

Type B Water Licence S22L1-002

MGM Energy – Well Abandonment, Remediation and Closure and Reclamation Project

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- Note: **Green highlighting** indicates conditions where dates or times are to be confirmed.
Blue highlighting indicates Board staff notes for reviewers

Part A: Scope and Defined Terms

Scope:

1. This Licence entitles the Licensee to use Water and deposit Waste for Industrial activities during the Well Abandonment, Remediation and Closure and Reclamation Project in the Colville Lake area of the NWT. **SCOPE**

The scope of this Licence includes the following:
 - a) Well abandonment activities with associated winter road and ice pad construction and camp activities; reclamation, remediation, monitoring and site closure activities;
 - b) Withdrawal of Water for ice road and ice pad construction, downhole abandonment, and camp activities;
 - c) Depositing of Waste to approved facilities;
 - d) Construction of watercourse crossing(s) with snowfills; and
 - e) Remediation of wellsites and drill Sumps, and associated Closure and Reclamation activities.

2. The scope of this Licence is as described in the Preliminary Screening for S22L1-002, dated [REDACTED]. **SCOPE – PRELIMINARY SCREENING**

Note: The Preliminary Screening for S12L1-001 and S12A-001, dated July 23, 2012 did not screen for abandonment, closure and reclamation activities.

3. This Licence is issued subject to the conditions contained herein with respect to the use of Water and the deposit of Waste in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Any change made to the *Mackenzie Valley Resource Management Act* or *Waters Act* and/or the Mackenzie Valley Federal Areas Waters Regulations or Waters Regulations that affects licence conditions and defined terms will be deemed to have amended this Licence. **LEGISLATION SUBJECT TO CHANGE**

4. Compliance with this Licence does not relieve the Licensee from responsibility for compliance with the requirements of any applicable federal, territorial, Déllıne, or municipal legislation. **LEGISLATIVE COMPLIANCE**

Defined Terms:

Analyst – an Analyst designated by the Minister under subsection 65(1) of the *Waters Act*.

Board – the Sahtu Land and Water Board established under Part 3 of the *Mackenzie Valley Resource Management Act*.

Closure Cost Estimate - an estimate of the cost to close and reclaim the Project.

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 and human activities.

Closure and Reclamation Plan (CRP) – a document, developed in accordance with this Licence, that clearly describes the Closure and Reclamation for the Project.

Discharge – a direct or indirect deposit or release of any Water or Waste to the Receiving Environment.

Drilling Waste – Waste material specifically produced from drilling activity.

Engagement Plan – a document, developed in accordance with the MVLWB *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.

Greywater – all liquid Waste from showers, baths, sinks, kitchens, and domestic washing facilities, but does not include Toilet Waste.

Groundwater – as defined in section 1 of the *Waters Regulations*: all water in a zone of saturation below the land surface, regardless of its origin.

Hazardous Waste - a Waste which, because of its quantity, concentration, or characteristics, may be harmful to human health or the environment when improperly treated, stored, transported, or discharged.

Inspector – an Inspector designated by the Minister under subsection 65(1) of the *Waters Act*.

Licensee – the holder of this Licence.

Minister – the Minister of the Government of the Northwest Territories (GNWT) – Environment and Natural Resources.

Ordinary High-Water Mark – the usual or average level to which a Watercourse rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing Watercourses (rivers, streams), this refers to an 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 predominantly aquatic vegetation to terrestrial vegetation

(excepting Water tolerant species). For reservoirs, this refers to normal high operating levels (full supply level).

Progressive Reclamation – Closure and Reclamation activities conducted during the operating phase of the Project.

Project – the undertaking described in Part A, Conditions 1 and 2.

Receiving Environment – the natural environment that, directly or indirectly, receives any deposit of Waste from the Project.

RECLAIM – the Government of the Northwest Territories’ model for estimating Closure and Reclamation costs.

Remediation – the removal, reduction, or neutralization of substances, Wastes, or hazardous materials from a site in order to prevent or minimize any adverse effects on the environment and public safety, now or in the future.

Sewage – all Toilet Wastes and Greywater.

Spill Contingency Plan (SCP) – a document developed for the Project in accordance with INAC’s *Guidelines for Spill Contingency Planning*.

Toilet Wastes – all human excreta and associated products, not including Greywater.

Traditional Knowledge – the cumulative, collective body of knowledge, experience and values built up by a group of people through generations of living in close contact with nature. It builds upon the historic experiences of a people and adapts to social, economic, environmental, spiritual, and political change.

Unauthorized Discharge – a Discharge of any Water or Waste not authorized under this Licence

Waste – as defined in section 1 of the *Waters Act*:

- a) a substance that, if added to water, would degrade or alter or form part of a process of degradation or alteration of the quality of the water to an extent that is detrimental to its use by people or by an animal, fish or plant, or
- b) water that contains a substance in such a quantity or concentration, or that has been so treated, processed or changed, by heat or other means, that it would, if added to other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water to the extent described in paragraph (a), and includes,
- c) a substance or water that, for the purposes of the *Canada Water Act*, is deemed to be waste,
- d) a substance or class of substances prescribed by regulations made under subparagraph 63(1)(b)(i),
- e) water that contains a substance or class of substances in a quantity or concentration that is equal to or greater than a quantity or concentration prescribed in respect of that substance or class of substances by regulations made under subparagraph 63(1)(b)(ii), and
- f) water that has been subjected to a treatment, process or change prescribed by regulations made under subparagraph 63(1)(b)(iii).

Waste Management Plan (WMP) – a document, developed in accordance with the MVLWB *Guidelines for Developing a Waste Management Plan*, that describes the methods of Waste management for the Project from Waste generation to final disposal.

Water – as defined in section 1 of the *Waters Act*: water under the administration and control of the Commissioner, whether in a liquid or frozen state, on or below the surface of land.

Watercourse – as defined in section 1 of the Waters Regulations: a natural watercourse, body of Water or Water supply, whether usually containing Water or not, and includes Groundwater, springs, swamps, and gulches.

Water Management Area – a geographical area of the Northwest Territories established by section 2 and Schedule A of the Waters Regulations.

Waters Regulations – the regulations proclaimed pursuant to section 63 of the *Waters Act*.

Water Use – as defined in section 1 of the *Waters Act*: a direct or indirect use of any kind, including, but not limited to,

- a) a diversion or obstruction of waters,
- b) an alteration of the flow of waters, and
- c) an alteration of the bed or banks of a river, stream, lake or other body of water, whether or not the body of water is seasonal, but does not include a use connected with shipping activities that are governed by the *Canada Shipping Act, 2001*.

Water Use Fee – the fee for use of Water as per the Waters Regulations pursuant to section 63 of the *Waters Act* and the MVLWB *Water Use Fee Policy*.

Part B: General Conditions

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| 1. | The Licensee shall ensure a copy of this Licence is maintained on site at all times. | COPY OF LICENCE |
| 2. | The Licensee shall take every reasonable precaution to protect the environment. | PRECAUTION TO PROTECT ENVIRONMENT |
| 3. | In conducting its activities under this Licence, the Licensee shall make every reasonable effort to consider and incorporate any scientific information and Traditional Knowledge that is made available to the Licensee. | INCORPORATE SCIENTIFIC INFORMATION AND TRADITIONAL KNOWLEDGE |
| 4. | In each submission required by this Licence or by any directive from the Board, the Licensee shall identify all recommendations based on Traditional Knowledge received, describe how the recommendations were incorporated into the submission, and provide justification for any recommendation not adopted. | IDENTIFY TRADITIONAL KNOWLEDGE |
| 5. | All references to policies, guidelines, codes of practice, statutes, regulations, or other authorities shall be read as a reference to the most recent versions, unless otherwise noted. | REFERENCES |
| 6. | The Licensee shall ensure all submissions to the Board:
a) Are in accordance with the <i>MVLWB Document Submission Standards</i> ;
b) Include a conformity statement or table which identifies where the requirements of this Licence, or other directives from the Board, are addressed; and
c) Include any additional information requested by the Board. | SUBMISSION FORMAT AND CONFORMITY |
| 7. | The Licensee shall ensure management plans are submitted to the Board in a format consistent with the <i>MVLWB Standard Outline for Management Plans</i> , unless otherwise specified. | MANAGEMENT PLAN FORMAT |
| 8. | The Licensee shall comply with all plans and programs, including revisions, approved pursuant to the conditions of this Licence. | COMPLY WITH SUBMISSIONS AND REVISIONS |
| 9. | The Licensee shall conduct an annual review of all plans and programs, and make any revisions necessary to reflect changes in operations, contact information, or other details. No later than November 30 each year, the Licensee shall send a notification letter to the Board, listing the documents that have been reviewed and do not require revisions. | ANNUAL REVIEW |

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| 10. | The Licensee may propose changes at any time by submitting revised plans and programs to the Board, for approval, a minimum of 90 days prior to the proposed implementation date for the changes. The Licensee shall not implement the changes until approved by the Board. | REVISIONS |
| 11. | The Licensee shall revise any submission and submit it as per the Board's directive. | REVISE AND SUBMIT |
| 12. | If any date for any submission falls on a weekend or holiday, the Licensee may submit the item on the following business day. | SUBMISSION DATE |
| 13. | The Licensee shall comply with the Schedules , which are annexed to and form part of this Licence, and any updates to the Schedules as may be made by the Board. | COMPLY WITH SCHEDULE(S) |
| 14. | The Schedules and any compliance dates specified in this Licence may be updated at the discretion of the Board. | UPDATES TO COMPLIANCE DATE(S) |
| 15. | The Licensee shall comply with all directives issued by the Board in respect of the implementation of the conditions of this Licence. | COMPLY WITH BOARD DIRECTIVES |
| 16. | The Licensee shall install, operate, and maintain meters, devices, or other such methods for measuring the volumes of Water used and Waste discharged to the satisfaction of an Inspector. | MEASURE WATER USE AND WASTE DISCHARGED |
| 17. | Beginning November 30, 2023 and no later than every September 30 thereafter, the Licensee shall submit an Annual Water Licence Report to the Board and an Inspector. The Report shall be in accordance with the requirements of Schedule 1, Condition 1. | ANNUAL WATER LICENCE REPORT |
| 18. | The Licensee shall comply with the Engagement Plan , once approved. | ENGAGEMENT PLAN |
| 19. | Within 90 days following the effective date of this Licence, the Licensee shall submit to the Board, for approval, a revised Engagement Plan. The Licensee shall not commence Project activities prior to Board approval of the Plan. Note: remove if Plan is approved | ENGAGEMENT PLAN – REVISED |
| 20. | A minimum of ten days prior to the initial commencement of Project activities, the Licensee shall provide written notification to the Board and an Inspector. Notification shall include the commencement date, and the name and contact information for the individual responsible for overseeing the Project. Written notification shall be provided to the Board and an Inspector if any changes occur. | NOTIFICATION – COMMENCEMENT |

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| 21. | The Licensee shall immediately provide written notification to the Board and an Inspector of any non-compliance with the conditions of this Licence. | NOTIFICATION –
NON-COMPLIANCE
WITH CONDITIONS |
| 22. | The Licensee shall immediately provide written notification to the Board of any non-compliance with a Board directive issued in respect of the implementation of the conditions of this Licence. | NOTIFICATION –
NON-COMPLIANCE
WITH DIRECTIVES |
| 23. | The Licensee shall ensure that a copy of any written authorization issued to the Licensee by an Inspector is provided to the Board. | COPY – WRITTEN
AUTHORIZATION |
| 24. | The Licensee shall submit a current Project schedule to the Board and an Inspector upon request. | SUBMIT CURRENT
PROJECT SCHEDULE |

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Part C: Security

1. The Licensee shall post and maintain a security deposit with the Minister in accordance with Schedule 2. The Licensee shall not commence **Winter** Project activities until the security deposit has been accepted by the Minister. **OR** The Licensee shall post the security deposit within 90 days after issuance of this Licence. **POST SECURITY DEPOSIT**
2. The Licensee shall submit an updated Closure Cost Estimate using the current version of RECLAIM within 90 days of the commencement of the winter abandonment Project. **UPDATE CLOSURE COST ESTIMATE**
3. The amount of the security deposit required by Part C, Condition 1 may be adjusted by the Board: **ADJUSTED SECURITY AMOUNT**
 - a) Based on an updated Closure Cost Estimate as per Part C, Condition 2; or
 - b) Based on such other information as may become available to the Board.

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Part D: Water Use

- The Licence shall only obtain Water for the Project as set out in the following table. The Licensee may withdraw up to 46,250 m³/year from these sources, without exceeding the maximum under-ice water withdrawal volumes (quantities) approved for each source.

**WATER SOURCE,
VOLUMES AND
MAXIMUM UNDER-
ICE WATER
WITHDRAWAL
VOLUME**

Water Source Number / Name	Location and Coordinates	Maximum Quantity (m ³ per year)	Maximum Under-Ice Quantity (m ³ per year)
Mackenzie River	64.93316 -125.97001 (crossing) 64.92017 -125.88384 (staging area)	50,000 m ³	N/A

- The Licensee shall construct and maintain the Water intake(s) with a screen designed to prevent impingement or entrapment of fish.
- Each year, prior to the [redacted] and in advance of any Water use, the Licensee shall pay the Water Use Fee in accordance with the MVLWB *Water Use Fee Policy*.

**WATER INTAKE
SCREEN**

WATER USE FEE

Part E: Construction

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Part F: Waste and Water Management

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| 1. | The Licensee shall manage Waste and Water with the objective of minimizing the impacts of the Project on the quantity and quality of Water in the Receiving Environment through the use of appropriate mitigation measures, monitoring, and follow-up actions. | OBJECTIVE – WASTE AND WATER MANAGEMENT |
| 2. | The Licensee shall minimize erosion by implementing suitable erosion control measures that shall be located and maintained to the satisfaction of an Inspector. | EROSION CONTROL |
| 3. | The Licensee shall comply with the Waste Management Plan once approved. | WASTE MANAGEMENT PLAN |
| 4. | The Licensee shall deposit all Waste as described in the approved Waste Management Plan. | DEPOSIT OF WASTE |
| 5. | A minimum of ten days prior to depositing any Waste into a licenced municipal facility, the Licensee shall provide written notification to the Board and an Inspector. | NOTIFICATION – WASTE DEPOSIT |
| 6. | The Licensee shall not discharge Waste, including Wastewater, to any Watercourse, or to the ground surface within 100 metres of the Ordinary High-Water Mark of any Watercourse. | DISCHARGE LOCATION – ORDINARY HIGH-WATER MARK |

Part G: Aquatic Effects Monitoring

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Part H: Spill Contingency Planning

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| 1. | The Licensee shall ensure that Unauthorized Discharges associated with the Project do not enter any Waters. | OBJECTIVE – PREVENT WASTE INTO WATER |
| 2. | The Licensee shall comply with the Spill Contingency Plan , once approved. | SPILL CONTINGENCY PLAN |
| 3. | A minimum of 90 days prior to the commencement of winter abandonment activities for the Project, the Licensee shall submit to the Board, for approval, a revised Spill Contingency Plan. The Licensee shall not commence winter abandonment activities for the Project prior to Board approval of the Plan.
Note: remove if Plan is approved | SPILL CONTINGENCY PLAN – REVISED |
| 4. | If a spill or an Unauthorized Discharge occurs or is foreseeable, the Licensee shall: <ol style="list-style-type: none"> a) Implement the approved Spill Contingency Plan referred to in Part H, Condition 2; b) Report it immediately using the NU-NT Spill Report Form by one of the following methods: <ul style="list-style-type: none"> • Telephone: (867) 920-8130 • Fax: (867) 873-6924 • E-mail: spills@gov.nt.ca • Online: Spill Reporting and Tracking Database c) Notify the Board and an Inspector immediately; and d) Within 30 days of initially reporting the incident, or within a timeframe authorized by an Inspector, 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. Written notification shall be provided to the Board and an Inspector if any changes occur | REPORT SPILLS |
| 5. | The Licensee shall ensure that spill prevention infrastructure and spill response equipment is in place prior to commencement of the Project. | SPILL PREVENTION AND RESPONSE EQUIPMENT |
| 6. | The Licensee shall restore all areas affected by spills and Unauthorized Discharges to the satisfaction of an Inspector. | CLEAN UP SPILLS |
| 7. | The Licensee shall not establish any fuel storage facilities or refueling stations, or store chemicals or Wastes within 100 metres of the Ordinary High-Water Mark of any Watercourse. | MATERIAL STORAGE – ORDINARY HIGH-WATER MARK |

Part I: Closure and Reclamation

1. The Licensee shall comply with the **Closure and Reclamation Plan**, once approved.
2. Within 90 days prior to the commencement of winter abandonment Project activities, the Licensee shall submit to the Board, for approval, a revised Interim **Closure and Reclamation Plan**. The Plan shall be in accordance with the requirements of **Schedule 3, Condition 1**. The Licensee shall not commence winter Project activities or activities described in the Plan prior to Board approval. (leave in or take out??)
3. Within 90 days of completing Abandonment and Closure of the wellsites, the Licensee shall submit to the Board a **Wellsite Abandonment Completion Report**.
4. Within 120 days of completing Abandonment and Closure of the wellsites, the Licensee shall submit, to the Board, for approval, a **Wellsite Reclamation Monitoring and Maintenance Plan**. The Plan shall be in accordance with the requirements of Schedule 3, Condition 2.

**CLOSURE AND
RECLAMATION PLAN**

**CLOSURE AND
RECLAMATION PLAN -
REVISED**

**WELLSITE
ABANDONMENT
COMPLETION REPORT**

**RECLAMATION
MONITORING AND
MAINTENANCE PLAN**

Signed on behalf of the SAHTU LAND AND WATER BOARD

Tanya MacIntosh, Chair

Bonnie Bergsma, Witness

Schedule 1: Annual Water Licence Report

	Condition
1.	The Annual Water Licence Report referred to in Part B, Condition 17 of this Licence shall include, but not be limited to, the following information about activities conducted during the previous calendar year:
	a) A brief summary of Project activities;
	b) An updated Project schedule;
	c) The monthly and annual quantities in cubic metres of fresh Water obtained from all sources, as required in Part B, Condition 16 of this Licence;
	d) A summary of the calibration and status of the meters and devices referred to in Part B, Condition 16 of this Licence;
	e) A summary of engagement activities conducted in accordance with the approved Engagement Plan , referred to in Part B, Condition 18 of this Licence;
	f) A summary of how Traditional Knowledge was incorporated into decision making;
	g) The monthly and annual quantities, in cubic metres, of each and all Waste types, as described in the approved Waste Management Plan , and all Discharges, and deposits to Waste Disposal facilities, identified by location;
	h) A description of any erosion susceptible areas encountered and a summary of activities to prevent or mitigate erosion;
	i) A summary of activities conducted in accordance with the approved Spill Contingency Plan , referred to in Part H, Condition 2 of this Licence, including: <ul style="list-style-type: none"> i. A list and description for all Unauthorized Discharges, including the date, NWT spill number, volume, location, summary of the circumstances and follow-up actions taken, and status (i.e. open or closed), in accordance with the reporting requirements in Part H, Condition 4 of this Licence; and ii. An outline of any spill training carried out.
	j) A summary of any Closure and Reclamation work completed;
	k) A list of any non-compliance(s) with the conditions of this Licence or any directive from the Board pursuant to the conditions of this Licence;
	l) A summary of actions taken to address concerns, non-conformances, or deficiencies in any reports filed by an Inspector;
	m) Any other details requested by the Board by [enter date] of the year being reported.

Schedule 2: Conditions Applying to Security Deposits

	Condition
1.	Pursuant to Section 35(1) of the Waters Act, and section 11 of the Regulations, the Licensee shall post a security deposit referred to in Part C of this Licence of \$ [REDACTED] .

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Schedule 3: Conditions Applying to Closure and Reclamation

1.	<p>The Closure and Reclamation Plan referred to in Part I, Condition 2 of this Licence and the Wellsite Reclamation Monitoring and Maintenance Plan referred to in Part I, Condition 4 of this Licence shall include, but not be limited to the following information:</p>
	<p>a) A description of the overall goals for Closure and Reclamation of the Project, including expected future land use;</p>
	<p>b) A description of engagement related to Closure and Reclamation planning, including a summary of completed and planned engagement, and links to the Engagement Plan referred to in Part B, Condition 18 for the Project;</p>
	<p>c) A description of the pre-existing and current Project environment, including, but not limited to:</p> <ul style="list-style-type: none"> i. climatic conditions; ii. physical conditions; iii. chemical conditions; iv. biological conditions; v. any physical or chemical assessments of soil, water, and permafrost; and vi. traditional uses.
	<p>d) A description of the Project, including, but not limited to:</p> <ul style="list-style-type: none"> i. site history; ii. Project development; iii. current status of the Project; iv. maps delineating all disturbed areas, hydrological features, and elevation contours; and v. photographs.
	<p>e) A description of each Project component, including, but not limited to:</p> <ul style="list-style-type: none"> i. wellsites and leases; ii. areas affected by spills or Unauthorized Discharges; and iii. other areas affected by Project activities.
	<p>f) For each Project component identified in condition (h) above, a description of remediation and reclamation activities anticipated during post-abandonment monitoring, maintenance, and reporting including, but not limited to:</p> <ul style="list-style-type: none"> i. water management (wallow areas) and restoration of natural drainage ii. soil management with analysis and interpretation of any samples collected during the reporting period; iii. climate change considerations; iv. uncertainties and contingencies.