

Proposed Conditions for Land Use Permit W2016E0004
Tłıchq All-Season Road

Part A: Scope of Permit

1. This Permit entitles Government of the Northwest Territories Department of Infrastructure (the holder) to conduct the activities described in the Tłıchq All-Season Road Updated Project Description (2018) at Latitude 63°14'0.00"N to 62°26'0.00"N Longitude 116°25'60.00"W to 117°10'0.00"W:
 - a) Construction and operation of an all-season highway
 - b) Development and operation of quarries, including associated access roads
 - c) The operation of summer and winter construction camps, including equipment, fuel, and material storage areas and maintenance facilities
 - d) The use of explosives
 - e) The use of self-propelled earth moving equipment and equipment over 10 tons
 - f) The use of single containers for the storage of petroleum fuel that have a capacity exceeding 4000 litres
 - g) The use of earth-drilling machinery
 - h) Construction of access roads and winter roads to quarries and water sources
 - i) Construction of bridges and culverts
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 absolve the Permittee from the responsibility for compliance with the requirements of all applicable federal, territorial, and Tłıchq municipal legislation.

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, or the *Mackenzie Valley Resource Management Act*.

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

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.

Drilling Fluids - 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.

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 *Mackenzie Valley Resource Management Act*.

Minister - the Minister of Crown-Indigenous Relations and Northern Affairs Canada or Government of the Northwest Territories Department of Lands, as may be the case

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).

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.

Sump - a man-made pit or natural depression in the earth's surface used for the purpose of depositing waste material, such as non-Toxic Drilling Waste or Greywater, therein.

Toxic - a 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.

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)

Condition	Category
26(1)(a) Location and Area	
1. The Permittee shall not conduct any part of the land-use operation within 30 metres of a cabin used for traditional activities, including trapping, hunting, or fishing, unless otherwise authorized in writing by the Board.	AVOID CABINS
2. The Permittee shall locate all camps on Durable Land or previously cleared areas.	CAMP LOCATION
3. Prior to the commencement of drilling, the Permittee shall submit the drill target locations on a 1:50,000-scale map with coordinates and map datum to an Inspector and the Board.	DRILL LOCATIONS
4. The Permittee shall not conduct a quarry operation within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector.	QUARRY SETBACK
5. The Permittee shall not conduct this land-use operation on any lands not designated in the accepted application.	LOCATION OF ACTIVITIES
6. Prior to the commencement of the land-use operation, the Permittee shall accompany an Inspector during an inspection of the proposed land-use area.	LAND-USE INSPECTION
26(1)(b) Time	
7. At least 48 hours prior to the commencement of the land-use operation, the Permittee's Field Supervisor shall contact an Inspector at (867)767-9188.	CONTACT INSPECTOR
8. At least 48 hours prior to commencement of this land-use operation, the Permittee shall provide the following information, in writing, to the Board <u>and</u> 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
9. At least ten (10) 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; and (b) when final cleanup and reclamation of the land used will be completed.	REPORTS BEFORE REMOVAL
10. The Board, for the purpose of this operation, designates April 15 as spring break-up.	SPRING BREAK – UP
26(1)(c) Type and Size of Equipment	
11. The Permittee shall not use any equipment except of a similar type, size, and number to that listed in the complete application, unless otherwise authorized in writing by an Inspector.	ONLY APPROVED EQUIPMENT

26(1)(d) Methods and Techniques

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| 12. | The Permittee shall construct and maintain the overland portion of winter roads not within the road alignment with a minimum of 10 cm of packed snow and/or ice at all times during this land-use operation. | WINTER ROADS |
| 13. | 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 |
| 14. | The Permittee shall leave a buffer strip of undisturbed vegetation at least 30 metres in width between cleared areas and public roads. | TREE SCREEN |
| 15. | The Permittee shall Dogleg quarry access roads that approach Watercourses or public roads. | DOGLEG APPROACHES |

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

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| 16. | The Permittee shall ensure that the land use area is kept clean at all times. | CLEAN WORK AREA |
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26(1)(f) Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land

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| 17. | The Permittee shall install and maintain culverts such that scouring does not occur. | CULVERT SIZE |
| 18. | The Permittee shall minimize erosion by installing erosion control structures where necessary. | PROGRESSIVE EROSION CONTROL |
| 19. | The Permittee shall, where flowing water from a Borehole is encountered: (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. | FLOWING ARTESIAN WELL |
| 20. | The Permittee shall not use any material other than clean water and snow in the construction of ice bridges. | ICE BRIDGE MATERIALS |
| 21. | The Permittee shall not use any materials other than clean snow and water in the construction of snow fills. | SNOWFILL MATERIALS |
| 22. | Prior to spring break-up or completion of the land-use operation, the Permittee shall clean up and either remove or v-notch all snowfills from stream crossings, unless otherwise authorized in writing by an Inspector. | REMOVE OR V-NOTCH SNOWFILLS |
| 23. | Prior to spring break-up or completion of the land-use operation, the Permittee shall clean up and v-notch all ice bridges, unless otherwise authorized in writing by an Inspector. | V-NOTCH ICE BRIDGES |
| 24. | 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 |
| 25. | The land-use operation shall not cause obstruction to any natural drainage, unless approved by the Board. | NATURAL DRAINAGE |

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| 26. | Outside the road corridor, quarries, quarry and water source access roads, 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 |
| 26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material | | |
| 27. | The Permittee shall maintain a record of all spills. For all reportable spills, as defined in the <i>NT-NU Spill Report Form</i> , the Permittee shall: (a) immediately report each spill to the 24-hour Spill Report Line (867) 920-8130; (b) report each spill to an Inspector within 24 hours; and (c) submit, to the Board and an Inspector, a detailed report on each spill within 30 days. | REPORT SPILLS |
| 28. | The Permittee shall dispose of all Toxic substances as described in the approved Waste Management Plan. | WASTE CHEMICAL
DISPOSAL |
| 29. | The Permittee shall dispose of all combustible waste petroleum products as described in the approved Waste Management Plan. | WASTE PETROLEUM
DISPOSAL |
| 30. | At least seven days prior to the use of any chemicals that were not identified in the accepted application, the SDS sheets must be provided to an Inspector and the Board. | CHEMICALS |
| 31. | 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 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 |
| 32. | The Permittee may deposit non-Toxic Drilling Waste 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 waterbody, unless otherwise authorized in writing by an Inspector. | DRILLING WASTE |
| 33. | The Permittee shall not allow any Drilling Waste to spread to the surrounding lands or Watercourses. | DRILLING WASTE
CONTAINMENT |
| 26(1)(h) Wildlife and Fish Habitat | | |
| 34. | The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation. | HABITAT DAMAGE |
| 35. | The Permittee shall provide the Board the approved Wildlife Management and Monitoring Plan | HABITAT DAMAGE |
| 26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage | | |
| 36. | The Permittee shall adhere to the approved Waste Management Plan 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 |

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| 37. | The Permittee shall keep all garbage and debris in a secure container until disposal. | GARBAGE
CONTAINER |
| 38. | The Permittee shall dispose of all garbage, waste, and debris as described in the approved Waste Management Plan, unless otherwise authorized in writing by an Inspector. | REMOVE GARBAGE |
| 39. | The Permittee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan. | SEWAGE DISPOSAL |

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

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| 40. | The Permittee shall not operate any vehicle or equipment within at least 30 metres of a known or suspected historical or archaeological site or burial ground without the approval of the Board. | ARCHAEOLOGICAL
BUFFER |
| 41. | The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site. | SITE DISTURBANCE |
| 42. | The Permittee shall, where a suspected archaeological or historical site, or burial ground is discovered: (a) immediately suspend operations on the site; implement the Archaeological Site Chance Find Protocol; and (b) notify an Inspector at (867) 767 9188, and the NWT Cultural Places Program at (867) 767-9347. | SITE DISCOVERY AND
NOTIFICATION |
| 43. | Prior to any new land disturbance, the Permittee shall consult with the Prince of Wales Northern Heritage Centre to identify if an Archaeological Impact Assessment of the sites where disturbance is planned is required. The Permittee shall submit a summary report to the Board and the NWT Cultural Places Program should an Archaeological Impact Assessment be required. | AIA |

26(1)(m) Fuel Storage

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| 44. | The Permittee shall not place any Fuel Storage Containers or tanks within 30 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | FUEL NEAR WATER |
| 45. | The Permittee shall ensure that all Fuel Storage Containers have adequate Secondary Containment. | FUEL CACHE
SECONDARY
CONTAINMENT |
| 46. | The Permittee shall set up all refueling points with secondary containment. | SECONDARY
CONTAINMENT -
REFUELING |
| 47. | The Permittee shall not allow petroleum products to spread to surrounding lands or Watercourses. | FUEL CONTAINMENT |
| 48. | The Permittee shall locate mobile fuel facilities on land when the facilities are stationary for more than 12 hours. | FUEL ON LAND |
| 49. | The Permittee shall adhere to the approved Spill Contingency Plan 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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| 50. | Prior to commencement of operations, the Permittee shall ensure that spill-response equipment is in place to respond to any potential spills. | SPILL RESPONSE |
| 51. | All equipment that may be parked for two hours or more, should have a haz-mat/drip tray under it or be sufficiently diapered. (Leaky equipment should be repaired immediately.) | DRIP TRAYS |
| 52. | The Permittee shall clean up all leaks, spills, and contaminated material. | CLEAN UP SPILLS |
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| 26(1)(n) Methods and Techniques for Debris and Brush Disposal | | |
| 53. | The Permittee shall progressively dispose of all brush and trees and shall complete all brush disposal; all disposal shall be completed prior to the expiry date of this permit. | BRUSH DISPOSAL/
TIME |
| 54. | The Permittee shall not clear areas larger than identified in the accepted application. | MINIMIZE AREA
CLEARED |
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| 26(1)(o) Restoration of the Lands | | |
| 55. | The Permittee shall dispose of all overburden as instructed by an Inspector. | DISPOSAL OF
OVERBURDEN |
| 56. | The Permittee shall carry out progressive reclamation of disturbed areas as soon as it is practical to do so. | PROGRESSIVE
RECLAMATION |
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| 26(1)(p) Display of Permits and Permit Numbers | | |
| 57. | The Permittee shall display a copy of this Permit in each campsite established to carry out this land-use operation. | DISPLAY PERMIT |
| 58. | Prior to the commencement of operations, the Permittee shall submit final Waste Management Plan (in accordance with MVLWB's 2011 <i>Guidelines for Developing a Waste Management Plan</i>) to the Board for approval. | SUBMIT REVISED
PLANS |
| 59. | Prior to the commencement of operations, the Permittee shall submit final Spill Contingency Plan (in accordance with Indian and Northern Affairs Canada's 2007 <i>Guidelines for Spill Contingency Planning</i>) to the Board for approval. | |
| 60. | Prior to the commencement of operations, the Permittee shall submit final Engagement Plan (in accordance MVLWB's 2013 <i>Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits</i>) to the Board for approval. | |
| 61. | 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 |

62. The Permittee shall adhere to 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.
63. All revised plans submitted to the Board shall include a brief summary of the changes made to the plan.

ENGAGEMENT PLAN

**SUMMARY OF
CHANGES**