Conditions Annexed to and Forming Part of Land Use Permit # S20P-003

Part A: Scope of Permit

- 1. This Permit entitles the Permittee to conduct the following land-use operation:
 - a) to use horizontal direction drilling (HDD) to replace at a deeper, safer depth, a segment of the Line 21 pipeline within the existing Enbridge ROW, southeast of kilometre post (KP) 158 near Little Smith Creek in the Northwest Territories;
 - b) to use heavy equipment and store fuel;
 - to upgrade existing access roads and construct temporary infrastructure for camp use, laydown yard, barge landing, and temporary workspaces;
 - d) to clear, grub, brush, and remove vegetation and snow as needed;
 - e) to excavate material and trench for HDD access and pipe removal;
 - f) to conduct in-stream works as needed;
 - g) to use the gravel pit for site activities;
 - h) to dispose of waste;
 - i) to complete site reclamation.
- 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.
- 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, Tłıcho, 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.

Closure and Reclamation - the process and activities that facilitate the return of areas affected by the Project to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment, human activities, and the surrounding environment.

Drilling Fluid - 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.

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*

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

- **Progressive Reclamation** Closure and Reclamation activities conducted during the operating phase of the project.
- 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* that describes the set of procedures to be implemented to minimize the effects of a spill.
- Safety Data Sheet a technical document, typically written by the manufacturer or supplier of a chemical, that provides information about the hazards associated with the product, advice about safe handling and storage, and emergency response procedures.

Sump - a human-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:

- 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 - 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.

Commented [BB1]: Not sure if this condition is required

Part C: Conditions Applying to All Activities (headings correspond to subsection 26(1) of the Mackenzie Valley Land Use Regulations)

26(1)(a) Location and Area

 The Permittee shall only conduct this land-use operation on lands designated in the application. LOCATION OF ACTIVITIES

 The Permittee shall not conduct any part of the land-use operation within 400 metres of any privately owned or leased land or structures, including cabins used for traditional activities, unless otherwise approved by the Board. PRIVATE PROPERTY SETBACK

3. The Permittee shall use an existing campsite, as described in the complete application.

USE EXISTING CAMP

 Prior to the commencement of drilling, the Permittee shall submit the target areas and final drill hole locations on a 1:50,000-scale map with coordinates and map datum to the Board and an Inspector. **DRILL LOCATIONS**

 The Permittee shall not conduct a drilling operation or construct an adit or drill site within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. DRILLING/ ADIT SETBACK

 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. **SUMP SETBACK**

The Permittee shall confine the width of the right-of-way to a maximum of 10 metres. WIDTH RIGHT-OF-WAY

26(1)(b) Time

8. At least 48 hours prior to the initial commencement of the land-use operation, the Permittee's Field Supervisor shall notify the Board and contact an Inspector at (867)

INITIAL NOTIFICATION – CONTACT INSPECTOR

 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: **IDENTIFY AGENT**

- 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).

Commented [BB4]: Preferred numbers?

setback in the condition?

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Commented [BB2]: There is a cabin 400 m away from the potential barge landing site

Commented [BB3]: The HDD alignment for the new pipeline is approximately 75 m setback from Little Smith Creek. Change the

10.	At least ten days prior to the completion of the land-use operation, the Permittee shall advise an Inspector of:	REPORTS BEFORE FINAL REMOVAL
	a) the plan for removal or storage of equipment and materials;b) when final cleanup and reclamation of the land used will be completed; and	
	c) when the Final Plan will be submitted.	
	26(1)(c) Type and Size of Equipment	
11.	The Permittee shall only use equipment of a similar type, size, and number to that listed in the complete application.	USE APPROVED EQUIPMENT
12.	The Permittee shall use portable ramps during loading or unloading of ships or barges.	PORTABLE RAMPS
	26(1)(d) Methods and Techniques	
13.	The Permittee shall Dogleg lines, trails and right-of-ways that approach Watercourses or public roads.	DOGLEG APPROACHES
14.	The Permittee shall meander any new cut lines to a maximum sight line of 200 metres.	MEANDER LINES
15.	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
16.	Prior to the expiry end of the land-use operation, the Permittee shall replace all excavated material, unless otherwise authorized in writing by an Inspector.	EXCAVATED MATERIAL TEST PITS
7	26(1)(e) Type, Location, Capacity, and Operation of All Facilities	
17.	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	
18.	The Permittee shall insulate the ground surface beneath all structures associated with this land-use operation to prevent:	PERMAFROST PROTECTION
	a) any vegetation present from being removed;b) the melting of Permafrost; andc) the ground settling and/or eroding.	

19.	The land-use operation shall not cause obstruction to any natural drainage.	NATURAL DRAINAGE
20.	The Permittee shall install and maintain suitable erosion control structures as the land-use operation progresses.	PROGRESSIVE EROSION CONTROL
21.	The Permittee shall apply appropriate mitigation at the first sign of erosion.	REPAIR EROSION
22.	The Permittee shall only conduct off-road vehicle travel on snow-covered surfaces.	OFF-ROAD VEHICLE TRAVEL
23.	The Permittee shall prepare the site in such a manner as to prevent rutting or gouging of the ground surface.	PREVENTION OF RUTTING
24.	The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting or gouging.	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.	VEHICLE MOVEMENT FREEZE-UP
26.	The Permittee shall not cut any stream bank, unless otherwise authorized in writing by an Inspector.	STREAM BANKS
27.	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
28.	The Permittee shall not remove vegetation or operate heavy equipment within 100 metres of the Ordinary High Water Mark of any Watercourse except at the barge landing.	EQUIPMENT: WATERCOURSE BUFFER
29.	The Permittee shall not excavate land within 100 metres of the Ordinary High Water Mark of any Watercourse, except at the barge landing and as authorized by DFO and an Inspector.	EXCAVATION SETBACK
	26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material	
30.	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.	DRILLING NEAR WATER OR ON ICE
31.	The Permittee may deposit Drilling Waste that does not contain Toxic Material in a Sump. Any Sumps or natural depressions used to deposit	DRILLING WASTE

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Commented [BB5]: If the barge landing is required with instream works and cut and fill, authorization from DFO and the Inspector will be required.

Commented [BB6]: Added this location to permit the barge landing to be built

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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.

 The Permittee shall remove all Drilling Waste containing Toxic Material to an approved disposal facility.

DRILLING WASTE DISPOSAL

33. The Permittee shall not allow any Drilling Waste to spread to the surrounding lands or Watercourses.

DRILLING WASTE CONTAINMENT

34. Prior to the expiry date of this Permit or the end of the land-use operation whichever comes first, the Permittee shall backfill and restore all Sumps, unless otherwise authorized in writing by an Inspector. RECLAIM NON-OIL AND GAS SUMPS

35. The Permittee shall dispose of all Toxic Material as described in the approved Waste Management Plan.

WASTE CHEMICAL DISPOSAL

Commented [BB7]: Not sure that there will be toxic material

36. The Permittee shall dispose of all combustible Waste petroleum products by removal to an approved disposal facility.

WASTE PETROLEUM DISPOSAL

37. The Permittee shall provide written notification to the Board and Inspector a minimum of 10 days prior to the initial deposit of Waste, demonstrating that the licenced disposal facility has agreed to accept the Waste and has the capacity to receive the volumes of Waste requested. NOTIFICATION OF SOLID WASTE DISPOSAL

26(1)(h) Wildlife and Fish Habitat

38. 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

39. The Permittee shall dispose of all Waste as described in the **Waste**Management 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.

WASTE MANAGEMENT

 The Permittee shall keep all garbage and debris in a secure container until disposal. GARBAGE CONTAINER

41. The Permittee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan.

SEWAGE DISPOSAL - PLAN

26(1)(i) Protection of Historical	Archaeological	and Rurial Sites
ZOLIMI PROLECTION OF HISTORICAL	. Alciiaeologicai	. anu bunai sites

42. The Permittee shall not operate any vehicle or equipment within 150 metres of a known or suspected historical or archaeological site or 500 metres of a burial ground.

ARCHAEOLOGICA L 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:

SITE DISCOVERY
AND
NOTIFICATION

a) immediately suspend operations on the site; and

b) notify the Board at (867) or an Inspector at (867) , and the Prince of Wales Northern Heritage Centre at 767-9347 ext. 71251 or ext. 71255.

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

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26(1)(/) Security Deposit

45. Prior to the commencement of the land-use operation, the Permittee shall deposit with the Minister a security deposit in the amount of

SECURITY DEPOSIT

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

26(1)(m) Fuel Storage

47. The Permittee shall:

REPAIR LEAKS

- a) examine all Fuel Storage Containers and Tank for leaks; and
- b) repair all leaks immediately.

48. The Permittee shall place Fuel Storage Containers and or Tanks a minimum of 100 metres from the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector.

FUEL STORAGE SETBACK

49. The Permittee shall ensure that all fuel caches have adequate Secondary Containment

FUEL CACHE SECONDARY CONTAINMENT

50. The Permittee shall set up all refueling points with Secondary Containment.

SECONDARY CONTAINMENT -REFUELING

51.	The Permittee shall not allow petroleum products to spread to surrounding lands or Watercourses.	FUEL CONTAINMENT
52.	The Permittee shall mark all Fuel Storage Containers and Tanks with the Permittee's name.	MARK CONTAINERS AND TANKS
53.	The Permittee shall mark all stationary fuel caches and fuel storage facilities with flags, posts, or similar devices so that they are at all times plainly visible to local vehicle travel.	MARK FUEL LOCATION
54.	The Permittee shall have a maximum of litres of fuel stored on the land use site at any time, unless otherwise approved by the Board.	MAXIMUM FUEL ON SITE
55.	Within ten days of the establishment of any fuel cache, the Permittee shall report the location and quantity of the cache in writing to the Board and an Inspector.	REPORT FUEL LOCATION
56.	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
57.	The Permittee shall comply with 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
58.	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.	SPILL RESPONSE
59.	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.	DRIP TRAYS
60.	The Permittee shall clean up all leaks, spills, and contaminated material immediately	CLEAN UP SPILLS
61.	During the period of this Permit, if a spill occurs or is foreseeable, the Permittee shall: a) implement the approved Spill Contingency Plan; b) report it-immediately using the NU-NT Spill Report Form by one of the following methods: • Telephone: (867) 920-8130 • Fax: (867) 873-6924 • E-mail: spills@gov.nt.ca • Online: Spill Reporting and Tracking Database c) within 24 hours, notify the Board and an Inspector; and	REPORT SPILLS

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d) within 30 days of initially reporting the incident, submit a detailed report to the Board and an Inspector, including descriptions of causes, response actions, and any changes to procedures to prevent similar occurrences in the future. Any updates to this report shall be provided to the Board and an Inspector in writing as changes occur.

26(1)(n) Methods and Techniques for Debris and Brush Disposal

62. The Permittee shall progressively dispose of all brush and trees; all disposal shall be completed prior to the end of this land use operation

BRUSH DISPOSAL/ TIME

63. The Permittee shall not clear areas larger than identified in the complete application.

MINIMIZE AREA CLEARED

64. The Permittee shall clear by hand all trees and brush a minimum distance of 50 metres from the top edge of all stream banks and top edge of slopes.

CLEARING SENSITIVE AREA

26(1)(o) Restoration of the Lands

65. 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

66. The Permittee shall save the organic soil stripped from the land use area and shall use the organic soil for reclamation as approved by the Board, or otherwise authorized in writing by an Inspector. SAVE AND PLACE ORGANIC SOIL

67. Prior to the end of the land-use operation, the Permittee shall complete all cleanup and restoration of the lands used.

FINAL CLEANUP AND RESTORATION

68. Prior to the end of the land-use operation, the Permittee shall prepare the site in such a manner as to facilitate natural revegetation.

NATURAL VEGETATION

69. Prior to the end of the land-use operation, the Permittee shall initiate active removal of all non-native species established in previously disturbed areas.

NATIVE SPECIES

70. 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

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

DISPLAY PERMIT

Commented [BB9]: Reports of several non-native species at the site currently –

Commented [BB8]: Suggested for adjacent to Mackenzie River

when building the barge landing

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

72. The Permittee shall not move any equipment or commence any drilling when one or more caribou are within 500 metres.

CARIBOU DISTURBANCE

73. If nesting areas are encountered during the course of operations, the Permittee shall minimize all activity so as to not disturb them.

MIGRATORY BIRD NEST DISTURBANCE RESUBMIT PLAN

- 74. 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.
- 75. The Permittee shall comply with 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

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

SUMMARY OF CHANGES

Witness

Larry Wallace - Chair

Sahtu Land and Water Board