



October 20, 2016

File: MV2016X0011

Mr. Carey Ogilvie, Senior Manager
 Department of Indian Affairs and Northern Development
 Contaminants and Remediation Division
 Box 1500
 YELLOWKNIFE NT X1A 2R3

Email: Carey.Ogilvie@aandc-aadnc.gc.ca

Dear Mr. Ogilvie:

**Issuance of Type A Land Use Permit
 Miscellaneous - Tundra Mine Site**

Attached is Type A Land Use Permit MV2016X0011 granted by the Mackenzie Valley Land and Water Board (MVLWB or the Board) in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA). This Permit has been approved for a period of five years, commencing October 20, 2016 and expiring October 19, 2021.

Please read all conditions carefully. For the purpose of submitting plans in accordance with this Permit, the date of this letter, October 20, 2016, is the date of commencement.

The Board hereby approves the following plans, as summarized in Table 1:

Table 1: Plans that have been approved

Condition Number	Title of Plan/Program/Report	Date Received
52	Spill Contingency Plan	May 16, 2016
65	Engagement Plan	May 16, 2016

Should you wish to discontinue your land-use operation at any time prior to the date of expiry set out in the Permit, a written notice of discontinuance is required as per section 37 of the MVLUR, in addition to the submission of a final plan.

A copy of this Permit and all related correspondence and documents has been filed on the Public Registry at the MVLWB office. Please be advised that this letter, with its attached procedures, inspection reports, and related correspondence is part of the Public Registry and is intended to keep all interested parties informed of the manner in which the Permit requirements are being met. All Public Registry material will be considered if an amendment to the Permit is requested.

-2-

The full cooperation of The Department of Indian Affairs and Northern Development – Contaminants and Remediation Division is anticipated and appreciated. If you have any questions or concerns, please contact Tyree Mullaney at (867) 766-7464 or email tyree@mvlwb.com.

Yours sincerely,

A handwritten signature in black ink, appearing to read "F. M. Adlem". The signature is fluid and cursive, with a long horizontal stroke at the end.

Floyd Adlem
MVLWB, A/Chair

Copied to: Distribution List

Attachments:

- Land Use Permit cover page and conditions
- Reasons for Decision



Land Use Permit

Permit Class	Permit No	Amendment No
A	MV2016X0011	

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

Department of Indian Affairs and Northern Development –
Contaminants and Remediation Division

Permittee

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

Signature Mr. Carey Ogilvie	Date May 4, 2016
Type of Land Use Operation Miscellaneous	
Location Tundra Mine Site, NT	

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

Dated at Yellowknife this 20 day of October, 2016

Signature A/Chair

Handwritten signature of Floyd Adlem in black ink.

Floyd Adlem

Signature Witness

Handwritten signature of Amanda Gauthier in black ink.

Amanda Gauthier

Effective Date

October 20, 2016

Expiry Date

October 19, 2021

ATTENTION

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 # MV2016X0011

Part A: Scope of Permit

1. This Permit entitles the Permittee to conduct the following land-use activities associated with the closure, Reclamation and Remediation of the abandoned mining and milling operations at the Tundra Mine site, located near Matthews Lake, Northwest Territories, including:
 - a) Use of equipment
 - b) Construction, maintenance and operation of a winter road;
 - c) Construction, maintenance and operation of a camp;
 - d) Maintenance and operation of site roads;
 - e) Quarry operations;
 - f) Use and storage of fuel; and
 - g) Various Reclamation and Remediation activities.
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, Tłıchǝ, or municipal laws.
4. Annex 1 forms a part of this Land Use Permit and sets out areas of federal and non-federal authority. The Inspectors' authorities are dependent on the ultimate responsibility for administration and control of the lands affected by this Land Use Permit.

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.

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 June 2013, or amended editions, *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.

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 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.

Reclamation – means the activities which facilitate the return of disturbed areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment, human activities, and the surrounding environment.

Remediation - means the removal, reduction, or neutralization of substances, Wastes or hazardous materials from a site so as to prevent or minimize adverse effects on the environment now or in the future.

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.

Sewage Disposal Facilities - Sump(s) and/or Sewage collection tank(s) and/or storage containers designed to hold Sewage.

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.

Sump - a man-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 - has the meaning set out in section 51 of the Act.

Watercourse - has the meaning set out in section 1 of the MVLUR.

Part C: Conditions Applying to All Land-Use Operations (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 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 locate all camps on Durable Land or previously cleared areas.	CAMP LOCATION
3. The Permittee shall use an existing campsite, as described in the complete application, or relocate the campsite as approved by an Inspector.	EXISTING CAMP
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 construct parallel lines or roads, unless an existing line or road cannot be used.	PARALLEL ROADS
6. The Permittee shall not conduct this land-use operation on any lands not designated in the complete application.	LOCATION OF ACTIVITIES
26(1)(b) Time	
7. At least 48 hours prior to the commencement of this land-use operation, the Permittee's Field Supervisor shall contact:	CONTACT INSPECTOR
<ul style="list-style-type: none"> a) an Indian Affairs and Northern Development Canada Inspector at (867) 669-2442 or (867) 669-2468, <u>and</u> b) a Government of the Northwest Territories Inspector at (867) 767-9188. 	
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 Indian Affairs and Northern Development Canada Inspector, <u>and</u> a Government of the Northwest Territories Inspector:	IDENTIFY AGENT
<ul style="list-style-type: none"> 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). 	
9. At least ten days prior to the completion of the land-use operation, the Permittee shall advise an Indian Affairs and Northern Development Canada Inspector <u>and</u> a Government of the Northwest Territories Inspector of:	REPORTS BEFORE REMOVAL
<ul style="list-style-type: none"> 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. 	
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. | ONLY APPROVED
EQUIPMENT |
|-----|--|------------------------------------|

26(1)(d) Methods and Techniques

- | | | |
|-----|--|-------------------------------|
| 12. | 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. | 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. | Prior to the expiry of this Permit, the Permittee shall replace all excavated material, unless otherwise authorized in writing by an Inspector. | EXCAVATED
MATERIAL |

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

- | | | |
|-----|---|-----------------------------|
| 15. | The Permittee shall ensure that the land use area is kept clean at all times. | CLEAN WORK
AREA |
| 16. | 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. | SUMPS FROM
WATER |

26(1)(f) Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land

- | | | |
|-----|--|--|
| 17. | The land-use operation shall not cause additional obstructions to any natural drainage. | NATURAL
DRAINAGE |
| 18. | The Permittee shall minimize erosion by installing erosion control structures as the land-use operation progresses. | PROGRESSIVE
EROSION
CONTROL |
| 19. | The Permittee shall not conduct off-road vehicle travel in areas without snow-covered surfaces, unless authorized in writing by an Inspector. | OFF-ROAD
VEHICLE TRAVEL |
| 20. | The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface. | PREVENTION OF
RUTTING |
| 21. | The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting. | SUSPEND
OVERLAND
TRAVEL |
| 22. | 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 |
| 23. | The Permittee shall not use any material other than clean water or snow in the construction of ice bridges. | ICE BRIDGE
MATERIALS |
| 24. | The Permittee shall not use any materials other than clean snow or water in the construction of snow fills. | SNOWFILL
MATERIALS |

- | | | |
|---|--|------------------------------------|
| 25. | 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 |
| 26. | 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 |
| 27. | The Permittee shall minimize approach grades on all Watercourse crossings. | MINIMIZE APPROACH |
| 28. | The Permittee shall not cut any stream bank, unless otherwise authorized in writing by an Inspector. | STREAM BANKS |
| 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. | EXCAVATION AND EMBANKMENTS |
| 30. | The Permittee shall not remove vegetation or operate heavy equipment within 100 metres of the Ordinary High Water Mark of any Watercourse, unless authorized in writing by an Inspector. | WATERCOURSE BUFFER |
| 31. | The Permittee shall not excavate land within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | EXCAVATE NEAR WATERCOURSE |
| 26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material | | |
| 32. | At least seven days prior to the use of any chemicals that were not identified in the complete application, the MSDS sheets must be provided to an Inspector and the Board. | CHEMICALS |
| 33. | Prior to the expiry date of this Permit, the Permittee shall reclaim all Sumps, unless otherwise authorized in writing by an Inspector. | RECLAIM SUMPS |
| 34. | Prior to the expiry date of this Permit or the end of operations, whichever comes first, the Permittee shall backfill and restore all Sumps, unless otherwise authorized in writing by an Inspector. | BACKFILL SUMPS |
| 35. | The Permittee shall maintain a record of all spills. For all reportable spills, in accordance with the Government of the Northwest Territories <i>Spill Contingency Planning and Reporting Regulations</i> , the Permittee shall: <ul style="list-style-type: none"> a) immediately report each spill to the 24-hour Spill Report Line (867) 920-8130; b) report each spill to an Indian Affairs and Northern Development Canada Inspector <u>and</u> a Government of the Northwest Territories Inspector within 24 hours; and c) submit a detailed report on each spill to the Board <u>and</u> an Indian Affairs and Northern Development Canada Inspector, <u>and</u> a Government of the Northwest Territories Inspector, within 30 days of its occurrence. | REPORT SPILLS |
| 36. | The Permittee shall dispose of all Toxic Material as described in the approved application. | WASTE CHEMICAL DISPOSAL |

- | | | |
|-----|---|---|
| 37. | The Permittee shall dispose of all combustible waste petroleum products by removal to an approved disposal facility. | WASTE
PETROLEUM
DISPOSAL |
| 38. | The Permittee shall dispose of all waste petroleum products by removal to an approved disposal facility or by incineration in a device designed for this purpose, as described in the approved application. | WASTE
PETROLEUM
DISPOSAL |

26(1)(h) Wildlife and Fish Habitat

- | | | |
|-----|---|-----------------------|
| 39. | 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

- | | | |
|-----|---|------------------------------|
| 40. | The Permittee shall keep all garbage and debris in a secure container until disposal. | GARBAGE
CONTAINER |
| 41. | The Permittee shall dispose of all garbage, waste, and debris as described in the approved application, unless otherwise authorized in writing by an Inspector. | REMOVE
GARBAGE |

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

- | | | |
|-----|--|--|
| 42. | 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 |
| 43. | The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site. | SITE
DISTURBANCE |
| 44. | The Permittee shall, where a suspected archaeological or historical site, or burial ground is discovered: <ul style="list-style-type: none"> a) immediately suspend operations on the site; and b) notify the Board at (867) 669-0506 <u>or</u> an Indian Affairs and Northern Development Canada at (867) 669-2442 or (867) 669-2468, <u>and</u> a Government of the Northwest Territories Inspector at (867) 767-9188; and c) notify the Prince of Wales Northern Heritage Centre at (867) 767-9347 ext. 71251 or ext. 71250. | SITE DISCOVERY
AND NOTIFICATION |

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

Intentionally left blank

26(1)(l) Security Deposit

- | | | |
|-----|--|---|
| 45. | All costs to remediate the area under this Permit are the responsibility of the Permittee. | RESPONSIBILITY
FOR REMEDIATION
COSTS |
|-----|--|---|

26(1)(m) Fuel Storage

- | | | |
|-----|--|----------------------------|
| 46. | 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 |
|-----|--|----------------------------|

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
51.	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
52.	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
53.	Prior to commencement of operations, the Permittee shall ensure that spill-response equipment is in place to respond to any potential spills.	SPILL RESPONSE
54.	All equipment that may be parked for two hours or more, shall have a hazmat/drip tray under it or be sufficiently diapered. Leaky equipment shall be repaired immediately.	DRIP TRAYS
55.	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		
<i>Intentionally left blank</i>		
26(1)(o) Restoration of the Lands		
56.	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.	PRE-CONSTRUCTION PROFILES
57.	The Permittee shall dispose of all overburden as instructed by an Inspector.	DISPOSAL OF OVERBURDEN
58.	The Permittee shall store overburden and use it to recontour the site after operations are complete, unless otherwise authorized in writing by an Inspector.	SAVE AND PLACE ORGANIC SOIL
59.	The Permittee shall level all stockpiles of granular material located within the land use area prior to the expiry date of this Permit.	NO STOCKPILES
60.	Prior to the expiry date of this Permit, the Permittee shall complete all cleanup and restoration of the lands used.	FINAL CLEANUP AND RESTORATION
61.	Prior to the expiry date of this Permit, the Permittee shall prepare the site in such a manner as to facilitate natural revegetation.	NATURAL VEGETATION

62. 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

63. The Permittee shall display a copy of this Permit in each campsite established to carry out this land-use operation. **DISPLAY PERMIT**

26(1)(q) Biological and Physical Protection of the Land

64. 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**

65. 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. **ENGAGEMENT PLAN**

66. All revised plans submitted to the Board shall include a brief summary of the changes made to the plan. **SUMMARY OF CHANGES**

Annex 1
Annexed to Land Use Permit MV2016X0011
Tundra Mine Federal Exclusion Area, referred to in Part A, item 4

This image denotes the Tundra Mine federal exclusion areas. Federal jurisdiction applies within the area outlined below.

