

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| 13.6 | The Permittee shall construct a dyke around each stationary fuel container or group of stationary fuel containers where any one container has a capacity exceeding 4 000 litres. | DYKE/FUEL CONTAINERS |
| 13.7 | The Permittee shall line the dyke and area enclosed by the dyke with a type of plastic film impermeable liner approved by the Land Use Inspector. | LINE DYKE |
| 13.8 | The volume of the dyked area shall be 10% greater than the capacity of the largest fuel container placed therein. | CAPACITY |
| 13.9 | The Permittee shall ensure that the dyke and the area enclosed by the dyke shall be impermeable to petroleum products at all times. | IMPERMEABLE DYKE |
| 13.10 | The Permittee shall: <ul style="list-style-type: none"> (a) examine all fuel storage containers for leaks a minimum of once every <u>1</u> days. (b) repair all leaks immediately. | CHECK FOR LEAKS |
| 13.11 | The Permittee shall maintain a watchman at the site at all times when fuel is stored on site. | WATCHMAN |
| 13.12 | The Permittee shall submit to the S.L.W.B. a contingency plan, for petroleum spills, for use during the construction and operation of the winter road and associated facilities. | CONTINGENCY PLAN |
| 13.13 | The Permittee shall not use bladders for storing petroleum products. | BLADDERS PROHIBITED |
| 13.14 | The Permittee shall not use bladders for transporting petroleum products. | BLADDERS PROHIBITED |
| 13.16 | The Permittee shall seal all container outlets except the outlet currently in use. | SEAL OUTLET |

26 (1) (N) - DEBRIS AND BRUSH DISPOSAL

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| 14.1 | The Permittee shall dispose of all debris and brush by: <ul style="list-style-type: none"> (a) windrowing the debris and brush to the side of the line, and | BRUSH DISPOSAL |
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- (b) making breaks in the windrow of at least seven (7) metres wide at intervals of not more than three hundred and thirty (330) metres.
- 14.2 The Permittee shall make the windrow of brush and debris lie flat and compact by: **BRUSH DISPOSAL**
- (a) bucking the material into suitable lengths and lopping the branches from the stem, and/or
 - (b) crushing with heavy machinery in order to compact the material.
- 14.3 The Permittee shall ensure that windrows are separated from standing timber. **WINDROWS LOCATION**
- 14.12 The Permittee shall dispose of all brush and timber prior to removal of men or equipment from the land use area. **BRUSH DISPOSAL**
- 14.13 The Permittee shall spread all cut debris and brush over the areas cleared, prior to completion of the operation or expiry of the Land Use Permit. **SPREAD BRUSH**
- 14.14 The Permittee shall salvage all portions of trees cleared that are larger than thirteen (13) centimeters in diameter. **SALVAGE TIMBER**
- 14.15 The Permittee shall neatly pile all salvaged wood at locations specified in writing by a Land Use Inspector **PILE WOOD**
- 26 (1) (O) - RESTORATION OF THE LANDS**
- 15.1 The Permittee shall establish vegetation on all areas stripped of vegetation during this land use operation to a minimum of seventy (70%) per cent ground cover, unless otherwise authorized in writing by the Land Use Inspector. **REVEGETATE STRIPPED AREA**
- 15.2 The Permittee shall apply grass seed and fertilizer to areas designated in writing by a Land Use Inspector. **REPLANT DESIGNATED AREAS**
- 15.3 The Permittee shall commence and foster Revegetation on all parts of the land used, as may be directed by a Land Use Inspector, within one year of the completion of the land use operation. **RE-ESTABLISH VEGETATION**

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| 15.4 | The Permittee when clearing land shall:
(a) Save all vegetation removed from the land use area.

(b) Place the vegetation over the land use area prior to expiry of the Land Use Permit. | SAVE
VEGETATION |
| 15.5 | The Permittee shall save the organic soil stripped from the excavation area. | SAVE
ORGANIC SOIL |
| 15.6 | The Permittee shall place the organic soil over the disturbed area prior to the expiry date of this permit. | PLACE
ORGANIC SOIL |
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| 26 (1) (P) - DISPLAY OF PERMITS AND PERMIT NUMBERS | | |
| 16.1 | The Permittee shall display a copy of this Permit in a conspicuous place in each campsite established to carry out this land use operation. | DISPLAY
PERMIT |
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| 26 (1) (Q) - MATTERS NOT INCONSISTENT WITH THE REGULATIONS | | |
| 17.5 | The Permittee shall provide in writing to the Land Use Inspector at least forty-eight (48) hours prior to commencement of this land use operation, the following information:

(a) person, or persons, in charge of the field operation to whom notices, orders, and reports may be served;

(b) alternates;

(c) all the indirect methods for contacting the above person(s). | IDENTIFY
AGENT |
| 17.6 | The Permittee shall, while conducting the operation, make every effort to avoid covering or destroying traps or snares that may be found in the area. | TRAPS
PROTECTION |
| 17.7 | The Permittee shall restore any trails used by trappers or hunters by slashing any and all trees that may fall across these paths or trails and by removing any other obstructions such as snow piles or debris that may be pushed across the trails. | TRAILS
RESTORATION |
| 17.8 | The Permittee shall not feed wildlife. | NO FEEDING
WILDLIFE |

NEW The Permittee shall submit a Final Plan in Digital Format compatible with ARC GIS software for the footprint used and a map at a scale of 1:250,000 for the operations.

**FINAL
PLANS**

17.9 **PART 1** - In this Permit:

"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 the drilling of bore holes and includes bore hole cuttings.

"dogleg" means clearing a line, trail or right-of-way that is curved sufficiently so that no part of the clearing beyond the curve is visible when approached from either direction.

NEW The Permittee must construct fencing around the perimeter of drill waste sumps.

**FENCING
DRILL SUMPS**



Witness

SAHTU Land and Water Board



Larry Wallace (Chairman)

