

# 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 Board the Application is being made to:	<b>Mackenzie Valley Land and Water Board:</b>	<input checked="" type="checkbox"/>	Sahtu Land and Water Board:	
	Wek'èezhìi Land and Water Board:		Gwich'in Land and Water Board:	

If applicable, provide the existing or current Land Use Permit file number:	MV2023X0024		
Use an "X" to indicate if this Application is accompanied by an Application for a Water Licence:	Water Licence – in a non-federal area:		N/A
	Water Licence – in a federal area:		N/A

### 1. NAME AND CONTACT INFORMATION – APPLICANT

Project Name:	CONFIRMATORY SOIL SAMPLING AND PHASE II ENVIRONMENTAL SITE ASSESSMENT Two PSPC Residential Properties 9818 101st Street and 9606 102nd Street, Fort Simpson, Northwest Territories		
Applicant's Name:	Matt Irvine		
Position:	Manager, Environmental Services and Contaminated Sites Management		
Company Name:	Public Services and Procurement Canada		
Mailing Address:	310-269 Main Street		
Community:	Winnipeg	Telephone:	1 204-294-2170
Prov/Terr:	MB	Email:	matthew.irvine@pwgsc.gc.ca
Postal Code:	R3C 1B3	Other:	R3C 1B3

## 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:		<b>X</b>	
Name:			
Position:			
Company Name:			
Mailing Address:			
Community:			
Prov/Terr:		Telephone:	
Postal Code:		Email:	
Field Supervisor:		Other:	

## 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:	Colin Charlton – Utility Clearance		
Position:	General Manager		
Company Name:	Sub Arctic Geomatics Ltd.		
Mailing Address:	226 Utsingi Drive		
Community:	Yellowknife	Telephone:	867-445-9801
Prov/Terr:	NT	Email:	sas@sub-arctic.ca
Postal Code:	X1A 0E7	Other:	N/A

Name:	Jennifer Grandguillot – Drilling		
Position:	Project Manager		
Company Name:	Great Slave Drilling Ltd.		
Mailing Address:	15A McMeekan Crescent		
Community:	Hay River	Telephone:	(867) 875-2922
Prov/Terr:	NT	Email:	jen@greatslavedrilling.com
Postal Code:	X0E 0R7	Other:	N/A

Name:	Civil Works Contractor TBD - Excavation, Transport and Disposal of PHC Impacted Soils. To be awarded by PSPC to local northern contractor		
Position:	TBD		
Company Name:	TBD		
Mailing Address:	TBD		
Community:	TBD	Telephone:	TBD
Prov/Terr:	TBD	Email:	TBD
Postal Code:	TBD	Other:	PSPC to award work to Northern company following permit approval and proposal. All contractor details will be provided to the MVLWB following award of work

#### 4. LOCATION OF ACTIVITIES

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

Traditional Place Name:

Łíídlı́ Kúé (Fort Simpson)

REFER TO ATTACHMENT 2 Project Location and Layout Figures

#### GEOGRAPHICAL COORDINATES 9606 102<sup>nd</sup> Street Fort Simpson, NT

Minimum latitude:	61.86222°	Maximum latitude:	61.86255°
Minimum longitude:	121.34762°	Maximum longitude:	121.34836°

REFER TO ATTACHMENT 2 SITE LOCATION AND LAYOUT FIGURES

#### GEOGRAPHICAL COORDINATES 9818 101<sup>st</sup> Street Fort Simpson, NT

Minimum latitude:	61.86340°	Maximum latitude:	61.86370°
Minimum longitude:	121.35149°	Maximum longitude:	121.35225°

REFER TO ATTACHMENT 2 SITE LOCATION AND LAYOUT FIGURES

NTS Map Sheet No.:

95H

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

Attached:

Not Available:

x

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

Free Hold/ Private:		Commissioner's/ Territorial Lands:		Federal Land:	x	Municipal Land:	
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#### 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):	x
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REFER TO ATTACHMENT 8 PSPC ACCESS AND PERMISSION LETTER

**6. RIGHTS AND/OR CONTRACTS TO SUPPORT ELIGIBILITY**

**REFER TO ATTACHMENT 8 PSPC ACCESS AND PERMISSION LETTER**

**7. PERMIT TYPE AND CRITERIA**

Refer to sections 4 and 5 of the [Mackenzie Valley Land Use Regulations](#). Use an “X” to indicate which permitting criteria apply:

Type A				Type B				Type C	
4(a)(i):		4(b)(i):	<b>X</b>	5(a)(i):		5(b)(i):		(SLWB and WLWB only):	
4(a)(ii):	<b>X</b>	4(b)(ii):		5(a)(ii):		5(b)(ii):			
4(a)(iii):		4(b)(iii):		5(a)(iii):					
4(a)(iv):		4(b)(iv):		5(a)(iv):					
4(a)(v):				5(a)(v):					
				5(a)(vi):					

## 8. PROJECT DESCRIPTION

### REFER TO ATTACHMENT 2 PROJECT LOCATION AND LAYOUT FIGURES

#### 2024 OPEN WATER SEASON YEAR ONE WORK

##### 9606 102nd Street, Fort Simpson

- Utility locates – Subarctic Geomatics.
- Excavation of up to 20 m<sup>3</sup> of PHC impacted soils from base and side walls of existing heating oil tank spill using an excavator and tandem truck.
- Follow up to previous excavation during spill response. Removing soil from side walls and base to address remaining lightly impacted soils.
- Load and transport approximately 20 m<sup>3</sup> or approximately two tandem truck loads of lightly PHC impacted soils are anticipated to be transported to the KBL Yellowknife soil treatment facility. The tandem dump trucks will use the existing municipal roads to load and transport the soil. All shipments will be properly manifested. KBL received the soils from the emergency spill excavation
- Drilling three groundwater monitoring wells each up to 8 m in depth at 9606 102<sup>nd</sup> Street Fort Simpson, NT using small track mounted drill weighing 4,100 lbs or 1,800 kg. Work to be completed by Great Slave Drilling. Boreholes are to be approximately 10 in depth. However, the permit is for a Type A Land Use Permit as a contingency in the event that such a light small portable drill is available in the NWT or if the smaller drill hits refusal. The larger drill would be greater than 2,500 kg.
- Developing, purging and collecting groundwater samples from wells.
- Collecting one surface water grab sample from Mackenzie River.
- Long term monitoring of groundwater levels and concentrations of select parameters (anticipated for up to three to five years seasonally).
- Geotechnical and structural monitoring of excavation works

##### 9818 101st Street, Fort Simpson

- Excavation of a few cubic meters of PHC impacted soil with mini excavator resulting from leak from heating oil tank. Estimated at 2 m<sup>3</sup>. Transported and disposed of along with soils from 9606 102<sup>nd</sup> Street, Fort Simpson.
- Removal and disposal of bollards and previous heating oil AST.

Fill excavation and revegetate any disturbed areas if any.

#### POTENTIAL FUTURE ITERATIVE PHASE II ESA/DSI WORK – YEARS 2 to 5

- Drilling of additional step out boreholes to depths of approximately 5 m to collect soil samples, with select boreholes completed as monitoring wells.
- Archeological digs and/or studies if triggered by exploratory excavation work or site observations;
- Hydrogeological testing such as well drawdown and response testing;
- Ecological/Biological bird surveys or SAR assessment based on site conditions and observations of any SAR species.
- Minor excavations and off-site treatment: Small scale <50 m<sup>3</sup> removal of hydrocarbon soils and meeting the requirements of acceptance for KBL.
- Disposal of drill cuttings off-site at KBL.
- Disposal of groundwater purge and development volumes
- Existing or updated spill response and waste management plans
- Potential training of local indigenous employees
- Decommissioning groundwater wells
- Groundwater well development, purging and sampling.
- Test pitting for soil sampling using a small local backhoe or excavator.

Indicate the total number of hectares to be used in each phase of the project, as well as through the life of the project.

**REFER TO ATTACHMENT 2 PROJECT LOCATION AND LAYOUT FIGURES**

9818 101<sup>st</sup> Street Fort Simpson, NWT – 713 m<sup>2</sup>. Excavation disturbance limited to approximately 20 m<sup>2</sup>.  
 9606 102<sup>nd</sup> Street Fort Simpson, NWT – 643 m<sup>2</sup>. Excavation disturbance limited to approximately 1 m<sup>2</sup>.  
 Boreholes disturbance is considered negligible.

Total Disturbance for mitigation planning is estimated at 15% of total property area or 200 m<sup>2</sup>. This is a conservative estimate and includes equipment access and work areas.

**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.

No camp is required; accommodations are to be provided by local businesses. The site work is expected to last 5 days, with a maximum of 5 people on site at any given time. Assume 20 person-days in 2023. Similar extents of work anticipated, if required, in future years Phase II ESA iterative seasonal assessment work.

**10. ROADS AND ACCESSES**

Use an “X” to indicate if this is to be a pioneered road or access:	Yes		Use an “X” to indicate if the route has been laid out or ground-truthed:	Yes	
	No	<b>X</b>		No	<b>X</b>

The project is accessible by municipal/territorial roads and therefore does not require any additional road construction.

**11. PROPOSED WASTE MANAGEMENT METHODS**

**REFER TO ATTACHMENT 5 WASTE MANAGEMENT PLAN**

Approximately 20 m<sup>3</sup> or two tandem truck loads of lightly PHC impacted soils are anticipated to be transported to the KBL Yellowknife soil treatment facility. The tandem dump trucks will use the existing municipal roads to load and transport the soil. All shipments will be properly manifested. Refer to Attachment 6 Waste Management Plan for details.

## 12. EQUIPMENT

Identify the types of equipment proposed to be used.

Number	Type/Description	Size (tonnes)	Proposed use
1	Small to medium track mounted drill rig	1 to 5	Boreholes and groundwater wells
2	Pick-up truck	1 to 3	Employee and small equipment/tool transportation
1	Trailer	1 tonne	Mobilize/demobilize equipment
1	Small excavator or rubbered tired backhoe	10 to 20	Test pitting. Minor hydrocarbon soil removal <50 m <sup>3</sup>
1	Tandem dump truck	12 to 15	Transporting excavated soils to Off-site Disposal facility. will use the existing municipal roads to load and transport the soil.

## 13. FUEL

Identify all fuel types proposed to be used.

Type of Fuel	# of Containers	Container Capacity (L)	Container Type	Proposed storage or staging location(s)
Diesel:	1	230	Tidy tank	Pick-up truck not stored or staged on-site
Gasoline:	1	30	CSA approved jerry can + small generator tank.	Fuel for generator to power low flow hydrolift pump. Stored in truck and within containment

[REFER TO ATTACHMENT 6 SPILL CONTINGENCY PLAN](#)

## 14. METHODS OF FUEL TRANSFER

[REFER TO ATTACHMENT 6 SPILL CONTINGENCY PLAN](#)

## 15. SPILL CONTINGENCY PLAN

[REFER TO ATTACHMENT 6 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:	May 15, 2024	Completion Date:	May 15, 2029
Project activities are planned to occur during the open water season and prior to the closing of the Liard River ferry. No work is anticipated to occur in winter seasons.			
Term of Permit Requested:		Five years – to consider 2024 open water season work and potential future iterative seasonal phase 2 ESA/DSI work.	

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

[REFER TO ATTACHMENT 10 MITIGATION TABLE](#)

## 18. CLOSURE AND RECLAMATION

### **Closure Reclamation Plan:**

This project is a small-scale low complexity environmental assessment and works. A detailed stand-alone reclamation plan is not considered to be necessary. Anticipated reclamation works comprise:

- surface scarification, amendment and seeding of soil potentially compacted by heavy equipment.
- Backfilling excavation with local unimpacted soils and seeding/amending any sod that was removed during the excavation.
- Capping off any old fuel lines.
- Repaving section of asphalt removed at 9818 101<sup>st</sup> Street.
- Minor regrading as required to ensure that final grade is appropriately slope away from structures and to drainage locations.
- Completed annually prior to demobilization

### **Closure Cost Estimate:**

[REFER TO ATTACHMENT 9 CLOSURE COST ESTIMATE](#)

## 19. ADDITIONAL SUPPORTING INFORMATION

### **Engagement:**

[REFER TO ATTACHMENT 4 ENGAGEMENT PLAN](#)



**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):	0\$
Total Fees:	150\$

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

Mailed Check
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**21. SIGNATURE**

Matt Irvine Public Services and Procurement Canada	Manager – Environmental Services and Contaminated Sites Management
Applicant's Name (print) or Company Name	Position (print)

	March 18, 2024
Signature	Date