



GWICH'IN LAND AND WATER BOARD

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LAND USE PERMIT

Permit Class	Permit No	Amendment No
A	G14E002	-

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

GNWT – Department of Transportation (P.O. Box 2038, Inuvik NT X0E 0T0)

(Permittee)

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

Signature Arvind Vashishtha	Date April 10, 2014
Type of Land use Operation Highway Operation, Maintenance & Reconstruction, Quarrying, Stockpiling, Winter Access Road Construction & Maintenance	
Location Dempster Highway, Stockpile km 6, Quarries km 23.9, 28.8, 141, 166.3, 173.8, 178.1, 193.7, 211.2, 230.2, 235, 251, Dempster Highway to Arctic Red River (near Tsiigehtchic)	

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

Dated at Inuvik this 20th day of May, 2014

Witness – Leonard DeBastien

Chair – Mr. Paul Sullivan

Commencement Date

May 25, 2014

Expiry Date

May 24, 2019

Note: It is a condition of this Permit that the Permittee comply with the provisions of the *Mackenzie Valley Resource Management Act* and Regulations and the terms and conditions set out herein. A failure to comply may result in suspension or cancellation of this Permit.

Conditions Annexed to and Forming Part of Land Use Permit # G14E002

Part A: Scope of Permit

1. This Permit entitles "PERMITEE" to conduct the following land-use operation:
 - a) Operation, maintenance, and reconstruction of Dempster Highway, NWT Highway #8 (approx. 67.047328°/-136.208490° to 68.314489°/-133.383674°)
 - b) Quarrying at
 - i. km 23.9 (8W 464160.0476mE 7451082.914mN),
 - ii. km 28.8 (8W 468894.0835mE 7451265.620mN),
 - iii. km 141 (8W 552180.1839mE 7480715.414mN),
 - iv. km 166.3 (8W 548989.5809mE 7504795.308mN),
 - v. km 173.8 (8W 547357.0127mE 7512292.173mN),
 - vi. km 178.1 (8W 548474.9023mE 7516029.694mN),
 - vii. km 193.7 (8W 556904.2045mE 7528311.803mN),
 - viii. km 211.2 (8W 564129.3076mE 7544156.048mN),
 - ix. km 230.2 (8W 565459.7797mE 7562995.457mN),
 - x. km 235 (8W 565966.7133mE 7566137.630mN), and
 - xi. km 251 (8W 568971.8812mE 7578052.761mN)
 - c) Stockpiling granular material at km 6 (8W 450999.7837mE 7442574.709mN)
 - d) Construction, operation, and maintenance of a winter access road between Dempster Highway and the Arctic Red River (near Tsiigehtchic, approx. 67.446598°/-133.759932° to 67.444508°/-133.750538°)
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 municipal legislation.

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

Act - the *Mackenzie Valley Resource Management Act*.

Board - the Gwich'in Land and Water Board established under Part 3 of the *Mackenzie Valley Resource Management Act*.

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.

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 Federal Minister under the *Mackenzie Valley Resource Management Act*.

Federal Minister - the Minister of Indian Affairs and Northern Development.

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).

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

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.

Spill Contingency Plan - a document, developed in accordance with Aboriginal Affairs and Northern Development Canada's *Guidelines for Spill Contingency Planning* (April 2007), that describes the set of procedures to be implemented to minimize the effects of a spill.

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.

Waste Management Plan (WMP) - a document, developed in accordance with the Boards' *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, *unless otherwise specified*

(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 not conduct any part of the land-use operation within 300 metres of any privately owned or leased land or structure, unless otherwise authorized in writing by the Board. | Private Property |
| 2. | The Permittee shall not conduct any part of the land-use operation within 300 metres of a cabin used for traditional activities, including trapping, hunting, or fishing, unless otherwise authorized in writing by the Board. | Avoid Cabins |
| 3. | The Permittee shall locate all camps on Durable Land or previously cleared areas. | Camp Location |
| 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.
<i>(applies to Quarrying)</i> | Quarry Setback |
| 5. | The Permittee shall locate all lines, trails, and right-of-ways to be constructed parallel to any Watercourse a minimum of 100 metres from the Ordinary High Water Mark, except at crossings.
<i>(applies to Quarrying)</i> | Parallel Watercourse |
| 6. | The Permittee shall not conduct this land-use operation on any lands not designated in the accepted application. | Location of Activities |
| 7. | Prior to the commencement of the land-use operation, the Permittee shall mark each corner of the land use area.
<i>(applies to Quarrying)</i> | Mark Area |

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| 8. | The Permittee shall maintain the corner markings until the area is reclaimed.
<i>(applies to Quarrying)</i> | Corner Posts |
| 9. | Prior to the commencement of the land-use operation, the Permittee shall accompany an Inspector during an inspection of the proposed land use area. | Inspect Locations |
| 26(1)(b) Time | | |
| 10. | At least 48 hours prior to the commencement of this land-use operation, the Permittee's Field Supervisor shall contact an Inspector at (867) 777-8900. | Contact Inspector |
| 11. | 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 |
| 12. | 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; and
(b) when final cleanup and reclamation of the land used will be completed. | Reports Before Removal |
| 26(1)(c) Type and Size of Equipment | | |
| 13. | The Permittee shall not use any equipment except of a similar type, size, and number to that listed in the accepted application. | Only Approved Equipment |
| 26(1)(d) Methods and Techniques | | |
| 14. | As the land-use operation progresses, the Permittee shall refill and restore craters caused by explosives.
<i>(applies to Quarrying)</i> | Refill Craters |
| 15. | Immediately upon completion of operations at each Borehole, the Permittee shall remove or cut off and seal each drill casing at ground level.
<i>(applies to Quarrying)</i> | Removal and Sealing of Drill Casings |
| 16. | The Permittee shall remove all wire from the land as the land-use operation progresses.
<i>(applies to Quarrying)</i> | Remove Wire |
| 17. | 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.
<i>(applies to Winter Access Road)</i> | Winter Roads |

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| 18. | The Permittee shall not erect camps or store material other than that required for immediate use on the ice surface of a Watercourse.
<i>(applies to Winter Access Road)</i> | Storage on Ice |
| 19. | Prior to the expiry of this Permit, the Permittee shall replace all excavated material, unless otherwise authorized in writing by an Inspector.
<i>(applies to Quarrying)</i> | Excavated Material |
| 26(1)(e) Type, Location, Capacity, and Operation of All Facilities | | |
| 20. | 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 | | |
| 21. | The Permittee shall insulate the ground surface beneath all structures associated with this land-use operation to prevent:
(a) any vegetation present from being removed;
(b) the melting of Permafrost; and
(c) the ground settling and/or eroding. | Permafrost Protection |
| 22. | The land-use operation shall not cause obstruction to any natural drainage. | Natural Drainage |
| 23. | The Permittee shall minimize erosion by installing erosion control structures as the land-use operation progresses. | Progressive Erosion Control |
| 24. | The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting.
<i>(applies to Winter Access Road)</i> | Suspend Overland Travel |
| 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.
<i>(applies to Winter Access Road)</i> | Vehicle Movement Freeze-up |
| 26. | The Permittee shall not use any material other than clean water and snow in the construction of ice bridges.
<i>(applies to Winter Access Road)</i> | Ice Bridge Materials |
| 27. | The Permittee shall not use any materials other than clean snow and water in the construction of snow fills.
<i>(applies to Winter Access Road)</i> | Snowfill Materials |

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| 28. | The Permittee shall minimize approach grades on all Watercourse crossings. | Minimize Approach |
| 29. | 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.
<i>(applies to Quarrying)</i> | Excavation and Embankments |
| 30. | The Permittee shall not excavate land within 100 metres of the high water mark of any Watercourse, unless otherwise authorized in writing by an Inspector.
<i>(applies to Quarrying)</i> | Excavate Near Watercourse |

26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material

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| 31. | At least seven days prior to the use of any chemicals that were not identified in the accepted application, the MSDS sheets must be provided to an Inspector and the Board. | Chemicals |
| 32. | 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 |
| 33. | The Permittee shall dispose of all Toxic substances as described in the approved Waste Management Plan. | Waste Chemical Disposal |
| 34. | The Permittee shall dispose of all combustible waste petroleum products by removal to an approved disposal facility. | Waste Petroleum Disposal |

26(1)(h) Wildlife and Fish Habitat

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| 35. | The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation. | Habitat Damage |
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26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage

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| 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 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**

38. 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

39. The Permittee shall not operate any vehicle or equipment within 150 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) 777-6624 or an Inspector at (867) 777-8900, the Prince of Wales Northern Heritage Centre at (867) 920-6182 or 873-7688, and the Gwich'in Social and Cultural Institute at (867) 952-2524. **Site Discovery and Notification**

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

This section intentionally left blank

26(1)(l) Security Deposit

42. Prior to commencement of the land-use operation, the Permittee shall deposit with the Minister a security deposit in the amount of \$0.00. **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 not place any Fuel Storage Containers or Tanks within 100 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 set up all refueling points with secondary containment. **Secondary Containment - Refueling**

46. The Permittee shall not allow petroleum products to spread to surrounding lands or Watercourses. **Fuel Containment**

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| 47. | The Permittee shall locate mobile fuel facilities on land when the facilities are stationary for more than 12 hours.
<i>(applies to Winter Access Road)</i> | Fuel on Land |
| 48. | Within ten days of the establishment of any fuel cache, the Permittee shall report the location and quantity of the cache in writing to an Inspector and the Board. | Report Fuel Location |
| 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 |
| 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 |
| 26(1)(n) Methods and Techniques for Debris and Brush Disposal | | |
| 53. | The Permittee shall not clear areas larger than identified in the accepted application.
<i>(applies to Quarrying)</i> | Minimize Area Cleared |
| 54. | The Permittee shall not clear any vegetation.
<i>(applies to Winter Access Road)</i> | No Clearing |
| 26(1)(o) Restoration of the Lands | | |
| 55. | All areas affected by construction or removal activities shall be stabilized and landscaped to their pre-construction profiles, unless otherwise authorized in writing by an Inspector.
<i>(applies to Quarrying)</i> | Pre-construction Profiles |
| 56. | The Permittee shall store overburden and use it to recontour the site after operations are complete, unless otherwise authorized in writing by an Inspector.
<i>(applies to Quarrying)</i> | Save and Place Organic Soil |
| 57. | The Permittee shall level all stockpiles of granular material located within the land use area prior to the expiry date of this Permit.
<i>(applies to Quarrying)</i> | No Stockpiles |

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| 58. | Prior to the expiry date of this Permit, the Permittee shall complete all cleanup and restoration of the lands used. | Final Cleanup and Restoration |
| 59. | Prior to the expiry date of this Permit, the Permittee shall prepare the site in such a manner as to facilitate natural revegetation.
<i>(applies to Quarrying)</i> | Natural Vegetation |
| 60. | The Permittee shall carry out progressive reclamation of disturbed areas as soon as it is practical to do so.
<i>(applies to Quarrying)</i> | Progressive Reclamation |

26(1)(p) Display of Permits and Permit Numbers

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| 61. | The Permittee shall display a copy of this Permit in each campsite established to carry out this land-use operation. | Display Permit |
| 62. | 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

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| 63. | The Permittee shall not commence any drilling or move any equipment within 500 metres of one or more caribou. | CARIBOU DISTURBANCE |
| 64. | If migratory birds or their nesting areas, or any species at risk are encountered during the course of operations, the Permittee shall minimize all activity so as to not disturb these animals. | Migratory Bird Disturbance |