

Conditions Annexed to and Forming Part of Land Use Permit # MV201900X27

Part A: Scope of Permit

1. This Permit entitles the Permittee to conduct the following land-use operation:
 - a) Geotechnical drilling;
 - b) Horizontal Directional drilling;
 - c) Use of pre-existing staging areas for equipment and materials;
 - d) The use and storage of fuel;
 - e) Construction of temporary camps to accommodate work crews;
 - f) Clearing of vegetation as required in the right of way;
 - g) **Progressive Reclamation and associated Closure and Reclamation activities;**
 - h) Installation of conduits and fibre optic cable; and
 - i) Ongoing operations and maintenance.
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, or Municipal laws.

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

Act - the *Mackenzie Valley Resource Management Act*.

Board - the Mackenzie Valley Land and Water Board established under Part 4 of the Act.

Borehole - a hole that is made in the surface of the ground by drilling or boring.

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.

Drilling Fluid - any liquid mixture of water, sediment, drilling muds, chemical additives or other wastes that are pumped down hole while drilling and are specifically related to drilling activity.

Drilling Waste - all materials or chemicals, solid or liquid, associated with drilling, including drill cuttings and Drilling Fluids.

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.

Flowing Artesian Well - a well in which water:

- a) Naturally rises above the ground surface or the top of any casing; and
- b) Flows naturally, either intermittently or continuously.

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.

Progressive Reclamation - Closure and Reclamation activities conducted during the operating phase of the project.

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.

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.

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.

Sump - a human-made pit or natural depression in the earth's surface used for the purpose of depositing Waste that does not contain Toxic Material, such as non-toxic Drilling Waste or Sewage, therein.

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. | LOCATION OF ACTIVITIES |
| 2. | 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. | CAMP SETBACK |
| 3. | The Permittee shall not locate any Sump within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | SUMP SETBACK |

26(1)(b) Time

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| 4. | At least 48 hours prior to the initial commencement of the land-use operation, the Permittee's Field Supervisor shall contact an Inspector at (867) 777-8900. | INITIAL NOTIFICATION – CONTACT INSPECTOR |
| 5. | At least 48 hours prior to returning to the worksite following a seasonal Shut Down Period, the Permittee's Field Supervisor shall notify the Board and contact an Inspector at (867) 777-8900 | SEASONAL NOTIFICATION – CONTACT INSPECTOR |
| 6. | 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:

a) the name(s) of the person(s) in charge of the field operation;
b) alternates; and
c) all methods for contacting the above person(s). | IDENTIFY AGENT |
| 7. | At least ten days prior to any seasonal shutdowns the Permittee shall advise an Inspector of:

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. | REPORTS BEFORE SEASONAL REMOVAL |
| 8. | 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

9. 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

10. 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

11. 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

12. The Permittee shall insulate the ground surface beneath all structures associated with this land-use operation to prevent: **PERMAFROST PROTECTION**
- a) the melting of Permafrost; and
 - b) the ground settling and/or eroding.

13. The land-use operation shall not cause obstruction to any natural drainage. **NATURAL DRAINAGE**

14. **Within 90 days of the issuance of this permit, the Permittee shall submit to the Board for approval a Sediment and Erosion Control Plan.**  **SEDIMENT AND EROSION PLAN**

15. The Permittee shall install and maintain suitable erosion control structures as the land-use operation progresses. **PROGRESSIVE EROSION CONTROL**

16. The Permittee shall apply appropriate mitigation at the first sign of erosion. **REPAIR EROSION**

17. The Permittee shall, where flowing water from a Borehole is encountered: **FLOWING ARTESIAN WELL**
- a) plug the Borehole in such a manner as to permanently prevent any further outflow of water; and
 - b) immediately report the occurrence to the Board and an Inspector.

18. The Permittee shall prepare the site in such a manner as to prevent rutting or gouging of the ground surface. **PREVENTION OF RUTTING**

19. The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting or gouging. **SUSPEND OVERLAND TRAVEL**

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. **VEHICLE MOVEMENT FREEZE-UP**

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| 21. | The Permittee shall slope the sides of Waste material piles, excavations, and embankments — except in solid rock — to a minimum ratio of 2:1 vertical, unless otherwise authorized in writing by an Inspector. | EXCAVATION AND EMBANKMENTS |
| 22. | The Permittee shall not remove vegetation or operate heavy equipment within 100 metres of the Ordinary High Water Mark of any Watercourse, except as described in the application. | EQUIPMENT:
WATERCOURSE
BUFFER |
| 26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material | | |
| 23. | At least seven days prior to the use of any chemicals that were not identified in the complete application, the Safety Data Sheets must be provided to the Board and an Inspector. | CHEMICALS |
| 24. | When drilling within 100 metres of the Ordinary High Water Mark of any Watercourse, and when drilling on ice, the Permittee shall contain all drill water and Drilling Waste in a closed circuit system for reuse, off-site disposal, or deposit into a land-based Sump or natural depression. | DRILLING NEAR WATER
OR ON ICE |
| 25. | The Permittee may deposit Drilling Waste that does not contain Toxic Material in a Sump or natural depression. Any Sumps or natural depressions used to deposit Drilling Waste must be located at least 100 metres from the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | DRILLING WASTE |
| 26. | The Permittee shall remove all Drilling Waste containing Toxic Material to an approved disposal facility. | DRILLING WASTE
DISPOSAL |
| 27. | The Permittee shall not allow any Drilling Waste to spread to the surrounding lands or Watercourses. | DRILLING WASTE
CONTAINMENT |
| 28. | Prior to the expiry date of this Permit or the end of the land-use operation whichever comes first, the Permittee shall backfill and restore all Sumps, unless otherwise authorized in writing by an Inspector. | RECLAIM
NON-OIL AND GAS
SUMPS |
| 29. | The Permittee shall dispose of all Toxic Material as described in the approved Waste Management Plan. | WASTE CHEMICAL
DISPOSAL |
| 30. | The Permittee shall dispose of all combustible Waste petroleum products by removal to an approved disposal facility. | WASTE PETROLEUM
DISPOSAL |
| 31. | A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, an Emergency Frac-out Response Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan. | EMERGENCY FRAC-
OUT RESPONSE PLAN |

26(1)(h) Wildlife and Fish Habitat

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| 32. | A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Wildlife Management and Mitigation Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan. | WILDLIFE
MANAGEMENT AND
MITIGATION
PLAN |
| 33. | The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation. | HABITAT DAMAGE |

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

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| 34. | Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Waste Management Plan. | REVISED WASTE
MANAGEMENT PLAN |
| 35. | The Permittee shall comply with the Waste Management Plan , 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. | WASTE MANAGEMENT |
| 36. | The Permittee shall keep all garbage and debris in a secure container until disposal. | GARBAGE CONTAINER |
| 37. | The Permittee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan. | SEWAGE DISPOSAL -
PLAN |

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

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| 38. | A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Heritage Resource Protection Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan. | HERITAGE RESOURCE
PROTECTION PLAN |
| 39. | The Permittee shall not operate any vehicle or equipment within 30 metres of a known or suspected historical or archaeological site or burial ground. | ARCHAEOLOGICAL
BUFFER |
| 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:

a) immediately suspend operations on the site; and
b) notify the Board at (867) 777-4954 or an Inspector at (867) 8900, and the Prince of Wales Northern Heritage Centre at 767-9347 ext. 71255 or ext. 71251. | SITE DISCOVERY AND
NOTIFICATION |

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

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26(1)(l) Security Deposit

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| 42. | Prior to the commencement of the land-use operation, the Permittee shall deposit with the Minister a security deposit in the amount of \$98,811 | 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

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| 44. | The Permittee shall:
a) examine all Fuel Storage Containers and Tank for leaks; and
b) repair all leaks immediately. | REPAIR LEAKS |
| 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. | 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. | REPORT FUEL LOCATION |
| 52. | 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. | SEAL OUTLET |
| 53. | The Permittee shall adhere to the Spill Contingency Plan , 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. | SPILL CONTINGENCY PLAN |

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| 54. | Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Spill Contingency Plan . | REVISED
SPILLCONTINGENCY
PLAN |
| 55. | 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. | SPILL RESPONSE |
| 56. | 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. | DRIP TRAYS |
| 57. | The Permittee shall clean up all leaks, spills, and contaminated material immediately | CLEAN UP SPILLS |
| 58. | During the period of this Permit, if a spill occurs or is foreseeable, the Permittee shall: <ul style="list-style-type: none"> a) implement the approved Spill Contingency Plan; 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 • <u>Online: Spill Reporting and Tracking Database</u> c) within 24 hours, notify the Board and an Inspector; and 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 updates to this report shall be provided to the Board and an Inspector in writing as changes occur. | REPORT SPILLS |

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

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| 59. | The Permittee shall progressively dispose of all brush and trees; all disposal shall be completed prior to the end of this landuse operation | BRUSH DISPOSAL/
TIME |
| 60. | The Permittee shall not clear areas larger than identified in the complete application. | MINIMIZE AREA
CLEARED |

26(1)(o) Restoration of the Lands

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| 61. | Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board for approval a Closure and Reclamation Plan. | INTERIM CLOSURE
AND RECLAMATION
PLAN |
| 62. | Prior to the end of the land-use operation, the Permittee shall complete all cleanup and restoration of the lands used. | FINAL CLEANUP AND
RESTORATION |
| 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. | NATURAL VEGETATION |

64.	The Permittee shall carry out Progressive Reclamation of disturbed areas as soon as it is practical to do so.	PROGRESSIVE RECLAMATION
26(1)(p) Display of Permits and Permit Numbers		
65.	The Permittee shall display a copy of this Permit in each campsite established to carry out this land-use operation.	DISPLAY PERMIT
66.	The Permittee shall keep a copy of this Permit on hand at all times during this land-use operation.	COPY OF PERMIT
26(1)(q) Biological and Physical Protection of the Land		
67.	If nesting areas are encountered during the course of operations, the Permittee shall minimize all activity so as to not disturb them.	MIGRATORY BIRD NEST DISTURBANCE
68.	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.	RESUBMIT PLAN
69.	The Permittee shall comply with the Engagement Plan , 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.	ENGAGEMENT PLAN
70.	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Engagement Plan .	REVISED ENGAGEMENT PLAN
71.	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Construction Environmental Management Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.	CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN
72.	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Permafrost Protection Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.	PERMAFROST PROTECTION PLAN
73.	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, an Inspection and Maintenance Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.	INSPECTION AND MAINTENANCE PLAN
74.	All revised plans submitted to the Board shall include a brief summary of the changes made to the plan.	SUMMARY OF CHANGES

Annex A: Table of Items Requiring Submission

Attached to **Land Use Permit MV2019X0027**

Supplemental information to be submitted by Permittee as required through Land Use Permit conditions.

Part C	Item	Date
Condition 14	Sediment and Erosion Plan	Within 90 days of the issuance of this permit, the Permittee shall submit to the Board for approval a Sediment and Erosion Control Plan.
Condition 31	Emergency Frac-Out Response Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, an Emergency Frac-out Response Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 32	Wildlife Management Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Wildlife Management and Mitigation Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 34	Revised Waste Management Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Waste Management Plan.
Condition 38	Heritage Resource Protection Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Heritage Resource Protection Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 54	Revised Spill Contingency Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Spill Contingency Plan .

Condition 61	Interim Closure and Reclamation Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board for approval a Closure and Reclamation Plan.
Condition 70	Revised Engagement Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Engagement Plan .
Condition 71	Construction Environmental Management Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Construction Environmental Management Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 72	Permafrost Protection Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Permafrost Protection Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 73	Inspection and Maintenance Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, an Inspection and Maintenance Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.

Annex B: Revisions to Land Use Permit MV2019X0027

Attached to Land Use Permit MV2019X0027

List of changes that have been made to the Land Use Permit since issuance.

Date	Location of Change	What has changed
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