



Yamoga Building, Old Airport Road  
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Tel: 867-598-2413 Fax: 867-598-2325  
[www.slwb.com](http://www.slwb.com)

August 17, 2023

File: S22A-002

Terence Hughes  
Regulatory and Community Affairs Advisor  
MGM Energy  
Suite 2800, 421, 7<sup>th</sup> Avenue SW  
Calgary, Alberta T2P 4K9

Sent by email

Dear Mr. Hughes,

**Re: MGM Energy I-78 Well Abandonment and Site Closure and Reclamation Project - Issuance Package – Land Use Permit S22A-002 – Industrial Oil and Gas – 110 km SE of Norman Wells, Northwest Territories, Tuli't'a District**

The Sahtu Land and Water Board (Board) met on August 15, 2023, and considered the Application Package from MGM Energy (MGM) for Land Use Permit (Permit) S22A-002 for the East Mackay I-78 Well Abandonment and Site Closure and Reclamation Project in the Tuli't'a District, NT in accordance with the *Mackenzie Valley Resource Management Act*.

The Board has approved Land Use Permit S22A-002 (attached) for a term of five years, effective August 15, 2023 and expiring August 14, 2028. The Permit is supported by the attached Board's Reasons for Decision. These documents are posted to the Board's Public Registry.<sup>1</sup>

#### Security Deposit

A security deposit is required prior to commencement of Project activities, as per Permit Condition 42, SECURITY DEPOSIT and subsection 32(3) of the Mackenzie Valley Land Use Regulations. The security deposit is **payable to the Government of the Northwest Territories (GNWT)** and should be submitted to the following individual, to whom questions regarding security should also be directed:

<sup>1</sup> See SLWB Online Registry [www.slwb.com](http://www.slwb.com) for S22A-002

Onida Banksland, Land Use Advisor  
 GNWT – Department of Environment and Climate Change (GNWT-ECC)  
 Bag Service #1  
 Inuvik, NT X0E 0T0  
 Phone: 867-777-8900

### Submission Requirements

Please refer to Attachment A of the Permit for a complete summary and timetable of submissions required for the Permit. The Board’s decisions on submissions that were considered in conjunction with the Application Package are set out below, detailed in the Reasons for Decision, and summarized in Table A, attached.

#### *Management Plans – Approved with Revisions Required*

The Board requires that the following Plans be revised to include all changes detailed in the attached Reasons for Decision and submitted by the dates outlined in the following table. The revised Plans will be considered approved when the Permittee receives written confirmation of conformity. The Permittee may not commence Project activities until the Plans are approved.

Condition # and Title	Title of Plan (Version)	Version and Date Revision Due
36, WASTE MANAGEMENT PLAN	Waste Management Plan (1.0) <sup>2</sup>	<b>V2.0; 90 days after Permit issuance</b>
55, SPILL CONTINGENCY PLAN	Spill Contingency Plan (1.0) <sup>3</sup>	<b>V1.1; 90 days after Permit issuance</b>
70, ENGAGEMENT PLAN	Engagement Plan (1.0) <sup>4</sup>	<b>V1.1; 90 days after Permit Issuance</b>

### Inspectors

The Inspectors referred to in the Permit can be contacted at the regional GNWT-ECC offices.<sup>5</sup>

### Permit Processes and Additional Information

Sections 5 and 6 of the Board’s *Guide to the Land Use Permitting Process*<sup>6</sup> (Guide) contain detailed information on permit enforcement and potential post-issuance processes, such as amendments to conditions, and assignment to another company. Please be familiar with these sections of the Guide and reach out to Board staff with any questions about Board processes related to the Permit.

<sup>2</sup> See SLWB Online Registry for [S22A-002 – MGM Energy – Application – Environmental Protection Plan – Oct 17\\_22.pdf](#)

<sup>3</sup> See SLWB Online Registry for [S22A-002 – MGM Energy – Application – Spill Response Plan – Jun 29\\_22.pdf](#)

<sup>4</sup> See SLWB Online Registry for [S22A-002 – MGM Energy – Application – Engagement Plan – Jun 29\\_22.pdf](#)

<sup>5</sup> See GNWT-ECC Regional Offices webpage (<https://www.ecc.gov.nt.ca/en/regional-offices>) for regional contact information.

<sup>6</sup> See SLWB Policies and Guidelines webpage for MVLWB [Guide to the Land Use Permitting Process](#) (2020).

Full cooperation of MGM Energy is anticipated and appreciated. Please contact Bonnie Bergsma at [bonnie.bergsma@slwb.com](mailto:bonnie.bergsma@slwb.com) or (867) 496-2778 with any questions or concerns regarding this letter.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'T. Bremner', with a large, stylized initial 'T'.

Interim Chair, Sahtu Land and Water Board

BCC'd to:           Tulit'a District Distribution List  
                          Trevor Bremner – GNWT-ECC Sahtu Regional Office  
                          Onida Banksland - GNWT-

Attached:           Table A: Board Directions for revision of Management Plans  
                          Land Use Permit S22A-002  
                          Reasons for Decision

**Table A: Board Directions for revision of Management Plans**

Document	Additional Information / Revisions Required
<p><b>Waste Management Plan (WMP)</b></p>	<ul style="list-style-type: none"> <li>• Revise and resubmit as a stand-alone document.</li> <li>• Revisions to include the following:               <ul style="list-style-type: none"> <li>- flow/drainage pattern maps.</li> <li>- geotechnical characteristics.</li> <li>- potential environmental effects of the wastes generated.</li> </ul> </li> <li>• Updated to provide additional information on waste disposal once details on turnkey management are received from the contractor.</li> <li>• Include the reference to the “good environmental and industrial practices” in Section 2 Hazard Review.</li> <li>• Provided written agreement for final location for sewage disposal.</li> </ul>
<p><b>Spill Contingency Plan (SCP)</b></p>	<ul style="list-style-type: none"> <li>• Revisions to include the following               <ul style="list-style-type: none"> <li>- Type and quantity of hazardous materials stored on-site, if applicable, and location.</li> <li>- List of on-site resources, including spill response equipment and locations.</li> <li>- Existing preventative measures.</li> <li>- Response organization.</li> <li>- Updated contacts once contracts are finalized.</li> </ul> </li> </ul>
<p><b>Engagement Plan</b></p>	<ul style="list-style-type: none"> <li>• update Table 4 – contacts.</li> </ul>



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**MGM Energy**  
**Land Use Permit S22A-002**

Subject to the *Mackenzie Valley Resource Management Act* and the Mackenzie Valley Land Use Regulations and the terms and conditions in this permit, authority is hereby granted to:

\_\_\_\_\_ MGM Energy  
(Permittee)  
of \_\_\_\_\_ Suite 2800, 421, 7<sup>th</sup> Avenue SW, Calgary, Alberta T2P 4K9  
(Mailing Address)

hereinafter called the Licensee, to proceed with the following undertaking, subject to the annexed definitions and conditions contained therein:

Project Title:	I-78 Well Abandonment and Site Closure and Reclamation Project
Location:	110 km SE of Norman Wells NT, Tulit'a District
Purpose:	Oil and Gas Well Exploration - Abandonment and Final Closure
Type:	Type A
Effective Date:	August 15, 2023
Expiry Date:	August 14, 2028

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THIS PERMIT SHALL BE POSTED OR BE AVAILABLE ON SITE

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**Philippe di Pizzo**

**Interim Chair, Sahtu Land and Water Board**

**Bonnie Bergsma, M.Sc. Regulatory-Coordinator  
Specialist**

## Conditions Annexed to and Forming Part of Land Use Permit # S22A-002

### Part A: Scope of Permit

1. This Permit entitles the Permittee to conduct the following land-use operation:
  - a) mobilization and demobilization of heavy equipment;
  - b) use of equipment for winter access road and ice pad construction and maintenance;
  - c) use of equipment for well abandonment activities;
  - d) use of earth-moving equipment for reclamation activities during winter;
  - e) use and storage of fuel;
  - f) use of camp sites for more than 400 person-days;
  - g) activities related to post-closure reclamation, remediation, and monitoring.
2. This Permit is issued subject to the conditions contained herein with respect to the use of land for the activities and area identified in Part A, item 1 of this Permit.
3. Compliance with the terms and conditions of this Permit does not excuse the Permittee from its obligation to comply with the requirements of any applicable Federal, Territorial, Deline, Tłıchǫ, or Municipal laws.

### Part B: Definitions (defined terms are capitalized throughout the Permit)

**Act** - the *Mackenzie Valley Resource Management Act*.

**Board** - the Sahtu Land and Water Board established under Part 3 of the Act.

**Closure and Reclamation** - the process and activities that facilitate the return of areas affected by the Project to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment, human activities, and the surrounding environment.

**Dogleg** - the clearing of 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.

**Durable Land** - land that is able to withstand repeated use, such as gravel or sand with minimal vegetative cover.

**Engagement Plan** - a document, developed in accordance with the Board's *Engagement and Consultation Policy* and the *Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits*, that clearly describes how, when, and which engagement activities will occur with an affected party during the life of the project.

**Fuel Storage Container** - a container for the storage of petroleum or allied petroleum products with a capacity of less than 230 litres.

**Fuel Storage Tank** - a closed container for the storage of petroleum or allied petroleum products with a capacity of more than 230 litres.

**Greywater** - all liquid wastes from showers, baths, sinks, kitchens, and domestic washing facilities but not including toilet wastes.

**Habitat** - the area or type of site where a species or an individual of a species of wildlife naturally occurs or on which it depends, directly or indirectly, to carry out its life processes.

**Inspector** - an Inspector designated by the Minister under the Act.

**Minister** - the Minister of Indian Affairs and Northern Development Canada or the Minister of the Government of the Northwest Territories – Department of Lands, as the case may be.

**Ordinary High-Water Mark** - the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the “active channel/bank-full level” which is often the 1:2 year flood flow return level. In inland lakes, wetlands, or marine environments, it refers to those parts of the Watercourse bed and banks that are frequently flooded by water so as to leave a mark on the land and where the natural vegetation changes from predominately aquatic vegetation to terrestrial vegetation (excepting water tolerant species). For reservoirs, this refers to normal high operating levels (full supply level).

**Permittee** - the holder of this permit.

**Permafrost** - ground (soil or rock) that remains at or below 0°C for at least two consecutive years.

**Professional Engineer** - a person registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists to practice as a Professional Engineer in the Northwest Territories as per the territorial *Engineering and Geoscience Professions Act*, and whose professional field of specialization is appropriate to address the components of the Project at hand.

**Safety Data Sheet** - a technical document, typically written by the manufacturer or supplier of a chemical, that provides information about the hazards associated with the product, advice about safe handling and storage, and emergency response procedures.

**Secondary Containment** - containment that prevents liquids that leak from Fuel Storage Tanks or containers from reaching outside the containment area and includes double-walled Tanks, piping, liners, and impermeable barriers.

**Sewage** - all toilet wastes and Greywater.

**Shut Down Period** - The period of time between April 15 to November 15 each year, for the purpose of the well abandonment operation only.

**Spill Contingency Plan** - a document, developed in accordance with Aboriginal Affairs and Northern Development Canada's *Guidelines for Spill Contingency Planning* that describes the set of procedures to be implemented to minimize the effects of a spill.

**Spring Break-up** – April 15 each year, for the purpose of the well abandonment operation, or as revised by an Inspector.

**Toxic Material** - any substance that enters or may enter the environment in a quantity or concentration or under conditions such that it:

- a) Has or may have an immediate or long-term harmful effect on the environment or its biological diversity;
- b) Constitutes or may constitute a danger to the environment on which life depends; or
- c) Constitutes or may constitute a danger in Canada to human life or health.

**Waste** - any garbage, debris, chemical, or Toxic Material to be used, stored, disposed of, or handled on land, and also as defined in section 51 of the Act.

**Waste Management Plan** - a document, developed in accordance with the Board's Guidelines for Developing a Waste Management Plan, that describes the methods of Waste management from Waste generation to final disposal.

**Watercourse** - a natural body of flowing or standing water or an area occupied by water during part of the year, and includes streams, springs, swamps and gulches but does not include groundwater.



**Part C: Conditions Applying to All Activities** (headings correspond to subsection 26(1) of the Mackenzie Valley Land Use Regulations)

**26(1)(a) Location and Area**

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|----|---|-------------------------------------|
| 1. | The Permittee shall only conduct this land-use operation on lands designated in the application.  | <b>LOCATION OF ACTIVITIES</b>       |
| 2. | The Permittee shall not conduct any part of the land-use operation within 300 metres of any privately owned or leased land or structures, including cabins used for traditional activities, unless otherwise approved by the Board. | <b>PRIVATE PROPERTY SETBACK</b>     |
| 3. | The Permittee shall locate all camps on Durable Land or previously cleared areas, and a minimum of 100 metres from the Ordinary High Water Mark.  | <b>CAMP SETBACK</b>                 |
| 4. | The Permittee shall use an existing campsite, as described in the complete application.   | <b>USE EXISTING CAMP</b>            |
| 5. | The Permittee shall locate all lines, trails, and rights-of-way to be constructed parallel to any Watercourse a minimum of 100 metres from the Ordinary High Water Mark, except at crossings.                                       | <b>PARALLEL WATERCOURSE SETBACK</b> |
| 6. | The Permittee shall not construct parallel lines or roads, unless an existing line or road cannot be used.  | <b>PARALLEL ROADS</b>               |
| 7. | The Permittee shall confine the width of the right-of-way to a maximum of 10 metres.  | <b>WIDTH RIGHT-OF-WAY</b>           |

**26(1)(b) Time**

- |     |   |   |
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| 8.  | At least 48 hours prior to the initial commencement of the land-use operation, the Permittee's Field Supervisor shall notify the Board and contact an Inspector at (867) 587-7205   | <b>INITIAL NOTIFICATION – CONTACT INSPECTOR</b> |
| 9.  | At least 48 hours prior to commencement of the land-use operation, the Permittee shall provide the following information, in writing, to the Board and an Inspector:<br><ul style="list-style-type: none"> <li>a) the name(s) of the person(s) in charge of the field operation;</li> <li>b) alternates; and</li> <li>c) all methods for contacting the above person(s).</li> </ul> | <b>IDENTIFY AGENT</b>                           |
| 10. | At least ten days prior to the Shut Down Period or Spring Break-up, the Permittee shall advise an Inspector of:   | <b>REPORTS BEFORE SEASONAL REMOVAL</b>          |

- a) the plan for removal or storage of equipment and materials; and
- b) when cleanup and Progressive Reclamation of the land used will be completed.

11. At least ten days prior to the completion of the land-use operation, the Permittee shall advise an Inspector of:
- a) the plan for removal or storage of equipment and materials;
  - b) when final cleanup and reclamation of the land used will be completed; and
  - c) when the Final Plan will be submitted.

**REPORTS BEFORE  
FINAL REMOVAL**

**26(1)(c) Type and Size of Equipment**

12. The Permittee shall only use equipment of a similar type, size, and number to that listed in the complete application.

**USE APPROVED  
EQUIPMENT**

**26(1)(d) Methods and Techniques**

13. The Permittee shall Dogleg lines, trails and right-of-ways that approach Watercourses or public roads.

**DOGLEG  
APPROACHES**

14. Prior to the movement of any vehicle that exerts pressure on the ground in excess of 35 kPa, the Permittee shall scout proposed lines and routes to select the best location for crossing streams and avoiding terrain obstacles.

**DETOURS AND  
CROSSINGS**

15. The Permittee shall construct and maintain the overland portion of winter roads with a minimum of 10 cm of packed snow and/or ice at all times during this land-use operation.

**WINTER ROADS**

16. The Permittee shall not erect camps or store material, other than that required for immediate use, on the ice surface of a Watercourse.

**STORAGE ON ICE**

**26(1)(e) Type, Location, Capacity, and Operation of All Facilities**

17. The Permittee shall ensure that the land use area is kept clean at all times.

**CLEAN WORK AREA**

**26(1)(f) Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land**

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| 18. The Permittee shall insulate the ground surface beneath all structures associated with this land-use operation to prevent:   | <b>PERMAFROST<br/>PROTECTION</b>               |
| a) any vegetation present from being removed;  |  |
| b) the melting of Permafrost; and  |  |
| c) the ground settling and/or eroding.   |  |
| 19. The land-use operation shall not cause obstruction to any natural drainage.  | <b>NATURAL<br/>DRAINAGE</b>                    |
| 20. The Permittee shall install and maintain suitable erosion control structures as the land-use operation progresses.   | <b>PROGRESSIVE<br/>EROSION CONTROL</b>         |
| 21. The Permittee shall apply appropriate mitigation at the first sign of erosion.   | <b>REPAIR<br/>EROSION</b>                      |
| 22. The Permittee shall only conduct off-road vehicle travel on snow-covered surfaces.   | <b>OFF-ROAD VEHICLE<br/>TRAVEL</b>             |
| 23. The Permittee shall prepare the site in such a manner as to prevent rutting or gouging of the ground surface.  | <b>PREVENTION OF<br/>RUTTING</b>               |
| 24. The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting or gouging.  | <b>SUSPEND<br/>OVERLAND TRAVEL</b>             |
| 25. 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.   | <b>VEHICLE<br/>MOVEMENT<br/>FREEZE-UP</b>      |
| 26. The Permittee shall only use clean water and snow in the construction of ice bridges and snow fills.   | <b>CONSTRUCT<br/>ICE BRIDGES<br/>SNOWFILLS</b> |
| 27. Prior to Spring Break-up or completion of the land-use operation, the Permittee shall clean up and either remove or v-notch all ice bridges and snowfills from stream crossings, unless otherwise authorized in writing by an Inspector. | <b>REMOVE<br/>ICE BRIDGES/<br/>SNOWFILLS</b>   |
| 28. The Permittee shall minimize approach grades on all Watercourse crossings.   | <b>MINIMIZE<br/>APPROACH</b>                   |
| <b>26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material</b>  |  |
| 29. The Permittee shall dispose of all Toxic Material as described in the approved Waste Management Plan.  | <b>WASTE CHEMICAL<br/>DISPOSAL</b>             |

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| 30. The Permittee shall dispose of all combustible Waste petroleum products by removal to an approved disposal facility.   | <b>WASTE<br/>PETROLEUM<br/>DISPOSAL</b>             |
| 31. The Permittee shall provide written notification to the Board and Inspector a minimum of 10 days prior to the initial deposit of Waste, demonstrating that the licenced disposal facility has agreed to accept the Waste and has the capacity to receive the volumes of Waste requested. | <b>NOTIFICATION OF<br/>SOLID WASTE<br/>DISPOSAL</b> |

**26(1)(h) Wildlife and Fish Habitat**

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| 32. The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation.   | <b>HABITAT DAMAGE</b>       |
| 33. The Permittee shall not destroy or damage beaver dams or lodges, muskrat push-ups, raptor nests, bear dens and other wildlife hibernacula.  | <b>WILDLIFE ABODES</b>      |
| 34. The Permittee shall use Wildlife Monitors to conduct Bear Den and other wildlife abode surveys in the fall prior to Project commencement in areas within 800 metres of the Project footprint surveys. | <b>BEAR DEN<br/>SURVEYS</b> |
| 35. If an active Bear Den is detected in the Project area, the Permittee shall contact GNWT-ENR to discuss mitigation options.  | <b>REPORT DENS</b>          |

**26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage**

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| 36. The Permittee shall dispose of all Waste as described in the <b>Waste Management Plan</b> , once approved, and shall annually review the plan and make any necessary revisions to reflect changes in operations, technology, chemicals, or fuels, or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval. | <b>WASTE<br/>MANAGEMENT<br/>PLAN</b> |
| 37. The Permittee shall keep all garbage and debris in a secure container until disposal.  | <b>GARBAGE<br/>CONTAINER</b>         |
| 38. The Permittee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan.  | <b>SEWAGE DISPOSAL<br/>- PLAN</b>    |

**26(1)(j) Protection of Historical, Archaeological, and Burial Sites**

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| 39. The Permittee shall not operate any vehicle or equipment within 150 metres of a known or suspected historical or archaeological site or within 500 m of a burial ground. | <b>ARCHAEOLOGICAL<br/>BUFFER</b> |
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40. The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site. **SITE DISTURBANCE**

41. The Permittee shall, where a suspected archaeological or historical site, or burial ground is discovered: **SITE DISCOVERY AND NOTIFICATION**

- a) immediately suspend operations on the site; and
- b) notify the Board at (867) 598-2413 or an Inspector at (867) 587-7205, and the Prince of Wales Northern Heritage Centre at 767-9347 ext. 71251 or ext. 71255.

**26(1)(k) Objects and Places of Recreational, Scenic, and Ecological Value**

**26(1)(l) Security Deposit**

42. The Permittee shall deposit with the Minister a security deposit in the amount of \$1,305,001 following issuance of this Permit. **SECURITY DEPOSIT**

43. All costs to remediate the area under this Permit are the responsibility of the Permittee. **RESPONSIBILITY FOR REMEDIATION COSTS**

**26(1)(m) Fuel Storage**

44. The Permittee shall: **REPAIR LEAKS**  
a) examine all Fuel Storage Containers and Tank for leaks; and  
b) repair all leaks immediately.

45. The Permittee shall place Fuel Storage Containers and or Tanks a minimum of 100 metres from the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. **FUEL STORAGE SETBACK**

46. The Permittee shall ensure that all fuel caches have adequate Secondary Containment. **FUEL CACHE SECONDARY CONTAINMENT**

47. The Permittee shall set up all refueling points with Secondary Containment. **SECONDARY CONTAINMENT - REFUELING**

48. The Permittee shall not allow petroleum products to spread to surrounding lands or Watercourses. **FUEL CONTAINMENT**

49. The Permittee shall locate mobile fuel facilities on land when the facilities are stationary for more than 12 hours. **FUEL ON LAND**

50. The Permittee shall mark all Fuel Storage Containers and Tanks with the Permittee's name. **MARK CONTAINERS AND TANKS**

- |  |  |
|--|--|
| 51. The Permittee shall mark all stationary fuel caches and fuel storage facilities with flags, posts, or similar devices so that they are at all times plainly visible to local vehicle travel.   | <b>MARK FUEL<br/>LOCATION</b>                    |
| 52. The Permittee shall have a maximum of 234,200 litres of fuel stored on the land use site at any time, unless otherwise approved by the Board.  | <b>MAXIMUM FUEL<br/>ON SITE</b>                  |
| 53. Within ten days of the establishment of any fuel cache, the Permittee shall report the location and quantity of the cache in writing to the Board and an Inspector.  | <b>REPORT FUEL<br/>LOCATION AND<br/>QUANTITY</b> |
| 54. The Permittee shall seal all outlets of Fuel Storage Containers and store the containers on their sides with the outlets located at 3 and 9 o'clock, except for containers currently in use.   | <b>SEAL OUTLET</b>                               |
| 55. The Permittee shall comply with the <b>Spill Contingency Plan</b> , once approved, and shall annually review the plan and make any necessary revisions to reflect changes in operations, technology, chemicals, or fuels, or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval.   | <b>SPILL<br/>CONTINGENCY<br/>PLAN</b>            |
| 56. Prior to commencement of the land-use operation the Permittee shall ensure that spill-response equipment is in place to respond to any potential spills.   | <b>SPILL RESPONSE</b>                            |
| 57. All equipment that may be parked for two hours or more, shall have a haz-mat/drip tray under it or be sufficiently diapered. Leaky equipment shall be repaired immediately.  | <b>DRIP TRAYS</b>                                |
| 58. The Permittee shall clean up all leaks, spills, and contaminated material immediately.   | <b>CLEAN UP SPILLS</b>                           |
| 59. During the period of this Permit, if a spill occurs or is foreseeable, the Permittee shall: <ul style="list-style-type: none"> <li>a) implement the approved Spill Contingency Plan;</li> <li>b) report it-immediately using the NU-NT Spill Report Form by one of the following methods: <ul style="list-style-type: none"> <li>• Telephone: (867) 920-8130</li> <li>• Fax: (867) 873-6924</li> <li>• E-mail: <a href="mailto:spills@gov.nt.ca">spills@gov.nt.ca</a></li> <li>• <u>Online: Spill Reporting and Tracking Database</u></li> </ul> </li> <li>c) within 24 hours, notify the Board and an Inspector; and</li> <li>d) within 30 days of initially reporting the incident, submit a detailed report to the Board and an Inspector, including descriptions of causes, response actions, and any changes to procedures to prevent similar occurrences in the future. Any</li> </ul> | <b>REPORT SPILLS</b>                             |

updates to this report shall be provided to the Board and an Inspector in writing as changes occur.

**26(1)(n) Methods and Techniques for Debris and Brush Disposal**

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| 60. The Permittee shall not clear areas larger than identified in the complete application. | <b>MINIMIZE AREA<br/>CLEARED</b> |
|---|----------------------------------|

**26(1)(o) Restoration of the Lands**

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|---|------------------------------------|
| 61. All outstanding liabilities and obligations of the Permittee in relation to work performed or required to be performed under Land Use Permit S12A-001 are fully incorporated into and subsumed under this Permit, and the Permittee must therefore complete the restoration and other obligations set out in or incurred under Permit S12A-001, as well as such further obligations as may be set out in or incurred under this Permit. | <b>TRANSFER OF<br/>LIABILITIES</b> |
|---|------------------------------------|

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| 62. Prior to the end of the land-use operation, the Permittee shall complete all cleanup and restoration of the lands used. | <b>FINAL CLEANUP<br/>AND RESTORATION</b> |
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| 63. Prior to the end of the land-use operation, the Permittee shall prepare the site in such a manner as to facilitate natural revegetation. | <b>NATURAL<br/>VEGETATION</b> |
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| 64. The Permittee shall initiate active revegetation of areas with less than 70% native vegetation regrowth following post-reclamation monitoring. | <b>ACTIVE<br/>REVEGETATION –<br/>RESEEDING</b> |
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- |  |                               |
|--|-------------------------------|
| 65. Prior to the end of the land-use operation, the Permittee shall restore any trails impacted by the land-use operation by removing fallen trees and any other obstructions from the trails. | <b>TRAILS<br/>RESTORATION</b> |
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**26(1)(p) Display of Permits and Permit Numbers**

- |  |                       |
|--|-----------------------|
| 66. The Permittee shall display a copy of this Permit in each campsite established to carry out this land-use operation. | <b>DISPLAY PERMIT</b> |
|--|-----------------------|

**26(1)(q) Biological and Physical Protection of the Land**

- |   |                                |
|---|--------------------------------|
| 67. The Permittee shall not move any equipment or commence any drilling when one or more caribou are within 500 metres. | <b>CARIBOU<br/>DISTURBANCE</b> |
|---|--------------------------------|

- |  |  |
|--|--|
| 68. If nesting areas are encountered during the course of operations, the Permittee shall minimize all activity so as to not disturb them. | <b>MIGRATORY BIRD<br/>NEST<br/>DISTURBANCE</b> |
|--|--|

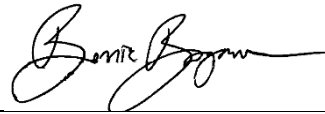
- |   |                           |
|---|---------------------------|
| 69. If any plan is not approved by the Board, the Permittee shall revise the plan according to the Board's direction and re-submit it to the Board for approval.  | <b>RESUBMIT PLAN</b>      |
| 70. The Permittee shall comply with the <b>Engagement Plan</b> , once approved, and shall annually review the plan and make any necessary revisions to reflect changes in operations or as directed by the Board. Revisions to the plan shall be submitted to the Board for approval. | <b>ENGAGEMENT PLAN</b>    |
| 71. All revised plans submitted to the Board shall include a brief summary of the changes made to the plan.   | <b>SUMMARY OF CHANGES</b> |

**Signed on behalf of the SAHTU LAND AND WATER BOARD**



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**Philippe di Pizzo, Interim Chair**



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**Bonnie Bergsma, Witness**



**ATTACHMENT A: Summary and Timetable of Submissions Required**

<b>Part C, Condition No.</b>	<b>Condition Title</b>	<b>Submission, Notification, Advisement and to Whom</b>	<b>When Required</b>
8	<b>INITIAL NOTIFICATION – CONTACT INSPECTOR</b>	Written Notification to Board Contact Inspector at 867-587-7205	At least 48 hours prior to the initial commencement of the land-use operation
9	<b>IDENTIFY AGENT</b>	In writing to Board and Inspector	At least 48 hours prior to commencement of the land-use operation
10	<b>REPORTS BEFORE SEASONAL REMOVAL</b>	Advise the Inspector	At least ten days prior to the Shut Down Period or Spring Break-up
11	<b>REPORTS BEFORE FINAL REMOVAL</b>	Advise the Inspector	At least ten days prior to the completion of the land-use operation
31	<b>NOTIFICATION OF SOLID WASTE DISPOSAL</b>	Written Notification to Board and Inspector	A minimum of 10 days prior to the initial deposit of Waste
35	<b>REPORT DENS</b>	Contact GNWT-ENR to discuss mitigation options	If an active Bear Den is detected in the Project area
36	<b>WASTE MANAGEMENT PLAN</b>	Review the plan and make any revisions to reflect changes, or as directed by the Board.	Annually
41	<b>SITE DISCOVERY AND NOTIFICATION</b>	Immediately suspend operations and Notify PWNHC, and/Board and/or Inspector	Where a suspected archaeological or historical site, or burial ground is discovered
42	<b>SECURITY DEPOSIT</b>	Deposit with the Minister	Following issuance of this Permit
53	<b>REPORT FUEL LOCATION AND QUANTITY</b>	Written Report to the Board and an Inspector	Within ten days of the establishment of any fuel cache
55	<b>SPILL CONTINGENCY PLAN (SCP)</b>	review the plan and make any revisions to reflect changes, or as directed by the Board.	Annually
59	<b>REPORT SPILLS</b>	Implement SCP & Report to NT-NU Notify Board and Inspector Follow-up Report	Immediately Within 24 hours Within 30 days
70	<b>ENGAGEMENT PLAN</b>	Review the plan and make any revisions or updates to the engagement record, or as directed by the Board.	Annually
71	<b>SUMMARY OF CHANGES</b>	Include a summary of changes made.	All revised Plans submitted to the Board



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## Reasons for Decision

Issued pursuant to paragraphs 22(2)(a) and 40(2)(c) of the Mackenzie Valley Land Use Regulations (MVLUR) and section 72.25 of the *Mackenzie Valley Resource Management Act* (MVRMA) and subsection 26(1) of the *Waters Act*.

Water Licence and Land Use Permit Applications	
<b>File Number</b>	S22L1-002 and S22A-002
<b>Company</b>	MGM Energy
<b>Project</b>	MGM Energy I-78 East Mackay Well Abandonment and Site Reclamation and Closure Project
<b>Location</b>	110 km SE Norman Wells, near Tulit'a, NT
<b>Activity</b>	Industrial Water Use for Oil and Gas Exploration Wellsite Abandonment and Final Closure
<b>Date of Decision</b>	August 15, 2023

This is the decision of the Sahtu Land & Water Board (the Board) with respect to the applications deemed complete October 26, 2022, for issuance of a Land Use Permit and Water Licence made by:

**MGM Energy**  
**Suite 2800, 421, 7<sup>th</sup> Avenue SW**  
**Calgary, Alberta T2P 4K9**

for: Oil and Gas Well Exploration Project, the I-78 Wellsite Abandonment and Site Reclamation and Final Closure Project, including Water Use related to Industrial undertakings for the construction and operation of a winter ice access road and ice pads on lease, staging, campsite, and storage areas; temporary storage, use, and transfer of fuel; use of heavy equipment; and use of a temporary campsite,

at 110 km SE of Norman Wells, on the southwest side of the Mackenzie River across from Tulit'a, Northwest Territories.

With respect to this application, written notice was given to 17 organizations within the Tulit'a District of the Sahtu Settlement Area and 20 outside of the settlement area in accordance with Sections 63 & 64 of the *Mackenzie Valley Resource Management Act* (MVRMA). There was no Public Hearing held in association with this Application.

## **DECISION**

On August 15, 2023, the Sahtu Land and Water Board (SLWB or Board) met and considered the Applications made by MGM Energy (Applicant) to the Board for Water Licence (Licence) S22L1-002 and Land Use Permit (Permit) S22A-002 for the use of Water and the deposit of Waste for the I-78 Wellsite Abandonment and Site Reclamation and Closure Project (the Project) in Tulit'a District of the Sahtu Settlement Area.

The Board is satisfied that the Project has been screened pursuant to s.124(1) of the *Mackenzie Valley Resource Management Act* (MVRMA), and that any potential adverse environmental effects were insignificant or mitigable with known technology, and as such the application could proceed through the regulatory process. The Board, after reviewing the submission of the Applicant, and the evidence gathered during the regulatory proceeding, and having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope, and intent of the MVRMA and Regulations made thereunder has made the following decisions:

- 1) To issue Water Licence S22L1-002 for a term of five years subject to the terms and conditions contained therein;
- 2) To issue Land Use Permit S22A-002 for a term of five years subject to the terms and conditions contained therein;
- 3) To require a total security for land liability for the Permit of \$1,305,001 to be posted immediately upon issuance;
- 4) To require a total security for water liability for the Licence of \$1,511,814 to be posted immediately upon issuance;
- 5) To approve Version 1.1 of the Engagement Plan.
- 6) To require revisions to Version 1.0 of the Waste Management Plan which the Applicant must submit as a stand-alone Version 2.0 of the Plan within 90 days of the effective date of the Licence and Permit for a conformity confirmation for final approval;
- 7) To require revisions to Version 1.0 of the Spill Contingency Plan, which the Applicant must submit as Version 1.1 of the Plan within 90 days of the effective date of the Licence and Permit for a conformity confirmation for final approval; and

- 8) To require revisions to Version 2.0 of the Closure and Reclamation Plan, which the Applicant must submit as Version 2.1 of the Plan within 90 days of the effective date of the Licence and Permit for a conformity confirmation for final approval.

## **PROJECT BACKGROUND**

MGM submitted new applications for a 5-year term Land Use Permit<sup>1</sup> and 5-year term Water Licence<sup>2</sup> for the abandonment and closure of I-78 East Mackay Project which includes a Wellsite Area and Staging Area. The Wellsite Area is located 110 km southeast of Norman Wells, is 2.4 ha in size, and includes a Wellhead, Recovered Wellhead Bare Area, and three groundwater monitoring wells. The Staging Area (0.8 ha) is located approximately 22 km north of the wellsite along the bank of the Mackenzie River. A third-party trailer is in the southwest corner of the staging area (Map 1).

Construction and drilling activities for the I-78 East Mackay well occurred in the 2012-2013 winter season under Permit S12A-001 and Licence S12L1-001 and the well has remained suspended since. Environmental monitoring and inspections of the location and wellhead have been conducted periodically over the years. The Permit and Licence were extended in 2017 for two years. Section 26(1)(B) (2.14) states *“The Permittee shall complete all clean up and restoration of the lands used prior the expiry date of this permit.”* The Permit and Licence expired in 2019 prior to abandonment and reclamation being completed. In the current applications, MGM is planning on abandoning the wellbore, removing the wellhead, and completing reclamation activities at the lease. Reclamation of the staging area is complicated because of the presence of third-party equipment on a portion of the area and the responsibility for its’ removal and clean-up of potentially contaminated soil is under discussion between MGM Energy and GNWT-ECC.

### **A. Project Activities**

The Project will include the following land-use operations:

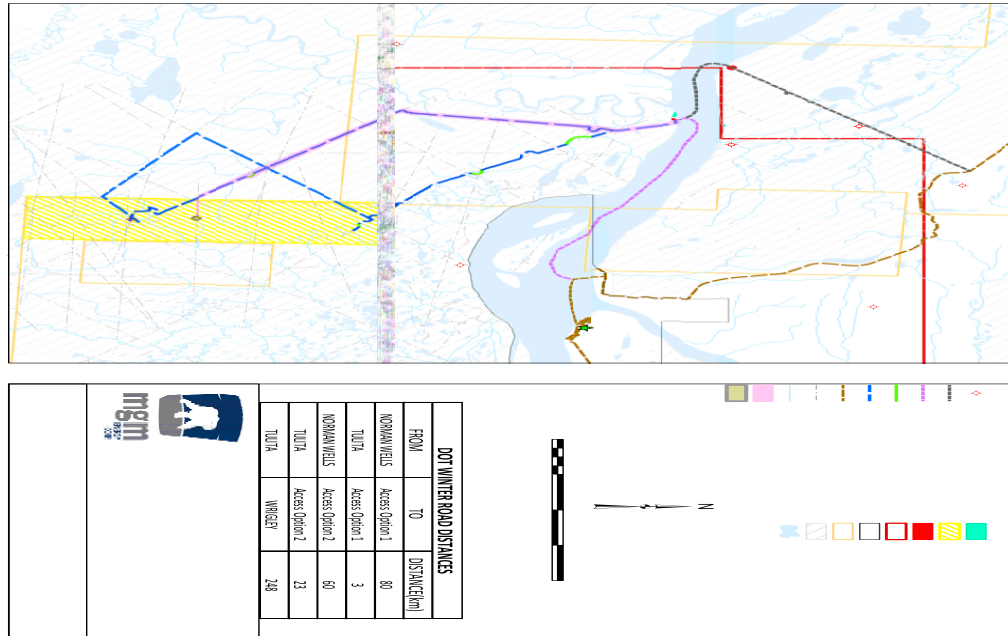
- Staging and mobilization - movement of equipment to the project area or region.
- Construction and operation of 35 km ice road and ice pads.
- Abandonment operations for one sweet well.
- Decommissioning three groundwater wells.
- Reclamation that may include scarification, seeding, recontouring, in-situ remediation and soil removal, if necessary.
- Demobilization of MGM Energy equipment and material from staging area, well site, camps, and other associated infrastructure.

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<sup>1</sup> See SLWB Online Registry [www.slwb.com](http://www.slwb.com) for [S22A-002 – MGM Energy – Land Use Permit Application – Jun29 22.pdf](#)

<sup>2</sup> See SLWB Online Registry [S22L1-002 – MGM Energy – Water Licence Application – Jun 29 22.pdf](#)

- Monitoring site conditions post abandonment and completing any necessary reclamation activities.



**Map 1: Project Area Location Map for MGM Energy I-78**

## B. Project Activities Schedule

Reclamation and monitoring activities are expected to occur during the entire term of the Permit and Licence (2023-2028). Winter construction, camp usage, well abandonment activities, and major remediation activities are planned for the first year of the authorizations during winter 2023-2024. Post abandonment monitoring will be summer to fall helicopter-based with a three-person crew, use of portable (singable) equipment and minimal site disturbance is anticipated. A proposed schedule is presented in Table 1.

**Table 1 Proposed Schedule of Activities**

Action	Rationale	General Timeframe
<b>Well abandonment, remediation, and reclamation earthworks.</b>	<ul style="list-style-type: none"> <li>OROGO requires completion of well abandonment by 2025.</li> <li>see above description of remediation and reclamation activities.</li> </ul>	Q4 2023 to Q1 2024
<b>Monitor wellsite for settling and native vegetation re-establishment.</b>	<ul style="list-style-type: none"> <li>To ensure that revegetation is achieving &gt;70% native species cover.</li> <li>To monitor for and control undesirable / non-native invasive species presence.</li> <li>To check that settling around the wellhead</li> </ul>	2023-2026

	has not increased from the 2020 remediation and reclamation activities.	
<b>Sample surface soils to evaluate and monitor any residual soil or water exceedances.</b>	<ul style="list-style-type: none"> <li>To monitor potential residual concentrations in surface soils or standing water.</li> </ul>	2023-2026
<b>Site closure.</b>	<ul style="list-style-type: none"> <li>Conduct a site visit with the inspector with the intention of receiving final regulatory closure on the site.</li> </ul>	2026 or 2027

### C. Main Issues Raised During the Review

A discussion of all Board considerations and evidence for the main issues is presented in the Staff Report to the Board<sup>3</sup>. The main issues raised during the review and their resolution included:

**C1.** Project description, potential impacts and mitigation measures, work schedule, work personnel and camps, equipment and fuel requirements, need more detail especially for completing the security estimate.

MGM PROVIDED MORE DETAIL FOR SECURITY (see below).

The Board recommended that the following Plans described in C2 to C6 be revised and resubmitted within 90 days following issuance, with conformity to be checked by Board staff.

**C2.** Recommendation to prepare updated contact list (Table 4) in the **Engagement Plan v. 1.1**.

**C3.** Recommendation for a stand-alone **Waste Management Plan** rather than as part of the Environmental Protection Plan.

**C4. Waste Management Plan v. 1.0** requires additional information and revisions, including:

- a) flow/drainage pattern maps.
- b) geotechnical characteristics.
- c) potential environmental effects of the wastes generated.
- d) waste disposal once details on turnkey management are received from the contractor.
- e) Include references to “good environmental and industrial practices” referred to in Section 2 Hazard Review.

**C5. Spill Contingency Response Plan v. 1.0** requires additional information and revisions, including:

- a. Describe type and amount of hazardous materials to be collected, on-site resources and disposal method(s).
- b. Existing preventative measures (Section 4).
- c. Ensure Response organization and Appendix C include updated list of contacts.

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<sup>3</sup> See SLWB Online Registry – [S22L1-002 and S22A-002 – MGM East Mackay Staff Report – Aug 15 23.pdf](#)

- d. Provide locations of spill response equipment, what type of spill response equipment will be on site in case of a summer release.

**C6. Closure and Reclamation Plan v 1.0** lacks detail and conformity with guidelines.

- i) review the TEK Study for closure goals and objectives and demonstrate how Traditional Knowledge was accommodated into the Closure and Reclamation Plan as per Table 2, CR# 13 in the Staff Report.
- ii) Include the as-built Plan of the Lease (as located on SLWB public registry S12A-001)
- iii) include the criteria that will be used to meet soil and water quality guidelines in the revised CRP and indicate the standard to be used for soils will be Parkland.

**Closure and Reclamation Plan v 2.0** requires some additional information and clarifications.

- iv) Correct editorial errors (e.g. vegetation cover objective is to achieve greater than (>) 70% native vegetation cover, not less than (<) 70%.
- v) Present the goals, principals, objectives, actions and activities, and criteria for success in a manner more consistent with the Guidelines as suggested at the beginning of section 6.4.4 of the Staff Report.

**C7.** Summer work needs to be detailed, including any equipment to be used, activities to be undertaken, and any new impacts and mitigation measures.

MGM RESPONSE - SUMMER WORK WILL BE HELICOPTER-BASED WITH NO STREAM CROSSINGS OR HEAVY EQUIPMENT REQUIRED. THE TERRAIN IS STABLE SO ISSUES OF EROSION AND DAMAGE TO PERMAFROST ARE NOT EXPECTED.

**C8.** MGM Security Estimate compared with ARKTIS estimate is vastly underestimated. Section D presents a summary of the Board's considerations for security.

**D. Reclaim Security Estimate Comparisons – GNWT-ENR (ARKTIS) and MGM Energy**

- As part of the Applications package, MGM submitted a reclamation security estimate for the project based on the RECLAIM Model 7.1 for Oil and Gas. GNWT-ENR retained ARKTIS Solutions Incorporated (ARKTIS) to provide a reclamation security estimate for the Project. GNWT-ENR recommended that the total reclamation security is \$4,962,917 with a land and water liability of \$2,192,322 and \$2,770,565 respectively. ENR also recommended that the Board require posting of the security to GNWT immediately upon the Board's decision.
- GNWT-ENR also indicated that further refinement of the security estimate could be made if MGM Energy were to verify and provide more information on cost items that ARKTIS made certain assumptions about, including details on wells and facilities, buildings and equipment, chemicals and contaminated soil management, and mobilization/demobilization.

- The difference in magnitude between ENR’s estimate of close to \$5 Million and that of MGM Energy’s initial estimate of approximately \$750,000 is significant.
- In response to the GNWT request for additional information on cost items, MGM Energy provided a more detailed Project execution plan, with refined equipment lists, fuel requirements, camp person-days and source locations for the required equipment. MGM Energy also requested that the reclamation and clean-up of the third-party trailer at the staging area be removed from the GNWT estimate, as this is and was never part of their Project.

#### **E. MGM Energy Response to ARKTIS Assumptions**

As presented in the Staff Report, the following assumptions *(a) to (g) – in italics*, were made by ARKTIS for the estimate they prepared for GNWT-ENR. Following each is the MGM Energy response with revised estimates based on more accurate information.

- a. The security estimate prepared for GNWT by ARKTIS assumed that all equipment would be sourced and mobilized/demobilized from British Columbia.*

MGM indicated that most of the equipment will be sourced from Norman Wells and Fort Nelson, B.C.

- b. ARKTIS included costing for fuel mobilization based on the original application.*

MGM Energy submitted a revised fuel estimate for the Project with mobilization from Norman Wells.

- 225,000 litres of diesel fuel.
- 8,200 litres propane.
- 1,000 litres gasoline.

- c. ARKTIS prepared their estimate based on the original application which included a 40-person sleigh camp and a 40-person temporary camp. They assumed and included costs for the dismantling of the 40-person temporary camp. All costs for mobilization and demobilization were assumed from B.C.*

MGM Energy submitted a revised estimate for a 10-person sleigh camp and a 20–30-person temporary camp also supplied and mobilized from Norman Wells.

- d. ARKTIS included costs for worker mobilization and accommodations at a rate of 40 persons x 120 days plus 30 persons for 60 days (Total of 6,600 person days)*

MGM Energy submitted a revised estimate of personnel requirements and timing for a total of 898 person days.

- e. ARKTIS assumed sewage would be disposed of in B.C.*

Based on initial conversations with the Town of Norman Wells, MGM expects to be able to dispose of sewage locally.



f. ARKTIS estimate did not review any securities currently held for the Project site or for any previous authorizations.

MGM currently has the following security posted under the following permit and licence:

Permit S12A-001	\$234,423.00	for land liability
Licence S12L1-001	<u>\$553,579.00</u>	for water liability
Total security	<b>\$788,002.00</b>	

g. ARKTIS assumed one sweet well drilled between 1,000 to 2,000 m depth, no vent flow/gas migration, and four completion zones.

According to AECOM, July 2013<sup>4</sup>, details of the drilling operation for the I-78 exploration oil well include the following: Drilling depth is 2,000 m; the well is sweet (no gases); the number of completions was two (2).

h. ARKTIS included costing of approximately \$7,000 for removal of the 3<sup>rd</sup> party equipment and 1m<sup>3</sup> contaminated soil by MGM Energy and assumed that 50% of the area would require recontouring and revegetation. They argue that the Staging Area was part of the original permitted area and therefore must be reclaimed, including the 3<sup>rd</sup> party equipment.

MGM Energy is not seeking permanent closure of the Staging Area, due to the presence of the 3<sup>rd</sup> party equipment with potential minor soil contamination that will require remediation, and potentially revegetation. They do not agree with GNWT-ENR that the clean-up of this area is their responsibility and their cost to assume. Board agrees with MGM Energy that it should not be their cost to clean up the 3<sup>rd</sup> party materials; however, the Board also agrees with GNWT that the Staging Area should be cleaned up. If MGM assumes this task, they should be provided relief from their security for the costs to clean up that area.

## **F. Board Potential Revised Reclaim Security Estimate**

SLWB staff copied the GNWT-ARKTIS RECLAIM estimate and adjusted the numbers for the cost items above based on MGM response. No other values were changed. The potential revised RECLAIM estimate is presented in Table 9. Note that there are other areas that were identified as potentially requiring additional information to verify the assumptions made by ARKTIS, thus this is presented as a potential revised estimate.

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<sup>4</sup> See SLWB Online Registry for [S12A-001 - Groundwater, Surface Water, and Water Supply Well Monitoring Report](#) – Jul 2013.pdf

The Board has the authority to set the security. In their submission to the Board, dated June 29, 2023, MGM Energy requested that the Board consider Section 32 (2) of the Mackenzie Valley Land Use Regulations and Section 11 (2) of the Water Regulations as part of the Security Adjustment. These considerations include a) the ability of MGM to pay; b) the past performance of MGM; c) the prior posting of security instruments to the government; and d) the probability and significance of any environmental damage.

For consideration, MGM submits that it has provided and maintained security instruments related to its activities at I-78 and has and is currently providing numerous more under the jurisdiction of the SLWB. MGM is a wholly owned subsidiary of Paramount Resources Ltd. (“Paramount”), the two entities have a history of providing and maintaining security of over 20 years. The assessment of potential for environmental impacts related to this Project, the risk is low.

MGM accepts that GNWT may want to submit an updated security estimate based on the information included in their response. Further, MGM is willing to meet and discuss the project scope (unchanged), updated equipment list, sourcing location(s) and project security if requested.

Board is of the opinion that the GNWT security is overinflated, and GNWT have also indicated willingness to review and discuss a security revision based on new information and confirmation of assumptions. Therefore, it does not seem reasonable for the GNWT to request the posting of security immediately after the Board issues the authorizations, unless the security is set by the Board.

The revised estimate prepared by Board staff demonstrates that ARKTIS (GNWT) should revise the estimate based on the updated information.

**Table 9: SLWB Potential Revised RECLAIM Estimate based on MGM verification of ARKTIS assumptions.**

<b>SUMMARY OF COSTS</b>				
<b>CAPITAL COSTS</b>	<b>COMPONENT NAME</b>	<b>COST</b>	<b>LAND LIABILITY</b>	<b>WATER LIABILITY</b>
WELLS AND FACILITIES		\$114,442	\$57,221	\$57,221
BUILDINGS AND EQUIPMENT (Construction Execution)		\$4,984	\$4,320	\$664
CHEMICALS AND CONTAMINATED SOILD MANAGEMENT		\$2,601	\$0	\$2,601
SURFACE AND GROUNDWATER MANAGEMENT		\$0	-	\$0
INTERIM CARE AND MAINTENANCE		\$22,082	-	\$22,082
INFLATION (2014 TO 2022) ON CAPITAL COSTS	21.81%	\$31,430	\$13,422	\$18,008
	<b>SUBTOTAL: Capital Costs</b>	<b>\$175,539</b>	<b>\$74,963</b>	<b>\$100,575</b>
	<b>PERCENT OF SUBTOTAL</b>		<b>43%</b>	<b>57%</b>
<b>INDIRECT COSTS</b>		<b>COST</b>	<b>LAND LIABILITY</b>	<b>WATER LIABILITY</b>
MOBILIZATION/DEMOBILIZATION/WORKER ACCOMODATIONS		\$2,336,622	\$997,846	\$1,338,776
POST-CLOSURE MONITORING AND MAINTENANCE		\$146,882	\$62,725	\$84,157
ENGINEERING	5%	\$8,777	\$3,748	\$5,029
PROJECT MANAGEMENT	1%	\$1,755	\$750	\$1,006
HEALTH AND SAFETY PLANS/MONITORING & QA/QC	1%	\$1,755	\$750	\$1,006
BONDING/INSURANCE	1%	\$1,755	\$750	\$1,006
CONTINGENCY	10%	\$17,554	\$7,496	\$10,058
CONTINGENCY - MOBILIZATION, ACCOMODATIONS AND POST-CLOSURE	15%	\$372,526	\$159,086	\$213,440
MARKET PRICE FACTOR ADJUSTMENT	0%	\$0	\$0	\$0
INFLATION (2014 TO 2022) MOBILIZATION/DEMOBLIZATION AND POST-CLOSURE MONITORING AND MAINTENANCE	21.81%	\$541,652	\$231,311	\$310,342
	<b>SUBTOTAL: Indirect Costs</b>	<b>\$3,429,279</b>	<b>\$1,464,461</b>	<b>\$1,964,818</b>
<b>TOTAL COSTS</b>		<b>\$3,604,817</b>	<b>\$1,539,424</b>	<b>\$2,065,393</b>
MGM CURRENT SECURITY HELD BY GNWT		\$788,002	\$234,423	\$553,579
<b>POTENTIAL ADDITIONAL SECURITY REQUIREMENTS FOR EAST MACKAY I-78 ABANDONMENT PROJECT</b>		<b>\$2,816,815</b>	<b>\$1,305,001</b>	<b>\$1,511,814</b>

## G. Recommendation Options for Security

Board staff recommended four options for the Board to choose in setting security for this Project:

- a) The Board may accept **the \$4.2 Million GNWT estimate prepared by ARKTIS** (estimate minus the current securities held for the Project).
- b) The Board may accept the revised potential estimate of **\$2.8 Million prepared by Board staff** based on MGM updates provided.
- c) The Board may accept the **MGM estimate of \$736,00** based on past performance, securities already held (\$788,000), ability to pay, and the low risk of environmental damage to the surrounding area.
- d) The Board may **defer setting security** for a period sufficient to allow the GNWT and MGM to revise their estimates.

Given the uncertainty with the estimates prepared by ARKTIS (too high) (option a)) and MGM (Option c) - equivalent to the security already held by GNWT), it is reasonable to either accept the Board staff estimate based on new information supplied by MGM Energy (option b)) which meets the two estimates approximately halfway, or to include conditions in the Licence to allow for more refinement of the estimate by the two parties for the Licence (water liability) (option d)). Option d) is possible for the Licence because the security amount is placed within a Schedule (2), and the Board may update the Schedule at their discretion as per Part B, Condition 14: **UPDATES TO SCHEDULE(S) AND COMPLIANCE DATE(S)**.

For Permits, there is no option to delay setting the security without the need for an amendment.

In their deliberations, the Board requested information on other security amounts that the Board has approved for other similar projects.

- **Suncor Energy Inc.** is planning to abandon three wells in the Colville Lake area and have posted a total security deposit of **\$3.7 M** divided into \$1,966,498 for S22L1-001 and \$1,757,670 for S22A-001.
- **Cenovus Energy** has abandoned all their wells and retain a total security of **\$1,555,560** for Interim Care and Maintenance activities at the Slater River Program site (\$1,166,670 for Permit S20X-006, and \$388,890 for Licence S20L1-004). Security for previous wells that have been abandoned was approximately \$1.2 M.

Based on the evidence provided, the Board chose option b) for the following reasons:

- The new information and details provided by MGM were sufficient to address the uncertainties and assumptions pointed out by ARKTIS, and for staff familiar with using the Reclaim estimate tool, to revise the estimates for each of the ARKTIS assumptions that had new information.
- The revised estimate addressed the areas where the greatest differences in the estimates were (equipment and fuel mobilization/demobilization; number of person-days required).
- A total security of \$2.8 M is reasonable for this Project and in keeping with other Board approved security amounts for similar projects in the Sahtu.
- MGM Energy has posted other security instruments and has maintained ongoing monitoring of wellsites in the Sahtu.

## **REASONS**

The Board's reasons for this decision are as follows:

- All new Project activities and updated mitigation measures were screened by the Board on August 2, 2023, and as there were no significant adverse impacts and/or public concerns made known to the Board, it was sent to the Review Board for notification, with no referral to Environmental Assessment during the 10-day pause period, that ended on August 12, 2023.
- It is the opinion of the Board that the terms and conditions attached to Permit S22A-002, and Licence S22L1-002, pursuant to the MVRMA and the Waters Act will ensure that any potential environmental impacts resulting from Project activities are not significant. The effects of the Project on the environment will be positive overall, and activities will be conducted in an environmentally responsible manner using best practices and in accordance with environmental considerations and mitigation measures outlined in the Land Use Permit and Water Licence.
- It is the opinion of the Board that the Project conforms with the Sahtu Land Use Plan and has met referral obligations to the Sahtu Land Use Planning Board as outlined in section 61 of the MVRMA.
- The well abandonment, and reclamation of land proposed by the Proponent is of a nature contemplated by the MVRMA and the Sahtú Dene and Métis Comprehensive Land Claim Agreement.
- The Board is satisfied that appropriate consultation has been conducted in accordance with the approved Engagement Plan and that advice has been sought and considered, in accordance with sections 63 and 64 of the MVRMA.

- It is the opinion of the Board that adequate security has been allocated for the Project in consideration of other similar projects.
- The Board has approved the Waste Management Plan (WMP), and Spill Contingency Plan, and the Closure and Reclamation Plan (CRP) with some revisions required prior to Project commencement.

The Proponent has been notified through provisions included in the scope of the Land Use Permit that compliance with the terms and conditions of the Permit has no effect on the Permittee's responsibility for compliance with the requirements of any other legislation.

The Board will provide any referenced material or documents and/or reasons for decision for any specific clause or clauses contained within the Applications if requested to do so in writing.

SIGNED this 16<sup>th</sup> day of August 2023 on behalf of the SAHTU Land & Water Board.

A handwritten signature in black ink, appearing to read 'P. Di Pizzo', with a stylized flourish at the end.

Philippe Di Pizzo

Interim Chair, Sahtu Land and Water Board