



**Mackenzie Valley Land and Water Board**  
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**P.O. Box 2130**  
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**Phone (867) 669-0506**  
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September 27, 2019

File: MV2019X0012

Mr. Mark Cliffe-Phillips  
Mackenzie Valley Environmental Impact Review Board  
200 Scotia Center  
Box 938, 5102 - 50th Avenue  
Yellowknife NT X1A 2N7

Email: [preliminaryscreening@reviewboard.ca](mailto:preliminaryscreening@reviewboard.ca)  
[mcliffephillips@reviewboard.ca](mailto:mcliffephillips@reviewboard.ca)

Dear Mr. Cliffe-Phillips,

**Re: Notice of Preliminary Screening Determination – Application for Land Use Permit  
Fort Smith Airport Monitoring Wells – Fort Smith, NT**

The Mackenzie Valley Land and Water Board (Board) met on September 26, 2019 and considered the Application from Transport Canada for Type B Land Use Permit (Permit) MV2019X0012 for the Fort Smith Airport Monitoring Wells in Fort Smith, NT, in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA).

The Board conducted a preliminary screening based on the Application and the public record for the proceeding. Based on the evidence provided, the Board is satisfied the screening has been completed according to section 125 of the MVRMA and has decided **not to refer** the project to environmental assessment. The Preliminary Screening Report includes the Board's reasons for decision, as required by section 121 of the MVRMA (attached).

If the Board does not receive notice of referral to environmental assessment, it will proceed with the issuance of Permit MV2019X0012 on October 8, 2019.

Our Board and staff look forward to continued communications throughout the pause period. If you have any questions or concerns regarding this letter, please contact Shelagh Montgomery at (867) 766-7457 or email [smontgomery@mvlwb.com](mailto:smontgomery@mvlwb.com).

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Mavis Cli-Michaud".

Mavis Cli-Michaud  
Chair, MVLWB

Copied to: David Finch, Regulatory Specialist (MVLWB);  
Akaitcho Region distribution list;  
Reid Campbell - Transport Canada;  
Leslie Wiltzen, GNWT-Lands Inspector;  
Norman McCowan, GNWT-Lands Inspector;

Attached: Preliminary Screening Report, including Reasons for Decision



- Burning
- Burying
- Channelling
- Cut and Fill
- Cutting of Trees or Removal of Vegetation
- Dams and Impoundments
  - construction
  - abandonment/removal
  - modification
- Ditch Construction
- Drainage Alteration
- Drilling other than Geoscientific
- Ecological Surveys
- Excavation
- Explosive Storage
- Fuel Storage
- Topsoil, Overburden or Soil
  - fill
  - disposal
  - removal
  - storage

- Diamond drill
- Borehole core sampling
- Bulk soil sampling
  - gravel
  - hydrological Testing
- Site Restoration
  - fertilization
  - grubbing
  - planting/seeding
  - reforestation
  - scarify
  - spraying
  - re-contouring
- Slashing and removal of vegetation
- Soil Testing
- Stream Crossing/Bridging
- Tunnelling/Underground
- Other:

**NTS topographic map sheet numbers:**

075D

**Latitude / longitude and UTM system:**

19MW-01	60.03102777777778 N	-111.98251388888889 W
19MW-02	60.03787222222222 N	-111.96721111111111 W
19MW-03	60.03033055555556 N	-111.98187222222222 W

**Nearest community and water body:**

Fort Smith, NT / Slave River

**Land Status (consultation information)**

- Free Hold/Private    
  Commissioner's/Territorial Lands    
  Federal Crown Land    
  Municipal Land

**Transboundary/Transregional Implications**

- |   |  |   |                                |
|---|--|---|--------------------------------|
| <input type="checkbox"/> British Columbia | <input type="checkbox"/> Alberta       | <input type="checkbox"/> Saskatchewan                 | <input type="checkbox"/> Yukon |
| <input type="checkbox"/> Nunavut          | <input type="checkbox"/> National Park | <input type="checkbox"/> Inuvialuit Settlement Region |                                |
| <input type="checkbox"/> Wek'èezhii       | <input type="checkbox"/> Gwich'in      | <input type="checkbox"/> Sahtu                        |                                |

**Type of transboundary implication:**

- Impact / Effect    
  Development

Public concern: \_\_\_\_\_  
(Describe.)

**Physical - Chemical Effects**

**Impact**

**1) Ground Water**

- water table alteration
- water quality changes

**Mitigation**

Drilling into the water table could negatively impact groundwater quality and increase the risk of introducing surface contaminants. These potential contaminants could pose a risk for any organisms that rely on the groundwater for survival.

The augers used for drilling are cleaned between each hole to prevent any potential cross-contamination from occurring. Bentonite clay will be used to seal the borehole from the ground surface to just above the top of the well screen. The bentonite clay provides a watertight seal, preventing surface contamination from migrating down through the

borehole. In addition, all material used in the well installation is new and free of contamination.

Purged groundwater may be contaminated. All purged groundwater will be stored in drums and shipped off site for disposal.

infiltration changes

Installation of monitoring wells may allow surface water to flow into the well. Transport Canada will use bentonite near the ground surface which should prevent surface water infiltration.

other:

N/A

**Impact**

**Mitigation**

**2) Surface Water**

flow or level changes

water quality changes

Drilling and removal of soil from the ground in the form of borehole drilling could negatively affect soil stability and quality. In turn this could affect surface water run-off.

Anticipated disruption to surface contours and water flow is minimal. After the boreholes have been drilled, they are instrumented with 2" PVC piping and backfilled around the outside of the PVC with a mixture of silica sand and bentonite clay. The backfilling ensures stabilization of the hole and prevents potential collapses.

water quantity changes

drainage pattern changes

temperature

wetland changes/loss

other:

N/A

**Impact**

**Mitigation**

**3) Noise**

noise in/near water

Drilling activities will be short-termed and temporary. No noise mitigations proposed.

noise increase

Drilling activities will be short-termed and temporary. No noise mitigations proposed.

other:

N/A

**Impact**

**Mitigation**

**4) Land**

geologic structure changes

soil contamination

Removing potentially contaminated material during drilling contained in the drill cuttings could cause further contamination of the surrounding area and could potentially impact flora and fauna.

Soil cuttings will be contained onsite during the drilling process and sampled for possible contamination, thereby preventing any migration of contaminants. Upon project completion, soil cuttings will be disposed of offsite at a licensed facility, or returned to drill area depending on sampling results.

- buffer zone loss
- soil compaction and settling
- destabilization/erosion
- permafrost regime alteration
- explosives/scarring
- other:
- N/A

Drilling and removal of soil from the ground in the form of borehole drilling could negatively affect soil stability and quality. Bore holes will be instrumented with 2" PVC piping and backfilled. Backfilling ensures stabilization of the hole and prevents potential collapses.

**Impact**

**5) Non-renewable natural resources**

**Mitigation**

- resource depletion
- other:
- N/A

**Impact**

**6) Air/climate/atmosphere**

**Mitigation**

- other:
- N/A

**BIOLOGICAL ENVIRONMENT**

**Impact**

**1) Vegetation**

**Mitigation**

- species composition
- species introduction

Drilling and removal of soil from the ground in the form of borehole drilling could negatively affect soil stability and quality. Using the same pieces of equipment in different areas increases the risk for cross-contamination to occur.

After the boreholes have been drilled, they are instrumented with 2" PVC piping and backfilled around the outside of the PVC with a mixture of silica sand and bentonite clay. The backfilling ensures stabilization of the hole and prevents potential collapses. The augers used for drilling are cleaned between each hole to prevent any potential cross-contamination from occurring.

- toxin/heavy accumulation
- other: Linear Migration routes, habitat fragmentation
- N/A

Area is already disturbed. Mitigation not necessary.

**Impact**

**2) Wildlife and Fish**

**Mitigation**

- effects on rare, threatened or endangered species
- fish population changes
- waterfowl population changes
- breeding disturbance
- population reduction
- species diversity change
- health changes
- behavioural changes
- habitat changes / effects
- game species effects
- toxins/ heavy metals
- forestry changes
- agricultural changes
- other:
- N/A

**Interacting Environment**

**Impact**

**1) Habitat and Communities**

**Mitigation**

- predator-prey
- wildlife habitat/ecosystem composition changes
- reduction/removal of keystone or endangered species
- removal of wildlife corridor or buffer zone
- other:
- N/A

**Impact**

**2) Social and Economic**

**Mitigation**

- planning/zoning changes or conflicts
- increase in urban facilities or services use

- rental house
- airport operations/capacity changes
- human health hazard
- impair the recreational use of water or aesthetic quality
- affect water use for other purposes
- affect other land use operations
- quality of life changes
- public concern
- other:
- N/A

The monitoring wells will be installed in the Town of Fort Smith, which could be a potential hazard. When assessment is complete, the boreholes will be backfilled with drill cuttings, sealed with bentonite. Contaminated drill cuttings and all purged groundwater will be shipped off-site for disposal.

**Impact**

**Mitigation**

**3) Cultural and Heritage**

- effects to historic property
- increased economic pressure on historic properties
- change to or loss of historic resources
- change to or loss of archaeological resources
- increased pressure on archaeological sites
- change to or loss of aesthetically important sites
- effects to aboriginal lifestyle
- other:
- N/A

- Pursuant to Schedule 4.1 of the **Northwest Territory Métis Nation (NWTMN)** Interim Measures Agreement, the MVLWB determined that written notice was given to the NWTMN and that a reasonable period of time was allowed for NWTMN to make representations with respect to the application.
- Pursuant to subsection 1.6, paragraphs (a) and (b) of the **Akaiicho Territory Dene First Nations (ATDFN)** Interim Measures Agreement, the MVLWB determined that written notice was given to the ATDFN and that a reasonable period of time was allowed for ATDFN to make representations with respect to the Application.

**Preliminary Screener / Referring Body Information**

Akaitcho IMA Implementation Office	Lutsel K'e Dene First Nation - Chief or Wildlife, Lands and Environment
Bathurst Inlet Development Ltd.	Mackenzie Valley Environmental Impact Review Board
Bathurst Inlet Lodge	Manitoba Denesuline
CanNor NWT Region	MVLWB
City of Yellowknife	National Energy Board
Dene Nation	New Nadina Explorations Limited
Deninu K'ue First Nation	North Slave Metis Alliance
Det'on Cho Corporation	Northwest Territory Metis Nation
Environment and Climate Change Canada	NWT & Nunavut Chamber of Mines
Fisheries and Oceans Canada	NWT- OROGO
Fort Resolution Metis Council	Salt River First Nation
Forward Mining	Smith's Landing First Nation
GNWT - ENR (Environment and Natural Resources)	Snap Lake Environmental Monitoring Agency - SLEMA
GNWT - Executive and Indigenous Affairs (EIA)	Tlicho Government
GNWT - HSS (Health and Social Services)	Tlicho Lands Protection Department
GNWT - INF (Infrastructure)	Town of Fort Smith
GNWT - ITI (Industry, Tourism and Investment)	Town of Hay River
GNWT - Lands	Wek'eezhii Renewable Resources Board
GNWT - MACA (Municipal and Community Affairs)	West Point First Nation
GNWT - PWNHC (Prince of Wales Northern Heritage Centre (w/in ECE))	Wood PLC
Golder Associates	Yellowknives Dene First Nation
Hamlet of Fort Resolution	
INAC - CARD	
INAC - NWT Inspectors	
INAC - Yellowknife	
Katlodeeche First Nation	



**Reasons For Decision**

(List all reasons and supporting rationales for preliminary screening decision)

**DECISION**

The Mackenzie Valley Land and Water Board (the Board) is satisfied that the preliminary screening of Application MV2019X0012, Transport Canada, Fort Smith Airport Monitoring Wells, Fort Smith NT has been completed in accordance with section 125 of the *Mackenzie Valley Resource Management Act (MVRMA)*.

The Board is satisfied that communities and First Nations affected by the Application have been notified and provided adequate time to provide comment on the Application as required by land claim and self government agreements, the MVRMA, policy directions relating to Interim Measures Agreements, and any other applicable legislation and agreements.

Having reviewed all relevant evidence on the Public Registry, including the submissions of the Applicant, the written comments received by the Board and any Staff Reports prepared for the Board, the Board has decided that in its opinion:

- The proposed development will not have a significant adverse impact on the environment; and
- The proposed development is not a cause of public concern.

The Board is also of the opinion that the Application can proceed through the regulatory process and that any impacts of the development on the environment can be mitigated through conditions of a land use permit.

<b>Preliminary Screening Decision</b>	
<input type="checkbox"/>	<b>Outside Local Government Boundaries</b>
<input type="checkbox"/>	The development proposal might have a significant adverse impact on the environment, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	The development proposal might have public concern, <i>refer it to the EIRB.</i>
<input type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input checked="" type="checkbox"/>	<b>Wholly Within Local Government Boundaries</b>
<input type="checkbox"/>	The development proposal is likely to have a significant adverse impact on air, water or renewable resources, <i>refer it to the EIRB.</i>
<input checked="" type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>
<input type="checkbox"/>	The development proposal might have public concern, <i>refer it to the EIRB.</i>
<input checked="" type="checkbox"/>	<i>Proceed with regulatory process and/or implementation.</i>

**Preliminary Screening Organization**

Mackenzie Valley Land and Water Board

September 26, 2019

**Signatures**

Mavis Cli-Michaud, Chair