



# SAHTU Land & Water Board Land Use Permit

Permit Class Type A Land Use Permit	Permit No. S17X-004
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Subject to the *Mackenzie Valley Land Use Regulations* and the terms and conditions in this permit, authority is hereby granted to:

**Transport Canada, Prairie and Northern Region – Environmental Services,  
Contaminated Sites**

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Permittee

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

Signature: Melissa Fraser	Date: November 6, 2017
Type of Land Use Operations: Drilling – Groundwater monitoring wells	
Location: Norman Wells, NT	

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

Dated at: Fort Good Hope, NWT This 5th Day of December Year: 2017

Witness

Larry Wallace (Chairman)  
SAHTU Land & Water Board

Commencement Date: December 5, 2017 Expiry Date: Dec 4, 2022

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### 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 BY THE BOARD.

THIS PERMIT SHALL BE POSTED OR BE AVAILABLE ON SITE.

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If you have any questions please call the SAHTU Land & Water Board at  
(867) 598-2413

## Conditions Annexed to and Forming Part of Land Use Permit # S17X-004

### Part A: Scope of Permit

1. This Permit entitles the Permittee to conduct the following land-use operation:
  - a) Operation and maintenance, monitoring, and closure of the hydrocarbon contaminated soil Land Treatment Facility located at the Norman Wells Airport property including:
    - a. Installation of groundwater monitoring wells, including drilling; and
    - b. Use of equipment.
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, condition 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 Sahtu Land and Water Board established under Part 3 of the Act.

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

**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.

**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** – soil (ground 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.

**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** - 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 (WMP)** - 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)

<b>Condition</b>	<b>Category</b>
<b>26(1)(a) Location and Area</b>	
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.	<b>PRIVATE PROPERTY</b>
2. 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 the Board and an Inspector.	<b>DRILL LOCATIONS</b>
3. The Permittee shall not conduct this land-use operation on any lands not designated in the complete application.	<b>LOCATION OF ACTIVITIES</b>
<b>26(1)(b) Time</b>	
4. At least 48 hours prior to the commencement of the land-use operation, the Permittee's Field Supervisor shall contact an Inspector at (867) 587-7203.	<b>CONTACT INSPECTOR</b>
5. 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).	<b>IDENTIFY AGENT</b>
6. 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.	<b>REPORTS BEFORE REMOVAL</b>
7. The Board, for the purpose of this operation, designates March 31, as spring break-up.	<b>SPRING BREAK-UP</b>
<b>26(1)(c) Type and Size of Equipment</b>	
8. The Permittee shall not use any equipment except of a similar type, size, and number to that listed in the complete application.	<b>ONLY APPROVED EQUIPMENT</b>
<b>26(1)(d) Methods and Techniques</b>	
9. Prior to the expiry date of this Permit, the Permittee shall replace all excavated material, unless otherwise authorized in writing by an Inspector.	<b>EXCAVATED MATERIAL</b>
<b>26(1)(e) Type, Location, Capacity, and Operation of All Facilities</b>	
10. The Permittee shall ensure that the land use area is kept clean at all times.	<b>CLEAN WORK AREA</b>
11. 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.	<b>SUMPS FROM WATER</b>

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

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| 12. | 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. | <b>Permafrost Protection</b>       |
| 13. | The land-use operation shall not cause obstruction to any natural drainage.  | <b>NATURAL DRAINAGE</b>            |
| 14. | The Permittee shall minimize erosion by installing erosion control structures as the land-use operation progresses.  | <b>PROGRESSIVE EROSION CONTROL</b> |
| 15. | The Permittee shall, where flowing water from a Borehole is encountered:<br>a) plug the Borehole in such a manner as to permanently prevent any further outflow of water; and<br>b) immediately report the occurrence to the Board and an Inspector. | <b>FLOWING ARTESIAN WELL</b>       |
| 16. | The Permittee shall not conduct off-road vehicle travel in areas without snow-covered surfaces.  | <b>OFF-ROAD VEHICLE TRAVEL</b>     |
| 17. | The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface.   | <b>PREVENTION OF RUTTING</b>       |
| 18. | The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting.   | <b>SUSPEND OVERLAND TRAVEL</b>     |
| 19. | The Permittee shall not ford wet streams.  | <b>NO FORDING OF STREAMS</b>       |
| 20. | 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.                                       | <b>EXCAVATION AND EMBANKMENTS</b>  |
| 21. | The Permittee shall not remove vegetation or operate heavy equipment within 100 metres of the Ordinary High Water Mark of any Watercourse.   | <b>WATERCOURSE BUFFER</b>          |
| 22. | 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.  | <b>EXCAVATE NEAR WATERCOURSE</b>   |

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

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| 23. | 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. | <b>CHEMICALS</b> |
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24.	The Permittee shall maintain a record of all spills. For all reportable spills, in accordance with the GNWT <i>Spill Contingency Planning and Reporting Regulations</i> , the Permittee shall:	<b>REPORT SPILLS</b>
	<ul style="list-style-type: none"> <li>a) immediately report each spill to the 24-hour Spill Report Line (867) 920-8130;</li> <li>b) report each spill to an Inspector within 24 hours; and</li> <li>c) submit, to the Board and an Inspector, a detailed report on each spill within 30 days.</li> </ul>	
25.	The Permittee shall dispose of all Toxic Material as described in the approved Waste Management Plan.	<b>WASTE CHEMICAL DISPOSAL</b>
26.	The Permittee shall dispose of all combustible Waste petroleum products by removal to an approved disposal facility.	<b>WASTE PETROLEUM DISPOSAL</b>
27.	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.	<b>DRILLING NEAR WATER OR ON ICE</b>
28.	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.	<b>DRILLING WASTE</b>
29.	The Permittee shall not allow any Drilling Waste to spread to the surrounding lands or Watercourses.	<b>DRILLING WASTE CONTAINMENT</b>
	<b>26(1)(h) Wildlife and Fish Habitat</b>	
30.	The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation.	<b>HABITAT DAMAGE</b>
	<b>26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage</b>	
31.	The Permittee shall adhere to the <b>Waste Management Plan</b> , 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.	<b>WASTE MANAGEMENT</b>
32.	The Permittee shall keep all garbage and debris in a secure container until disposal.	<b>GARBAGE CONTAINER</b>
33.	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.	<b>REMOVE GARBAGE</b>
34.	The Permittee shall provide written correspondence to the Board and Inspector ten (10) days prior to the initial deposit of Waste, demonstrating that the facility has agreed to accept the Waste and has the ability to receive the volumes of Waste required.	<b>NOTIFICATION of SOLID WASTE DISPOSAL</b>

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

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| 35. | The Permittee shall not operate any vehicle or equipment within 150 metres of a known or suspected historical or archaeological site or burial ground.   | <b>ARCHAEOLOGICAL<br/>BUFFER</b>           |
| 36. | The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site.  | <b>SITE DISTURBANCE</b>                    |
| 37. | The Permittee shall, where a suspected archaeological or historical site, or burial ground is discovered:<br><br>a) immediately suspend operations on the site; and<br>b) notify the Board at (867) 669-0506 or an Inspector at (867) 695-2626, and the Prince of Wales Northern Heritage Centre at 767-9347 ext. 71250 or ext. 71251. | <b>SITE DISCOVERY AND<br/>NOTIFICATION</b> |

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

*Intentionally left blank*

**26(1)(l) Security Deposit**

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| 38. | All costs to remediate the area under this Permit are the responsibility of the Permittee. | <b>RESPONSIBILITY FOR<br/>REMEDICATION<br/>COSTS</b> |
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**26(1)(m) Fuel Storage**

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| 39. | The Permittee shall: (a) examine all Fuel Storage Tanks and containers for leaks a minimum once per day; and (b) repair all leaks immediately.   | <b>CHECK FOR LEAKS</b>                           |
| 40. | 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.   | <b>FUEL NEAR WATER</b>                           |
| 41. | The Permittee shall set up all refueling points with Secondary Containment.  | <b>SECONDARY<br/>CONTAINMENT –<br/>REFUELING</b> |
| 42. | The Permittee shall not allow petroleum products to spread to surrounding lands or Watercourses.   | <b>FUEL CONTAINMENT</b>                          |
| 43. | The Permittee shall have a maximum of 450 litres of fuel stored on the land use site at any time, unless otherwise authorized in writing by the Board.   | <b>MAXIMUM FUEL ON<br/>SITE</b>                  |
| 44. | The Permittee shall adhere to the <b>Spill Contingency Plan</b> , 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. | <b>SPILL CONTINGENCY<br/>PLAN</b>                |
| 45. | 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.   | <b>SPILL RESPONSE</b>                            |

46.	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.	<b>DRIP TRAYS</b>
47.	The Permittee shall clean up all leaks, spills, and contaminated material.	<b>CLEAN UP SPILLS</b>
<b>26(1)(n) Methods and Techniques for Debris and Brush Disposal</b>		
48.	Prior to the expiry date of this Permit, the Permittee shall progressively dispose of all brush and trees and shall complete all brush disposal.	<b>BRUSH DISPOSAL/ TIME</b>
<b>26(1)(o) Restoration of the Lands</b>		
49.	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.	<b>PRE-CONSTRUCTION PROFILES</b>
50.	The Permittee shall dispose of all overburden as instructed by an Inspector.	<b>DISPOSAL OF OVERBURDEN</b>
51.	The Permittee shall store overburden and use it to recontour the site after operations are complete, unless otherwise authorized in writing by an Inspector.	<b>SAVE AND PLACE ORGANIC SOIL</b>
52.	Prior to the expiry date of this Permit, the Permittee shall level all stockpiles of granular material located within the land use area.	<b>NO STOCKPILES</b>
53.	Prior to the expiry date of this Permit, the Permittee shall complete all cleanup and restoration of the lands used.	<b>FINAL CLEANUP AND RESTORATION</b>
54.	Prior to the expiry date of this Permit, the Permittee shall prepare the site in such a manner as to facilitate natural revegetation.	<b>NATURAL VEGETATION</b>
55.	The Permittee shall carry out progressive reclamation of disturbed areas as soon as it is practical to do so.	<b>PROGRESSIVE RECLAMATION</b>
<b>26(1)(p) Display of Permits and Permit Numbers</b>		
56.	The Permittee shall keep a copy of this Permit on hand at all times during this land-use operation.	<b>COPY OF PERMIT</b>
<b>26(1)(q) Biological and Physical Protection of the Land</b>		
57.	Within 30 days of issuance, the Permittee shall submit a revised Waste Management Plan in accordance with MVLWB's 2011 <i>"Guidelines for Developing a Waste Management Plan"</i> to the Board for approval.	<b>SUBMIT REVISED PLAN</b>
58.	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.	<b>RESUBMIT PLAN</b>
59.	The Permittee shall adhere to the <b>Engagement Plan</b> , 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.	<b>ENGAGEMENT PLAN</b>



60. All revised plans submitted to the Board shall include a brief summary of the changes made to the plan.

**SUMMARY OF  
CHANGES**

**Signed on behalf of the Sahtu Land and Water Board**



**Witness**



**Larry Wallace (Chairman)**