

Preliminary Screening Report Form

<p>Preliminary screener: MVLWB</p> <p>Reference / File number: MV2019X0013</p> <p>TITLE: Installation of a groundwater monitoring wells in the vicinity of the City of Yellowknife Solid Waste Disposal Facilities</p> <p>ORGANIZATION: City of Yellowknife</p> <p>MEETING DATE: June 20, 2019</p>	<p>EIRB</p> <p>Reference number:</p>
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Type of Development:
(CHECK ALL THAT APPLY)

- New
- Amend, EIRB Ref. #
- Requires permit, licence, or authorization
- Does not require permit, licence, or authorization

Project Summary:

The City of Yellowknife applied for a new Permit MV2019X0013 to install a groundwater monitoring well (MW9) that will serve as a background well, as part of the groundwater monitoring well network in the vicinity of the City’s Solid Waste Disposal Facilities. Monitoring groundwater for environmental contaminants is a requirement of the City’s municipal Water Licence MV2009L3-0007, specifically arising from Part D, condition 14 and Schedule 2, condition 2. The City was granted Land Use Permit MV2018X0015 (see link) on September 20, 2018, for the installation of three groundwater monitoring wells off Highway #4, in the vicinity of the Yellowknife Ski Club, but was unable to obtain a permit for MW9 at that time, due to outstanding eligibility requirements. The City has now confirmed eligibility. Activities specified in this application include borehole drilling, design and installation of the monitoring well, monitoring well development and surveying, and groundwater sampling.

No camp is proposed and the City plans to use the Solid Waste Disposal Facilities for disposal of any garbage, sewage and overburden (if required). The City states that sites have been selected to eliminate the need for any clearing of brush/trees.

Equipment proposed includes: one Hutte 203D drill, one tractor trailer for drill transportation, 2 pick-up trucks and one Ingersoll Rand 350 drilling compressor. One 400L Tidy Tank mounted on a support truck will be used.

No restoration plan has been included; the City states that none is required as the sites will be left in their original conditions aside from very minimal (if any) clearing or brush cutting in order to allow drill access for the monitoring well installation.

Scope:

This Permit entitles the Permittee to conduct the following land-use operation:

- a) Installation of monitoring wells, including drilling;
- b) Clearing of brush; and
- c) Use of equipment.

Land Use Eligibility - Section 18 Mackenzie Valley Land Use Regulations:

Type of Disposition	Disposition Number(s)
<input type="checkbox"/> Mineral Claims	
<input type="checkbox"/> Prospecting Permit (s)	
<input type="checkbox"/> Mineral Leases	
<input type="checkbox"/> Oil and Gas: EL/SDL/PL	
<input type="checkbox"/> Quarry Permit	
<input type="checkbox"/> Timber Permit	
<input checked="" type="checkbox"/> Other:	For groundwater monitoring well MW9: Lease L-1900002T

Principal Activities (related to scoping) (CHECK ALL THAT APPLY)

- | | | |
|--|---|--|
| <input type="checkbox"/> Construction | <input type="checkbox"/> Exploration | <input type="checkbox"/> Decommissioning |
| <input checked="" type="checkbox"/> Installation | <input type="checkbox"/> Industrial | <input type="checkbox"/> Abandonment |
| <input type="checkbox"/> Maintenance | <input type="checkbox"/> Recreation | <input type="checkbox"/> Aerial |
| <input type="checkbox"/> Expansion | <input checked="" type="checkbox"/> Municipal | <input type="checkbox"/> Harvesting |
| <input type="checkbox"/> Operation | <input type="checkbox"/> Quarry | <input type="checkbox"/> Camp |
| <input type="checkbox"/> Repair | <input type="checkbox"/> Linear / Corridor | <input type="checkbox"/> Scientific/ |
| <input type="checkbox"/> Research | <input type="checkbox"/> Sewage | <input type="checkbox"/> Solid Waste |
| <input type="checkbox"/> Water Intake | | |
| <input type="checkbox"/> Other: | | |

Principal Development Components (related to scoping) (CHECK ALL THAT APPLY)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Access Road | <input type="checkbox"/> Waste Management |
| <input checked="" type="checkbox"/> construction | <input type="checkbox"/> disposal of hazardous waste |
| <input type="checkbox"/> abandonment/removal | <input type="checkbox"/> waste generation |
| <input type="checkbox"/> modification e.g., widening, straightening | <input type="checkbox"/> sewage |
| <input checked="" type="checkbox"/> Automobile, Aircraft or Vessel Movement | <input type="checkbox"/> disposal of sewage |
| <input type="checkbox"/> Blasting | <input type="checkbox"/> Geoscientific Sampling |
| <input type="checkbox"/> Building | <input type="checkbox"/> Trenching |
| <input type="checkbox"/> Burning | <input type="checkbox"/> Diamond drill |
| <input type="checkbox"/> Burying | <input type="checkbox"/> Borehole core sampling |
| <input type="checkbox"/> Channelling | <input type="checkbox"/> Bulk soil sampling |
| <input type="checkbox"/> Cut and Fill | <input type="checkbox"/> gravel |
| <input type="checkbox"/> Cutting of Trees or Removal of Vegetation | <input type="checkbox"/> hydrological Testing |
| <input type="checkbox"/> Dams and Impoundments | <input type="checkbox"/> Site Restoration |
| <input type="checkbox"/> construction | <input type="checkbox"/> fertilization |
| <input type="checkbox"/> abandonment/removal | <input type="checkbox"/> grubbing |
| <input type="checkbox"/> modification | <input type="checkbox"/> planting/seeding |
| <input type="checkbox"/> Ditch Construction | <input type="checkbox"/> reforestation |
| <input type="checkbox"/> Drainage Alteration | <input type="checkbox"/> scarify |
| <input checked="" type="checkbox"/> Drilling other than Geoscientific | <input type="checkbox"/> spraying |
| <input type="checkbox"/> Ecological Surveys | <input type="checkbox"/> re-contouring |
| <input type="checkbox"/> Excavation | <input checked="" type="checkbox"/> Slashing and removal of vegetation |
| <input type="checkbox"/> Explosive Storage | <input type="checkbox"/> Soil Testing |
| <input type="checkbox"/> Fuel Storage | <input type="checkbox"/> Stream Crossing/Bridging |
| <input type="checkbox"/> Topsoil, Overburden or Soil | <input type="checkbox"/> Tunnelling/Underground |
| <input type="checkbox"/> fill | <input type="checkbox"/> Other: |
| <input type="checkbox"/> disposal | |
| <input type="checkbox"/> removal | |
| <input type="checkbox"/> storage | |

NTS topographic map sheet numbers:

085J

Latitude / longitude and UTM system:

Groundwater well MW9: 62.478614 -114.40020196813656

Nearest community and water body:

Yellowknife, NT; Great Slave Lake (Back Bay)

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'èzhii | <input type="checkbox"/> Gwich'in | <input type="checkbox"/> Sahtu | |

Type of transboundary implication:

Impact / Effect

Development

Public concern: _____
(Describe.)

Physical - Chemical Effects

Impact

Mitigation

1) Ground Water

water table alteration

Should a flowing artesian well be encountered during drilling, there is a standard land use permit condition that could be included in the Land Use Permit to mitigate this issue.

water quality changes

infiltration changes

other:

N/A

Impact

Mitigation

2) Surface Water

flow or level changes

water quality changes

Fuel is to be transported in support of land use activities and therefore there is a potential for fuel used on site to contaminate surface waters. The impact of spills can be reduced by having an appropriate Spill Contingency Plan and spill equipment in place, and by training personnel in spill responses. The Spill Contingency Plan, once approved, will regulate fuel handling and spills management. Standard fuel handling and spill contingency conditions can also be included in the land use permit.

water quantity changes

drainage pattern changes

temperature

wetland changes/loss

other:

N/A

Impact

Mitigation

3) Noise

noise in/near water

noise increase

The proposed activities such as the use of equipment, could cause an increase in noise in the project area. No dwellings are adjacent to the operation. No mitigation is proposed.

other:

N/A

Impact

Mitigation

4) Land

geologic structure changes

soil contamination The use of equipment and refuelling of equipment could lead to soil contamination if a leak or spill occurs. Appropriate spill kits are to be available and response procedures to be carried out as per the Spill Contingency Plan. Standard conditions relating to equipment and fuel could be included in the permit.

buffer zone loss

soil compaction and settling A condition could be included in the land use permit to prevent rutting, as well as a stop work condition should rutting occur, to prevent rutting of the ground surface.

destabilization/erosion

permafrost regime alteration

explosives/scarring

other:

N/A

Impact

5) Non-renewable natural resources

Mitigation

resource depletion

other:

N/A

Impact

6) Air/climate/atmosphere

Mitigation

other: Dust

Drilling activities will produce dust in the vicinity of the well sites. No mitigation is proposed.

N/A

BIOLOGICAL ENVIRONMENT

Impact

1) Vegetation

Mitigation

species composition

species introduction

toxin/heavy accumulation

other: Linear Migration routes, habitat fragmentation

Some minor brush clearing may be required. Conditions could be included in the permit to address final cleanup and restoration of lands used, as well as progressive reclamation.

N/A

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

A standard condition could be included in the permit to ensure the Permittee will take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation.

- game species effects
- toxins/ heavy metals
- forestry changes
- agricultural changes
- other:
- N/A

Interacting Environment

Impact

Mitigation

1) Habitat and Communities

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

A standard condition could be included in the permit to ensure the Permittee will take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation.

Impact

Mitigation

2) Social and Economic

- 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

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
Bathurst Inlet Development Ltd.
Bathurst Inlet Lodge
BNT Gold Resources Ltd.
CanNor NWT Region
City of Yellowknife
Dene Nation
Deninu K'ue First Nation
Environment and Climate Change Canada
Fisheries and Oceans Canada
Fort Resolution Metis Council
General Public
GNWT - ECE
GNWT - ENR
GNWT - ENR - North Slave Region
GNWT - ENR - South Slave Region - Fort Smith
GNWT - Health
GNWT - INF
GNWT - ITI
GNWT - Lands
GNWT - Lands - Hay River Region
GNWT - Lands - North Slave Region
GNWT - Lands - South Slave Region - Fort Smith
GNWT - MACA
Golder Associates
Gov of Canada
Hamlet of Fort Resolution
INAC - CARD
INAC - NWT Inspectors
Katlodeeche First Nation
Lutsel K'e Dene First Nation - Chief or Wildlife, Lands and Environment
Mackenzie Valley Environmental Impact Review Board
Manitoba Denesuline
MVLWB
National Energy Board
North Slave Metis Alliance
Northwest Territory Metis Nation
NWT & Nunavut Chamber of Mines
NWT- OROGO
Salt River First Nation
Smith's Landing First Nation
Snap Lake Environmental Monitoring Agency - SLEMA
Town of Fort Smith
West Point First Nation
WLWB
Workers' Safety and Compensation Commission
Yellowknives Dene 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 MV2019X0013, City of Yellowknife, groundwater monitoring well installation in the vicinity of the Solid Waste Disposal Facilities near Highway #4, 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 the imposition of the terms and conditions in the attached Land Use Permit.

As a result, the Board, having due regard to the facts and circumstances, the merits of the submissions made to it, and to the purpose, scope, and intent of the MVRMA and the Mackenzie Valley Land Use Regulations has decided that this Land Use Permit be issued subject to the terms and conditions contained therein.

Preliminary Screening Decision	
<input type="checkbox"/>	Outside Local Government Boundaries
<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"/>	Wholly Within Local Government Boundaries
<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

June 20, 2019

Signatures



Mavis Cli-Michaud, Chair