



GWICH'IN LAND AND WATER BOARD

Box 2018 Inuvik NT X0E 0T0

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Land Use Permit

Permit Number: G 07 F 002

Permit Class: A

Subject to the Mackenzie Valley Resource Management Act, the Mackenzie Valley Land Use Regulations and the Conditions Annexed To and Forming Part of this Land Use Permit, the Gwich'in Land and Water Board (hereinafter referred to as the Board) hereby grants authority to:

Arctic Environmental Ltd.
Box 2606 Yellowknife NT X1A 2P1
(hereinafter referred to as the Permittee)

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

Applicant: Bob Valleau
Date Application Received: Tuesday, January 30, 2007
Date Application Accepted: Wednesday, January 31, 2007
Type of Land Use Operation: Twenty (20) kilometre Winter Road
Location: Kilometre 202 of the Dempster Highway (50 kilometres east of Inuvik), eastward, following an existing seismic line to 67 degrees, 49' 21" N, 133 degrees, 11' 35" W, to an old Northwestel site (70 kilometres east of Inuvik).
Commencement Date: Wednesday, February 14, 2007
Expiry Date: Friday, April 13, 2007

It is a condition of this Land Use Permit that the Permittee comply with the Conditions Annexed To and Forming Part of this Land Use Permit, and with any and all other applicable Acts, Regulations, Ordinances, By-Laws or Orders. Default thereof may result in the suspension or cancellation of this Land Use Permit.

This Land Use Permit may be Amended, Renewed, Suspended or Cancelled pursuant to the Mackenzie Valley Land Use Regulations.

Signed and Issued in Inuvik in the Northwest Territories on Wednesday, February 14, 2007.

Willard Hagen
Chair
Gwich'in Land and Water Board

CONDITIONS ANNEXED TO AND FORMING PART OF LAND USE PERMIT: G 07 F 002

PART A: SCOPE OF LAND USE PERMIT

1. This Land Use Permit entitles **Arctic Environment Ltd.** to conduct the following activities:

Construct a twenty (20) kilometre Winter Road with a maximum width of eight (8) metres commencing at Kilometre 202 of the Dempster Highway (50 kilometres east of Inuvik), eastward, following an existing seismic line to 67 degrees, 49' 21" N, 133 degrees, 11' 35" W, to an old Northwestel site (70 kilometres east of Inuvik), and remove all material from said site and transport back to the Dempster Highway where it will be sent south for disposal.
2. This Land Use 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 Land Use Permit.
3. Compliance with the terms and conditions of this Land Use Permit does not absolve the Permittee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

PART B: DEFINITIONS

"Act" means the Mackenzie Valley Resource Management Act.

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

"Dogleg" means clearing 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.

"Land Use Inspector" means an Inspector designated by the Minister under the Mackenzie Valley Resource Management Act.

"Sewage" means all toilet wastes and grey water.

PART C; CONDITIONS OF PERMIT

26 (1) (A) THE LOCATION AND AREA OF LANDS THAT MAY BE USED IN THIS LAND-USE OPERATION

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| <p>1. The Permittee shall not conduct this land use operation on any lands not designated in the accepted application, unless otherwise authorized in writing by the Board.</p> | <p>PLANS</p> |
| <p>2. The Permittee shall not conduct any part of this land use operation within three hundred (300) metres of any privately owned land or structure, unless otherwise authorized in writing by a Land Use Inspector.</p> | <p>PRIVATE PROPERTY</p> |
| <p>3. The Permittee shall:
(a) offset vehicle travel in areas without a snow covered surface; and
(b) shall confine the line to a maximum width of eight (8) metres, unless otherwise authorized in writing by a Land Use Inspector.</p> | <p>OFFSET VEHICLE TRAVEL</p> |
| <p>4. The Permittee shall not construct parallel lines or roads, unless otherwise authorized by a Land Use Inspector.</p> | <p>PARALLEL ROADS</p> |
| <p>5. The Permittee shall remove from all lands all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building materials.</p> | <p>REMOVE WASTE MATERIAL</p> |

26 (1) (B) THE TIMES AT WHICH ANY PORTION OF THIS LAND-USE OPERATION MAY BE CARRIED ON

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| <p>6. The Permittee's Field Supervisor shall contact or meet with a Land Use Inspector at the Inuvik office of the Department of Indian Affairs and Northern Development, – (867) 777-3361 – and the Gwich'in Land and Water Board, – (867) 777-7960 – at least forty-eight (48) hours prior to the commencement of this land use operation.</p> | <p>CONTACT INSPECTOR AND BOARD</p> |
| <p>7. The Permittee shall provide, in writing, to a Land Use Inspector and the Board, at least forty-eight (48) hours prior to commencement of this land use operation, the following information:
(a) person, or persons, in charge of the field operation to whom notices, orders, and reports may be served;
(b) alternates; and
(c) all methods for contacting the above person(s).</p> | <p>IDENTIFY AGENT</p> |
| <p>8. The Permittee shall advise a Land Use Inspector and the Board at least ten (10) days prior to the completion of this land use operation of:
(a) the plan for removal or storage of equipment and materials; and
(b) when final clean-up and restoration of the land used will be completed.</p> | <p>REPORTS BEFORE REMOVAL</p> |
| <p>9. The Permittee shall not conduct any overland movement of equipment and vehicles after 0800 hours local time on April 15, unless otherwise authorized in writing by a Land Use Inspector.</p> | <p>SHUT-DOWN DATE</p> |
| <p>10. The Board, for the purpose of this land use operation, designates April 15, as spring break-up.</p> | <p>SPRING BREAK-UP</p> |
| <p>11. The Permittee shall dispose of all brush and timber prior to the removal of men and equipment from the land use area.</p> | <p>BRUSH DISPOSAL</p> |

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| 12. | The Permittee shall commence and foster revegetation on all parts of the land used, as may be directed by a Land Use Inspector, within one (1) year of the completion of this land use operation. | RE-ESTABLISH
VEGETATION |
| 13. | The Permittee shall complete all clean-up and restoration of the lands used prior to the expiration date of this Land Use Permit. | CLEAN-UP |
| 14. | The Land Use Inspector and/or the Board reserve the right to impose closure of any area to the Permittee in periods when dangers to natural resources are severe. | CLOSURE |

26 (1) (C) THE TYPE AND SIZE OF EQUIPMENT THAT MAY BE USED IN THIS LAND-USE OPERATION

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| 15. | The Permittee shall not use any equipment except of the type, size, and number that is listed in the accepted application, unless otherwise authorized in writing by a Land Use Inspector. | ONLY APPROVED
EQUIPMENT |
| 16. | The Permittee shall equip bulldozer blades used in this land use operation with "mushroom" type shoes or a similar type of device, which shall be extended fifteen (15) centimetres below the cutting edge of the blade to protect the ground surface and vegetation. | BULLDOZER
BLADES AND
SHOES |
| 17. | The Permittee shall keep all garbage and debris in a covered metal container on site until disposed of. | GARBAGE
CONTAINER |
| 18. | The Permittee shall ensure a garbage container is on site. | GARBAGE
CONTAINER |

26 (1) (D) METHODS AND TECHNIQUES TO BE EMPLOYED BY THE PERMITTEE IN CARRYING OUT THIS LAND-USE OPERATION

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| 19. | The Permittee shall scout proposed lines and routes to select the best location for crossing streams and avoiding terrain obstacles prior to the movement of any vehicle that exerts pressure on the ground in excess of 35 Kpa. | DETOURS AND
CROSSINGS |
| 20. | The Permittee shall construct and maintain winter roads with a minimum of ten (10) centimetres of packed snow at all times during this land use operation. If this cannot be done, the Permittee shall construct Ice Roads in a manner approved by a Land Use Inspector. | SNOW ROADS/
ICE ROADS |
| 21. | The Permittee shall dogleg lines, trails and rights-of-way that approach lakes, streams or public roads, as specified in writing by a Land Use Inspector. | DOGLEG
APPROACHES |
| 22. | The Permittee shall leave a buffer strip of undisturbed vegetation at least thirty (30) metres in width between the cleared area and public roads or navigable waterways. | TREE SCREEN |

26 (1) (E) THE TYPE, LOCATION, CAPACITY AND OPERATION OF ALL FACILITIES TO BE USED BY THE PERMITTEE IN THIS LAND-USE OPERATION

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| 23. | The Permittee shall adhere to all mitigation measures in the accepted application. | MITIGATION
MEASURES |
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24. The Permittee shall ensure that the land use area is kept clean at all times. **CLEAN WORK AREA**

26 (1) (F) METHODS TO BE USED TO CONTROL OR PREVENT PONDING OF WATER, FLOODING, EROSION, SLIDES AND THE SUBSIDENCE OF LAND

25. The Permittee shall remove any obstruction to natural drainage caused by any part of this land use operation. **NATURAL DRAINAGE**

26. The Permittee shall not use any material other than water and/or clean snow in the construction of ice bridges, ramps and snow fills. **ICE BRIDGE MATERIALS**

27. The Permittee shall not allow any ice bridges to hinder the flow of water in any water body. **ICE BRIDGE**

28. The Permittee shall not ford wet streams, unless otherwise authorized in writing by a Land Use Inspector. **NO FORDING OF STREAMS**

29. The Permittee shall remove snow fills in stream crossings as this land use operation progresses, unless otherwise authorized in writing by a Land Use Inspector. **REMOVE WATER CROSSINGS**

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

31. 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**

32. The Permittee shall suspend overland travel of equipment or vehicles if rutting occurs. **SUSPEND OVERLAND TRAVEL**

33. The Permittee shall establish vegetation on all areas stripped of vegetation during this land use operation to a minimum of seventy per cent (70%) ground cover, unless otherwise authorized in writing by a Land Use Inspector. **REVEGETATE STRIPPED AREA**

34. The Permittee shall apply grass seed and fertilizer to areas designated in writing by a Land Use Inspector. **REPLANT DESIGNATED AREAS**

26 (1) (G) THE USE, STORAGE, HANDLING AND ULTIMATE DISPOSAL OF ANY CHEMICAL OR TOXIC MATERIAL TO BE USED IN THIS LAND-USE OPERATION

35. The Permittee shall remove all garbage and debris from the land use area as specified in the accepted application, or as authorized in writing by a Land Use Inspector. **REMOVE GARBAGE**

36. The Permittee shall immediately report all spills to the 24 hour Spill Report Line (867) 920-8130 in accordance with instructions contained in the NWT SPILL REPORT form NWT 1752/0202. **REPORT CHEMICAL AND PETROLEUM SPILLS**

37. The Permittee shall dispose of all sewage and grey water as proposed in the accepted application, or in a manner approved by a Land Use Inspector. **SEWAGE DISPOSAL**

26 (1) (H) PROTECTION OF WILDLIFE AND FISH HABITAT

38. The Permittee shall not unnecessarily damage wildlife habitat in conducting this land use operation. **HABITAT DAMAGE**
39. The Permittee shall not feed or harass wildlife. **NO FEEDING OR HARRASSING WILDLIFE**
40. The Permittee shall not remove vegetation or soil, or operate heavy equipment within one hundred (100) meters of any water body, unless otherwise authorized in writing by a Land Use Inspector. **HABITAT DAMAGE**
41. The Permittee shall not obstruct the movement of fish while conducting this land use operation. **FREE FISH MOVEMENT**
42. The Permittee shall not destroy or damage beaver dams. **BEAVER DAMS**
43. The Permittee shall not destroy or damage beaver lodges **BEAVER LODGES**
44. The Permittee shall not destroy or damage muskrat lodges. **MUSKRAT LODGES**
45. The Permittee shall use food handling and garbage disposal procedures that do not attract bears. Information about the latest bear detection and deterrent techniques can be obtained from Environment and Natural Resources in Inuvik at (867) 777-7308. **BEAR/MAN CONFLICT**
46. If migratory birds or their nesting areas, or any species at risk are encountered during the course of this land use operation, the Permittee will minimize all activity so as to not disturb these animals. **MINIMIZE ACTIVITY**
47. The Permittee shall cease operations when caribou are in the immediate vicinity of any area where this land use operation is being conducted. **CARIBOU HARRASSMENT**
48. The Permittee shall not, during the migration of caribou, locate any operation so as to block or cause substantial diversion of the migration, and shall cease any activity that may interfere with the migration, such as airborne surveys, or movement of equipment, until such time as the major migration has been completed. **CARIBOU MIGRATION**

26 (1) (I) THE STORAGE, HANDLING AND DISPOSAL OF REFUSE OR SEWAGE

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26 (1) (J) PROTECTION OF HISTORICAL AND ARCHAEOLOGICAL SITES AND BURIAL GROUNDS

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| 49. | The Permittee shall not knowingly operate any vehicle within thirty (30) metres of a known or suspected historical or archaeological site or burial ground site. | OPERATE
VEHICLE |
| 50. | The Permittee shall not knowingly remove, disturb, or displace any known or suspected historical or archaeological site or specimen or burial ground. | DISTURBANCE OF
SITE |
| 51. | The Permittee shall immediately cease any activity which disturbs an historical or archaeological site or specimen or burial ground, and shall contact the Gwich'in Land and Water Board at (867) 777-7960, or the Prince of Wales Northern Heritage Centre at (867) 920-6182, and shall not continue without written authorization from the Board. | CONTACTS |
| 52. | The Permittee shall ensure that all persons working under authority of this Land Use Permit are aware of the conditions concerning historical or archaeological sites or specimens or burial grounds. | NOTIFICATION
TO EMPLOYEES |

26 (1) (K) PROTECTION OF OBJECTS AND PLACES OF RECREATIONAL, SCENIC OR ECOLOGICAL VALUE

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26 (1) (L) POSTING OF SECURITY IN ACCORDANCE WITH SECTION 32

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| 53. | The Permittee shall deposit with the Minister a security deposit in the amount of \$0.00 pursuant to Section 32 of the Mackenzie Valley Land Use Regulations. | SECURITY
DEPOSIT |
| 54. | The Permittee shall be liable for any cost of damages over and above the amount of the security deposit. | LIABILITY FOR
DAMAGES |
| 55. | The Permittee shall be responsible for all costs to remediate the land used in this Land Use Permit. | RESPONSIBILITY
FOR
REMEDICATION
COSTS |

26 (1) (M) THE ESTABLISHMENT OF PETROLEUM FUEL STORAGE FACILITIES

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| 56. | The Permittee shall not place any fuel storage containers within thirty (30) metres of the normal high water mark of any water body, unless otherwise authorized in writing by a Land Use Inspector. | FUEL BY STREAM |
| 57. | The Permittee shall not allow petroleum products to spread to surrounding lands or into water bodies. | FUEL
CONTAINMENT |
| 58. | The Permittee shall mark all fuel containers, including 45-gallon drums, with the Permittee's name. | MARK
CONTAINERS |
| 59. | The Permittee shall ensure that adequate contingency plans and spill kits are in place, prior to commencement of this land use operation, to respond to | SPILL RESPONSE |

any potential spills.

26 (1) (N) METHODS AND TECHNIQUES FOR DEBRIS AND BRUSH DISPOSAL

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| 60. The Permittee shall spread all cut debris and brush over the areas cleared, prior to completion of this land use operation or the expiration date of this Land Use Permit. | <i>SPREAD BRUSH</i> |
| 61. The Permittee shall salvage all portions of trees cleared that are larger than thirteen (13) centimetres in diameter. | <i>SALVAGE TIMBER</i> |
| 62. The Permittee shall neatly pile all salvaged wood at locations specified in writing by a Land Use Inspector. | <i>PILE WOOD</i> |
| 63. The Permittee shall not leave tree stumps exceeding twenty (20) centimetres above the ground surface. | <i>TREE STUMPS</i> |

26 (1) (O) RESTORATION OF LANDS

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26 (1) (P) THE DISPLAY OF PERMITS AND PERMIT NUMBERS

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| 64. The Permittee shall, at all times during the course of this land use operation, keep on hand a copy of this Land Use Permit. | <i>COPY OF PERMIT</i> |
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26 (1) (Q) ANY OTHER MATTERS NOT INCONSISTENT WITH THE REGULATIONS, FOR THE PROTECTION OF THE BIOLOGICAL OR PHYSICAL CHARACTERISTICS OF THE LANDS

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| 65. The Permittee shall at all times conform to all other applicable Federal, Territorial or local acts, regulations, ordinances or by-laws. | <i>CONFORM TO APPLICABLE LAWS</i> |
| 66. The Permittee shall ensure that all persons working under the authority of this Land Use Permit are aware of and will adhere to the conditions as stated herein. | <i>NOTIFICATION TO ALL EMPLOYEES/ CONTRACTORS</i> |
| 67. The Permittee shall, while preparing the access road, make every effort to avoid covering or destroying traps or snares that may be found in the area. | <i>TRAPS PROTECTION</i> |
| 68. The Permittee shall restore any trails used by trappers or hunters along access routes by slashing any and all trees that may fall across these paths or trails and by removing any other obstructions such as snow piles or debris that may be pushed across the trails. | <i>TRAILS RESTORATION</i> |
| 69. The Permittee shall submit to the Land Use Inspector and the Board a contingency plan, for chemical and petroleum spills, for use during the construction and operation of the winter road. | <i>CONTINGENCY PLAN</i> |

70. The Permittee shall utilize avoidance cutting techniques to the greatest extent possible.

***AVOIDANCE
CUTTING***

71. The Permittee shall use existing lines or roads to the greatest extent possible.

***EXISTING
LINES/ROADS***

72. The Permittee shall not construct approaches abutted to the road bed on any public highway or road, without prior written approval from the Department of Transportation.

***HIGHWAY
APPROACHES***