Government of Gouvernement des Northwest Territories Territoires du Nord-Ouest

December 19, 2023

#### **DISTRIBUTION LIST**

#### Renewal of Land Use Permit W2016J0008 - Tundra Ecosystem Research Station, Daring Lake

The Department of Environment and Climate Change (ECC) is applying for a renewal from the Wek'èezhìi Land and Water Board of the above referenced land use permit for the Tundra Ecosystem Research Station (TERS) located at Daring Lake, NT. The current permit expired as of November 3<sup>rd</sup>, 2023; a renewal would render it valid until November 2028. Presently, a storage authorization is in place until a new land use permit can be granted.

The station supports scientific researchers from ECC and outside universities and a Science and Culture Camp for high school students throughout the NWT.

TERS is a state-of-the-art facility that utilizes current technologies to minimize its impact on the environment. This includes the use of solar power, high energy efficient appliances, propane toilet and solar powered electric fence. The camp has been inspected twice since the most recent permit issuance and seven times over the life of the project. A small oil spill was reported in 2019 that has since been cleaned up and cleared with the Land Use Inspector. Overall, the land use has been commended for operating and maintaining the camp to a high standard.

Prior to this application, the scope of work for operating and maintaining this research camp including fuel storage, and other associated camp activities have remained unchanged since the Preliminary Screening dated November 6, 2009. It was deemed that there was no likelihood that TERS would have a significant adverse impact on the environment or would be a cause of public concern.

The following TERS LUP applications and storage authorizations have since been approved abiding by the 2009 Preliminary Screening:

- (2009) LUP Application (W2009J006), granted November 11, 2009.
- (2014) Two-year permit extension for W2009J0006, granted October 29, 2014
- (2016) LUP renewal application (W2016J0008), granted November 4, 2016
- (2021) Two-year permit extension for W2016J0008, granted November 17, 2021
- (2023) Storage Authorization for W2016J0008, granted November 4, 2023

For the 2023 Land Use Permit Application, TERS has revised one component of operations regarding fuel volume capacity. This revision includes increasing the maximum fuel volume capacity to 28,800 liters in fuel drums to allow for further fuel storage on site in secondary containment fuel berms. Please refer to the impact mitigation table in the application form and see the attached Spill Contingency Plan for further information.

I have attached the following 2023 Land Use Permit application materials for review:

- 2023 Land Use Permit Application Form
- Spill Contingency Plan Version 4.0.
- Waste Management Plan Version 3.0.
- Project Details Plan.
- Engagement Plan Version 2.0.
- Engagement Summary & Record.

Further materials can be found on the Wek'èezhìi Land and Water Board public registry at: <u>https://wlwb.ca/registry/W2016J0008</u>

Please direct any comments or concerns with respect to the permit renewal to Colin Modeste-Burgin, TERS Camp Manager, at Colin\_Modeste-Burgin@gov.nt.ca

Sincerely,

Att Sy Cuff

Heather Sayine-Crawford Director Wildlife Management Division

# Land and Water Boards of the Mackenzie Valley









### LAND USE PERMIT APPLICATION FORM

Subsection 19(2) and Schedule 2 of the Mackenzie Valley Land Use Regulations

Use an "X" to indicate which	Mackenzie Valley Land and Water Board:		Sahtu Land and Water Board:	
Application is being made to:	Wek'èezhìı Land and Water Board:	Х	Gwich'in Land and Water Board:	

To complete this Form, please refer to the LWB <u>Guide to the Land Use Permitting Process</u> (Guide) and fill in the grey fields; attach additional pages, as necessary. Indicate N/A in the grey fields for Items or parts of Items that are not applicable. An application package checklist is provided in the Guide. Review the following LWB guidance for formatting your Application Package:

- Document Submission Standards
- <u>Standard Outline for Management Plans</u>

If applicable, provide the existing or current Land Use Permit file number:			
Use an "X" to indicate if this Application is ac	Water Licence – in a non-federal area:	N/A	
by an Application for a Water Licence:		Water Licence – in a federal area:	N/A

#### 1. NAME AND CONTACT INFORMATION - APPLICANT

Project Name:	Tundra Ecosystem Research Stat	Fundra Ecosystem Research Station (TERS)					
Applicant's Name:	Heather Sayine-Crawford						
Position:	Director, Wildlife Management [	Division					
Company Name:	Environment and Climate Chang	e, Governmen	t of the Northwest Territories				
Mailing Address:	PO Box 1320						
Community:	Yellowknife	Telephone:	867-767-9237 ext.53230				
Prov/Terr:	NT	Email:	Heather_Sayine-Crawford@gov.nt.ca				
Postal Code:	X1A 2L9	Other:					

#### 2. NAME AND CONTACT INFORMATION - APPLICANT'S HEAD OFFICE

Include a Certificate of Corporate Registration from the Government of the Northwest Territories in your Application Package.

Use an "X" to indicate this information is the same as Item 1 above:						
Name:	X					
Position:	x					
Company Name:	X					
Mailing Address:	X					
Community:	X					
Prov/Terr:	x	Telephone:	Х			
Postal Code:	x	Email:	Х			
Field Supervisor:	X	Other:	Х			

#### 3. NAME AND CONTACT INFORMATION - CONTRACTORS AND SUB-CONTRACTORS

Include relevant names, responsibilities, and contact information. An additional table should be added for each contractor and sub-contractor.

Name:	N/A		
Position:	N/A		
Company Name:	N/A		
Mailing Address:	N/A		
Community:	N/A	Telephone:	N/A
Prov/Terr:	N/A	Email:	N/A
Postal Code:	N/A	Other:	N/A

Use an "X" to indicate that contractor and/or subcontractor information is not available at this time.

#### 4. LOCATION OF ACTIVITIES (See attached Project Details Plan – GNWT-TERS)

Use the grey fields below to provide or reference the following information:

Traditional Place Name:

Yamba Lake (Yabah ti)

<u>Maps and Geographic Information System (GIS) Data:</u> Include a map in your Application Package identifying local geographic features, watercourses and water sources, project structures, and location(s) of any proposed waste deposits. Provide geographic coordinates (latitude and longitude) of project features, and the maximum and minimum project boundary in degrees, minutes, seconds, or decimal degrees. Include GIS data in your Application Package, if applicable. Refer to the LWB <u>Geospatial Data Submission Standards</u> for providing geographic information.

Minimum latitude:	64°52′0.05″	Maximum latitude:	64°52′ 4.0″
Minimum longitude:	111°25' 29.9"	Maximum longitude:	111° 35' 41"

NTS Map Sheet No.: Provide the map sheet number:

76D/13

GIS Data: Use an "X" to indicate if GIS data is attached.

Attached:		Not Available:		Х	
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Land Use Permit – Application

Page 2 of <u>11</u>

Land Types: Use an "X" to indicate the type(s) of the land on which the activities are proposed:

|--|

#### 5. ELIGIBILITY

Refer to section 18 of the Mackenzie Valley Land Use Regulations. Use an "X" to indicate which one applies:

18(a)(i):	18(a)(ii):		18(a)(iii):		18(b):	Х
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#### 6. RIGHTS AND/OR CONTRACTS TO SUPPORT ELIGIBILITY

Contact Indigenous, federal, and territorial governments, and other parties to ensure all appropriate rights, authorizations, permissions, dispositions, and contracts have been obtained or are in the process of being obtained (e.g., mineral exploration rights, quarry permits, licences of occupation, leases, access agreements and authorizations, etc.). List and provide confirmation of other authorizations that relate to the proposed activities; reference these in your Application Package (e.g., rights, permits, licences, etc.).

The Government of the Northwest Territories has operated the Tundra Ecosystem Research Station at Daring Lake since 1994. Reserve status was granted for the GNWT in 1994 by INAC (GNWT Reserve 76D/13-1).

Research permits are held for all TERS users who carry out environmental and other research-based activities from the Station. Wildlife Research Permits are issued by Wildlife Management Division, ECC, GNWT and NWT Research permits form the Aurora Research Institute.

#### 7. PERMIT TYPE AND CRITERIA

Refer to sections 4 and 5 of the <u>Mackenzie Valley Land Use Regulations</u>. Use an "X" to indicate which permitting criteria apply:

	Туре А			Туре В			Туре С	
4(a)(i):		4(b)(i):		5(a)(i):		5(b)(i):	(SLWB and WLWB only):	
4(a)(ii):		4(b)(ii):	х	5(a)(ii):		5(b)(ii):		
4(a)(iii):		4(b)(iii):		5(a)(iii):	Х			
4(a)(iv):		4(b)(iv):		5(a)(iv):				
4(a)(v):			•	5(a)(v):				
				5(a)(vi):				

#### 8. PROJECT DESCRIPTION

Include a project description in your Application Package, or for small-scale projects, describe the proposed activities in the grey field provided below. For each and all proposed water uses, include the name and type (e.g., lake, river) of water source(s), and the purpose and quantity of water to be used (rates, volumes (m<sup>3</sup>/day)). Indicate the total number of hectares to be used in each phase of the project, as well as through the life of the project.

The purpose of the Tundra Ecosystem Research Station (TERS) is to promote and support scientific research in the sub-arctic, in addition to providing educational programs for northern residents. The Station was designed as a stateof -the-art facility incorporating the latest technologies and best practices in power generation (i.e., solar and wind), wildlife deterrents and waste management. The camp compound encompasses approximately 0.5 hectares of land. Research and monitoring activities focus on the following priority areas: climate change, impacts of industrial development, wildlife disease and contaminants, species at risk, and ecosystem processes. Research activities generally take place within 5 km of the research station and contribute to pan-territorial monitoring programs such as: small mammal, arctic hare, raptor, breeding birds, water quality, and water quantity. Researchers from ECC also participate in the International Tundra Experiment, a circumpolar study examining the effects of climate change on plant phenology, growth, and reproduction. In addition, there are several university research groups that use TERS facilities on an ongoing basis from Queens, Carlton, Trent, and Wilfrid Laurier universities.

The GNWT runs the Tundra Science and Culture Camp at the Daring Lake facility. This is a 10-day cross-cultural environmental education program for high school students throughout the NWT.

The Tundra Ecosystem Research Station is a small camp that has been designed to be environmentally friendly. It is comprised of 10 Weather haven tents. The number of people on site varies between 2 and 35, with an average of approximately 6 people in camp at any time from May to September.

TERS is located at Daring Lake, which is a water source required for domestic use. Water is pumped up to a 1000 L (1 m<sup>3</sup>) holding tank in the summer and brought up in 5-gallon buckets in the spring. The estimated water consumption is 0.25 m<sup>3</sup> - 0.50 m<sup>3</sup> per day throughout the season.

#### 9. CAMP

Describe the proposed camp size and layout. Indicate the number of person-days; explain, with rationale, any variations in the number of people that may be on site over the life of the project.

The Tundra Ecosystem Research Station is a small camp that has been designed to be environmentally friendly. It is comprised of 10 Weather haven tents. The number of people on site varies between 2 and 35, with an average of approximately 6 people in camp at any one time. Person days range from 700 – 900 during the season of operation from May to September.

Use of solar power as the main power source, use of an incinerating toilet, grey-water sump, etc. and responsible storage of fuels all result in minimal short-term impacts on the environment in the Daring Lake area.

An electric bear fence encircles the living area of the research station to discourage human/animal interactions and all station users are trained on bear safety prior to or upon arrival at TERS.

Wildlife monitoring has shown that caribou do not avoid the Daring Lake area in response to the station. Large carnivores (wolverine, grizzly bears) are regularly sighted in the vicinity of the camp but have never interacted in any way with the camp (i.e., they do not exhibit behaviors that indicate they are attracted or habituated to the camp). The use of boardwalks in the fenced-in compound and on the tundra (near research sites) in high use areas are designed to minimize damage to local vegetation.

#### **10. ROADS AND ACCESSES**

Provide detailed information about the construction, location, and decommissioning of any roads and accesses.

Use an "X" to indicate if this is to	Yes		Use an "X" to indicate if the route has	Yes	
be a pioneered road or access:	No	Х	been laid out or ground-truthed:	No	Х

N/A

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#### **11. PROPOSED WASTE MANAGEMENT METHODS**

Use the grey fields below to provide or reference the following information:

<u>Waste Management Plan</u>: Include a Waste Management Plan in your Application Package, if applicable, or for small-scale projects, describe the proposed waste management activities in the grey fields provided below. A template for the Plan can be found in the LWB <u>Guidelines for Developing a Waste Management</u> <u>Plan</u>.

Waste Type	Management Method(s)
Garbage:	See attached Waste Management Plan
Sewage (Sanitary and greywater):	See attached Waste Management Plan
Brush and trees:	N/A
Overburden (Organic soils, waste material, etc.):	N/A
Other (describe):	N/A

<u>Off-site Disposal</u>: If waste is proposed to be disposed of off-site within the NWT, written confirmation (e.g., an email, letter, etc.) from the facility/facilities indicating they will accept the waste is required. Include it/these in your Application Package. Please note this information will be required by the Board prior to commencement of activities.

(Letters from Yellowknife Solid Waste Facility and KBL located in Waste Management Plan)

#### **12. EQUIPMENT**

Identify the types of equipment proposed to be used.

Number	Type/Description	Size (weight in tonnes)	Proposed use
4	Polaris / Skidoo snowmobiles	550cc	Transport field personnel and equipment
4	Yamaha outboard motor	4 stroke (15hp, 20 hp and 25hp) 2 stroke (20 hp)	Transport field personnel and equipment, data collection
1	Gas water pump	5 hp	Filling water tank
2	Gas generators	4500 watt and 2500 watt	Recharging batteries
1	Yamaha ATV	450cc	Transport of equipment

#### 13. FUEL

Identify all fuel types proposed to be used.

Type of Fuel	Number of containers	Capacity of containers (e.g., litres, pounds)		Type of container (e.g., barrel, tank, tidy- tank)	Proposed storage or staging location(s)
Diesel:	35	205L	7200 L Total	drum	Fuel storage area with berm
Gasoline:	35	205L	7200L Total	drum	Fuel storage area with berm
Aviation Fuel:	35	205L	7200L Total	drum	Fuel storage area with berm
Jet A/B:	35	205L	7200L Total	drum	Fuel storage area w/ berm
Propane:	20	45kg	900 kg total	Tank	Within camp compound

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#### **14. METHODS OF FUEL TRANSFER**

Describe the proposed methods to transfer fuel.

Fuel is transferred by use of manual fuel pumps from drums into jerry cans they are filled inside the fuel berm (Secondary containment), fuel spill pads will also be used to catch any drips.

#### **15. SPILL CONTINGENCY PLAN**

Include a Spill Contingency Plan in your Application Package, if applicable, or for small-scale projects, provide relevant details in the grey field provided below. An example of this Plan can be found in the INAC <u>Guidelines</u> for Spill Contingency Planning.

See attached Spill Contingency Plan.

#### **16. PROPOSED PROJECT SCHEDULE AND TERM**

Indicate the proposed project start and completion dates and the time of year the project activities are planned to occur. Describe any anticipated temporary closure(s) or seasonal shutdowns. Indicate the term requested.

Start Date:	November 2023	Completion Date: November 2028		
Activities occur during the spring and summer, from the beginning of May through to the beginning of September, annually.				
Term of Permit Reques	ted:	Five - years		

#### 17. POTENTIAL ENVIRONMENTAL IMPACTS OF THE PROJECT AND PROPOSED MITIGATIONS

If the proposed project, or parts of the proposed project, may be exempt from preliminary screening, describe the rationale for the exemption in the grey field below. Include the date of the most recent screening, and/or the environmental assessment or impact review number.

Prior to this application, the scope of work for operating and maintaining this research camp including fuel storage, and other associated camp activities have remained unchanged since the Preliminary Screening dated November 6, 2009. It was deemed that there was no likelihood that TERS would have a significant adverse impact on the environment or would be a cause of public concern.

The following TERS LUP applications and storage authorizations have since been approved abiding by the 2009 Preliminary Screening:

(2009) LUP Application (W2009J006), granted November 11, 2009.

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For the 2023 Land Use Permit Application, TERS has revised one component of operations regarding fuel volume capacity. This revision includes increasing the maximum fuel volume capacity to 28,800 liters in fuel drums to allow for further fuel storage on site in secondary containment fuel berms. Please refer to the impact mitigation table below and see the attached Spill Contingency Plan for further information.

Unless the project could be exempt from preliminary screening, using the Impact-Mitigation Table below, or the more detailed Table in Appendix D of the <u>Guide</u>, identify all potential impacts and possible mitigations that are relevant to the proposed project, and indicate whether any of the mitigation measures have been developed as a result of input from affected parties. Possible potential impacts are listed below; however, these lists are not exhaustive and may not apply to all projects. All information provided should reflect the size, scale, and nature of the proposed project. Cumulative impacts and climate change must be considered. Attach additional pages if needed. Use landscape orientation if preferred.

<b>Potential Impacts</b> Use an "X" to indicate which apply	x	Potential Project Impacts and Proposed Mitigations Describe the potential impact(s) and the proposed measure(s) to reduce each of these impacts.			
ABIOTIC	CON	<b>IPONENTS</b>			
	Lan	d			
Soil contamination	Х	Soil may be impacted in the case of a spill of petroleum			
Soil compaction		products stored on-site. An approved spill contingency plan will be followed, and an appropriate spill kit will be			
Destabilization/erosion		easily accessible, fully stocked, and identifiable on-site at			
Change in soil structure		all times.			
Inability to support vegetation		**please see spill contingency plan			
Other		Press of spin commence prime			
Water					
Groundwater					
Water table alteration		Ground water quality may be impacted in the case of a			
Infiltration changes		spill of petroleum products stored on-site. An approved			
Changes in water quality	Х	appropriate spill kit will be easily accessible, fully			
Temperature changes		stocked, and identifiable on-site at all times.			
Other		** please see spill contingency plan			
Per	rma	frost			
Loss or change in extent					
Changes in seasonal fluctuations					
Change in persistence					
Other					
Surf	Surface Water				
Water flow or level changes (permanent, temporary, seasonal)		Surface water quality may be impacted in the case of a spill of petroleum products stored on-site. An approved			
Drainage pattern changes		spill contingency plan will be followed, and an			
Temperature changes		stocked, and identifiable on-site at all times.			
Changes in water quality	Х				

Wetland impairment	A	Il hazardous materials will be stored at a distance from
Changes to aquatic habitat (see Biotic section below)	W	vaterbodies as per the land use permit conditions.
Other	**	* Please see spill contingency plan
Air		
Changes in air quality	W	Vaste materials produced at TERS will be transported
Harm to living things	of	ff-site and dropped of at an appropriate and approved
Increased greenhouse gases	w	aste disposar facility. Waste incinerated on site would

Other X only include paper, cardboard, and untreated wood wastes.

\*\* Please see Waste Management Plan.

BIOTIC COMPONENTS				
Direct loss of vegetation	X	The footprint of the camp and walking trails / boardwalks out to research locations results in some minimal vegetation loss. Research at the station relies on maintaining intact ecosystems so we aim to have very little disturbance		
Loss of Species at Risk or may-be-at-risk plants				
Change in species composition				
Introduction of non-native (invasive) species				
Effects on plant health (dust, metals, toxins)				
Increased risk of fire				
Compaction of vegetation	X	The footprint of the camp and walking trails / boardwalks out to research locations results in some compaction of vegetation. Research at the station relies on maintaining intact ecosystems so we aim to have very little disturbance		
Other				
Terrestrial	Wile	dlife Habitat		
Direct loss or removal of habitat, dens, or nests	x	The footprint of the camp results in a very minimal amount of direct habitat loss. Research at the station relies on maintaining intact ecosystems so we aim to have very little disturbance		
Loss or removal of keystone species and/or Species at Risk habitat				
Fragmentation of wildlife corridor				
Direct injury or mortality				
Disturbances to key lifecycle stages: breeding, feeding, nesting, staging				
Effects on population abundance				
Change in species diversity				
Effects on wildlife health (toxins, metals, etc.)				
Changes to migratory movement patterns				
Changes to predator-prey relationships				
Human-wildlife conflicts	X	It is possible to have human-wildlife conflict but in our 25+ years of operations we have not had any serious Incidents.		
		The station also uses an electric fence that surrounds camp. Waste storage until approved disposal method is followed according to attached waste management plan.		
Other				
Aqua	tic I	Habitat		
Breeding disturbances		water quality may be impacted in the case of a spill of		
Change in species diversity		contingency plan will be followed, and an appropriate		
Effects on health (toxins, metals, sediment, etc.)	Х	spill kit will be easily accessible, fully stocked, and		
Changes to migratory movement patterns		identifiable on-site at all times.		

Land Use Permit – Application

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Changes to predator-prey relationships	Deposit of grey water may affect aquatic environment.	
Effects on population abundance	Waste will be deposited appropriately, according to the	
Change in species diversity	Please see waste management plan.	
Other	X	

#### CULTURAL COMPONENTS

<b>Potential Impacts</b> Use an "X" to indicate which apply	x	Potential Project Impacts and Proposed Mitigations Describe the potential impact(s) and the proposed measure(s) to reduce each of these impacts.		
Wildlife	e Ha	rvesting		
Loss or reduction in game species populations				
Effects on traditional land use, subsistence, and harvesting rights				
Other				
Cultural Integrity a	Ind	Heritage Resources		
Change to or loss of cultural integrity				
Change to or loss of traditional lifestyle				
Change to or loss of heritage resource				
Other				
Social and Economic Well-being				
Increased human health hazard and risk				
Economic opportunities or losses (employment, training)				
Change in ecological, cultural, social, or economic values identified for protection in approved Land Use Plans				
Impairment of the recreational or traditional uses of the land or water				
Impairment of the aesthetic quality of the land or water				
Changes to the use of the area by other non- Indigenous people (e.g., trappers, outfitters, residents, hunters, forest harvesters, other authorized projects)				
Other				

#### **18. CLOSURE AND RECLAMATION**

Use the grey field below to provide or reference the following information:

<u>Closure and Reclamation Plan</u>: Include a Closure and Reclamation Plan in the Application Package, if applicable, or for small-scale projects, describe the proposed closure and reclamation activities in the grey field provided below. Describe any temporary closure(s) and seasonal shutdowns. Please also refer to the LWB/AANDC <u>Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories</u>.

<u>Closure Cost Estimate</u>: Prepare a Closure Cost Estimate and include it in your Application Package. Applicants are encouraged to contact Board staff, prior to applying, to determine which closure-cost-estimate template is most suited to the activities being applied for. Guidance is provided in section 2.2 of the LWB/GNWT/CIRNAC <u>Guidelines for Closure and Reclamation Cost Estimates for Mines</u>. If the Application is submitted concurrently with a Water Licence Application, the estimate should include a breakdown of water- and land-related activities and liabilities.

The TERS is a long-term facility; there are no foreseeable plans for closure. Back hauls are used to regularly remove unused items, and/or garbage. Should the facility close, all buildings would be dismantled and removed from the site. The grey- water pit would be filled in and restored to a natural state.

#### **19. ADDITIONAL SUPPORTING INFORMATION**

Use the grey field below to provide or reference the following information:

<u>Engagement</u>: Conduct engagement, prepare an Engagement Record and Engagement Plan in accordance with the LWB <u>Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits</u>, and include them in your Application Package. Templates are provided in the Guidelines. Please also refer to <u>Information for Proponents on MVLWB's Engagement Requirements</u>.

<u>Land Use Plans</u>: Contact the applicable Land Use Planning Board or the Tłįchǫ Government for assistance in interpreting the requirements of the relevant land use plan(s). Include a Land Use Plan Conformity Table, or if applicable, written confirmation of conformity from the Tłįchǫ Government, in your Application Package, demonstrating how the project meets the requirements of the Land Use Plan, if applicable.

<u>Traditional Knowledge (TK)</u>: Provision of TK is mandatory for applications to the SLWB. Other applicants are strongly encouraged to include TK.

<u>Studies Undertaken to Date</u>: List any relevant studies that support the proposed activities and include them in your Application Package.

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The Tundra Ecosystem Research Station has facilitated research over the past 28 years contributing to the body of knowledge related to climate change, vegetation, water, and wildlife interactions in the southern arctic ecozone. More than 70 academic articles have been published as a result of research conducted at TERS and many research collaborations are ongoing. The Tundra Science and Culture Camp received a Premier's Award for Collaboration in 2011 and has continued to deliver an important cross-cultural program to northern students in partnership with Tłįchǫ Elders and the Tłįchǫ cultural team.

#### 20. FEES

Refer to the Guide for assistance in determining relevant fees.

Type of Fee	Amount (\$)
Application fee (if applicable):	\$150
Land-use fees (for federal areas only):	\$
Total Fees:	\$

If fees are submitted separately, indicate how and when they will be delivered to the Board's office.

#### **21. SIGNATURE**

Heather Sayine-Crawford, Director	Wildlife Management Division Environment and Climate Change Government of the Northwest Territories
Applicant's Name (print)	
or	Position (print)
Company Name	

Att So Coupl	December 19, 2023
Signature	Date

Review the application package checklist provided in the Guide, and submit completed applications to the Regulatory Manager or Executive Director identified on the "Contact Us" pages of the respective Land and Water Board (<u>www.mvlwb.com</u>, <u>www.wlwb.ca</u>, <u>www.slwb.com</u>, <u>www.glwb.com</u>).

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Government of

Gouvernement des Northwest Territories Territoires du Nord-Ouest

December 19, 2023

#### **DISTRIBUTION LIST**

#### Project Details Plan for Renewal of Land Use Permit W2016J0008 - Tundra Ecosystem **Research Station, Daring Lake**

Please accept this letter and attachment as the Project Details Plan submission for section 4 of the Land Use Permit Application Package - Location of Activities, associated with the renewal of the above referenced Land Use Permit for the Tundra Ecosystem Research Station (TERS) located at Daring Lake.

The permit is currently expired as of November 3, 2023. A renewal would render it valid until November 2028. The activities regarding location and camp layout at the research station have remained the same as was originally permitted. Currently a Storage Authorization is in place until a new Land Use Permit can be granted to support continuing land use activities at TERS.

Throughout the lifetime of the permit, land use activities include fuel storage, camp operations and ecological field research, occurring primarily over the summer months. The figures in the attachment show the location of the station, building layout, and fuel storage areas. The area occupied by the station and associated land use is approximately 100m by 50m (or less that 1 hectare).

Please direct any comments or concerns with respect to the permit renewal to Colin Modeste-Burgin, TERS Camp Manager, at Colin Modeste-Burgin@gov.nt.ca

Sincerely,

Heather Sayine-Crawford Director Wildlife Management Division

#### Attachments:

- **Project Details Plan**



Government of Gouvernement des Northwest Territories Territoires du Nord-Ouest

## **Project Details Plan Tundra Ecosystem Research Station** Daring Lake, NWT

Prepared for: 2023 Land Use Permit Application

**GNWT-ECC-Wildlife Division** TERS- Daring Lake, NWT W2016J0008 Nov 2023

## **Revision History**

Version #	Date	Section	Revision
1	Nov 2023	General	<ul> <li>Added Cover Letter</li> <li>Added Cover Page</li> <li>Added Revision History and Conformity Tables</li> <li>Added Maps</li> </ul>

## Conformity Table – WLWB and Public Review

ID #	Date	Source	Торіс
1	Oct 24, 2023	WLWB Recommendations	Project Details
Comment/ Recommendation			
GNWT-ECC - TERS - LUP Application - Deemed Incomplete - Oct 24_23.pdf (mvlwb.ca)			
<b>Comment:</b> Section 4 of the application states that a map is to be included as part of the application package however no map was included. Please include a regional overview map and a detailed map with operational features. Both maps should include base map features and project structures and activities. <b>Recommendation:</b> Please include regional overview map and a detailed map with operational features and activities.			
Actions Taken		Included maps and project details plan – Colin Modeste-Burgin	
2	Oct 24, 2022	W/202210005 - W/LW/R - Application	General
2	000 24, 2023	Letter – Deemed incomplete	General
Comment/ Recommendation			
GNWT-ECC - TERS - LUP Application - Deemed Incomplete - Oct 24 23.pdf (mvlwb.ca)			
Comment: Each management plan should be accompanied by a cover letter and dated. also, a			
revision history and conformity table.			
Recommendation: Add cover letter, Revision history table, conformity table			
Actions Taken		Added/ Revised recommended sections – Colin Modeste-Burgin	

**Figure 1** – The location of the Tundra Ecosystem Research Station (TERS) **(A)** In relation to Yellowknife and other NWT communities and **(B)** in relation to Yamba and Daring Lake. Coordinates of the station are: 64° 52′ 0.05″ to 64° 52′ 4.0″ Latitude and 111° 25′ 29.9″ to 111° 35′ 41″ Longitude.



A) TERS location in relation to Yellowknife and other NWT communities.

B) TERS location in relation to Yamba Lake and Daring Lake.



**Figure 2** – Drawing depicting **(A)** the placement of the area of the current land use permit as well as **(B)** detail of the camp layout. Please note that neither A nor B are drawn to scale.

#### A) Placement of the area of the current land use permit.

