



Mackenzie Valley Land and Water Board
7th Floor - 4922 48th Street
P.O. Box 2130
YELLOWKNIFE NT X1A 2P6
Phone (867) 669-0506
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August 2, 2018

File: MV2018X0002

Ms. Donna Owchar
Prairie Provident Resources Canada Ltd.
1100, 640 - 5th Avenue S.W.
Calgary, Alberta T2P 3G4

Email: dowchar@ppr.ca

Dear Ms. Owchar:

**Re: Issuance of Type A Land Use Permit
Abandonment and Reclamation - Near the Community of Fort Liard, NT**

Attached is Type A Land Use Permit MV2018X0002 granted by the Mackenzie Valley Land and Water Board (MVLWB or the Board) in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA). This Permit has been approved for a period of 5 years commencing August 2, 2018 and expiring August 1, 2023.

Based on the evidence provided, the Board has also confirmed that the Application is exempt from preliminary screening as per Schedule 1, Paragraph 2 of the Exemption List Regulations of the MVRMA which states:

A development, or part thereof, for which renewal of a permit, licence or authorization is requested that

- a) Has not been modified; and
- b) Has fulfilled the requirements of the environmental assessment process established by the *Mackenzie Valley Resource Management Act*, the *Canadian Environmental Assessment Act* or the *Environmental Assessment Review Process Guidelines Order*.

Please read all conditions carefully. For the purpose of submitting plans in accordance with this Permit, the date of this letter, August 2, 2018, is the date of commencement.

In accordance with Permit condition 44, a security deposit in the amount of \$63,600.00 shall be posted with the Minister and copied to the Board prior to the start of the operation under section 32 of the Mackenzie Valley Land Use Regulations. As delegated under Schedule A of the Delegation Instrument under the MVRMA, this security deposit, **payable to the Government of the Northwest Territories** in the amount of \$63,600.00, shall be submitted to: the Government of the Northwest Territories, Department of Lands, North Slave Regional Office, 140 Bristol Avenue, Yellowknife NT, X1A 3T2. For more information about posting security with the GNWT, please contact Charlene Coe, Land Use Advisor, at (867) 767-9187 (ext. 24194). Please send a copy of the receipt for the security deposit to the MVLWB office prior to the start of your operation.

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The Board hereby approves the following Plans as summarized in Table 1:

Table 1: Plans that have been approved

Condition Number	Title of Plan	Date Received
37	Waste Management Plan	February 16, 2018
54	Spill Contingency Plan	February 16, 2018
69	Engagement Plan	February 16, 2018

Should you wish to discontinue your land-use operation at any time prior to the expiry date set out in the Permit, a written notice of discontinuance is required as per section 37 of the MVLUR, in addition to the submission of a final plan.

A copy of this Permit and all related correspondence and documents has been filed on the [Public Registry](#) at the MVLWB office. Please be advised that this letter, inspection reports, and related correspondence is part of the Public Registry and is intended to keep all interested parties informed of the manner in which the Permit requirements are being met. All Public Registry material will be considered if an amendment to the Permit is requested.

The full cooperation of Prairie Provident Resources Canada Ltd. is anticipated and appreciated. If you have any questions or concerns, please contact Angela Love at (867) 766-7456 or email angela.love@mvlwb.com.

Yours sincerely,



Mavis Cli-Michaud
MVLWB, Chair

Copied to: Distribution List

Attached: Land Use Permit MV2018X0002
Reasons for Decision



Land Use Permit

Permit Class	Permit No	Amendment No
A	MV2018X0002	

Subject to the Mackenzie Valley Land Use Regulations and the terms and conditions in this Permit, authority is hereby granted to:

Prairie Provident Resources Canada Ltd.

Permittee

to proceed with the land use operation described in the Application of:

Signature Donna Owchar	Date February 15, 2018
Type of Land Use Operation Remediation and Reclamation	
Location Near the Community of Fort Liard, NT	

This Permit may be assigned, extended, discontinued, suspended, or cancelled pursuant to the Mackenzie Valley Land Use Regulations.

Dated at Yellowknife this 2 day of August, 2018

Signature Chair

Mavis Cli-Michaud

Signature Witness

Tanya Lantz

Effective Date
August 2, 2018

Expiry Date
August 1, 2023

ATTENTION

It is a condition of this Permit that the Permittee comply with the provisions of the *Mackenzie Valley Resource Management Act* and Regulations and the terms and conditions set out herein. A failure to comply may result in suspension or cancellation of this Permit.

Conditions Annexed to and Forming Part of Land Use Permit #MV2018X0002

Part A: Scope of Permit

1. This Permit entitles the Permittee to conduct the following land-use operation:
 - a) Abandonment and reclamation of the wellsites;
 - b) Use and maintenance of all access roads, camps, staging areas, barge landing sites, and related facilities;
 - c) Use and maintenance of bridges and culverts;
 - d) Use of heavy equipment;
 - e) Installation and maintenance of erosion control measures;
 - f) Other related activities, including reclamation; and
 - g) Fuel and hazardous materials storage.
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.
3. 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, or Municipal laws.

Part B: Definitions (defined terms are capitalized throughout the Permit)

Act - the *Mackenzie Valley Resource Management Act*.

Board - the Mackenzie Valley Land and Water Board established under Part 4 of the Act.

Drilling Fluids - 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 Permits*, that clearly describes how, when, and which engagement activities will occur with an affected party during the life of the project.

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.

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* (April 2007), that describes the set of procedures to be implemented to minimize the effects of a spill.

Sump - a man-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:

- a) 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.

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

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| 1. | The Permittee shall use an existing campsite, as described in the complete application. | EXISTING CAMP |
| 2. | The Permittee shall not conduct this land-use operation on any lands not designated in the complete application. | LOCATION OF ACTIVITIES |

26(1)(b) Time

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| 3. | At least 48 hours prior to the commencement of the land-use operation, the Permittee's Field Supervisor shall contact an Inspector at (867) 695-2626. | CONTACT INSPECTOR |
| 4. | 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:

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). | IDENTIFY AGENT |
| 5. | At least ten days prior to the completion of the land-use operation, the Permittee shall advise an Inspector of:

a) the plan for removal or storage of equipment and materials; and
b) when final cleanup and reclamation of the land used will be completed. | REPORTS BEFORE REMOVAL |
| 6. | The Board, for the purpose of this operation, designates March 31 as spring break-up. | SPRING BREAK-UP |

26(1)(c) Type and Size of Equipment

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| 7. | The Permittee shall not use any equipment except of a similar type, size, and number to that listed in the complete application. | ONLY APPROVED EQUIPMENT |
| 8. | The Permittee shall use portable ramps during loading or unloading of ships or barges. | PORTABLE RAMPS |

26(1)(d) Methods and Techniques

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| 9. | Prior to the movement of any vehicle that exerts pressure on the ground in excess of 35 kPa, the Permittee shall scout proposed lines and routes to select the best location for crossing streams and avoiding terrain obstacles. | DETOURS AND CROSSINGS |
| 10. | 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 |

11. The Permittee shall not erect camps or store material, other than that required for immediate use, on the ice surface of a Watercourse. **STORAGE ON ICE**

12. Prior to the expiry date of this Permit, the Permittee shall replace all excavated material, unless otherwise authorized in writing by an Inspector. **EXCAVATED MATERIAL**

26(1)(e) Type, Location, Capacity, and Operation of All Facilities

13. 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

14. The land-use operation shall not cause obstruction to any natural drainage. **NATURAL DRAINAGE**

15. The Permittee shall minimize erosion by installing erosion control structures as the land-use operation progresses. **PROGRESSIVE EROSION CONTROL**

16. The Permittee shall not conduct off-road vehicle travel in areas without snow-covered surfaces. **OFF-ROAD VEHICLE TRAVEL**

17. The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface. **PREVENTION OF RUTTING**

18. The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting. **SUSPEND OVERLAND TRAVEL**

19. 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**

20. The Permittee shall not use any material other than clean water and snow in the construction of ice bridges. **ICE BRIDGE MATERIALS**

21. The Permittee shall not use any materials other than clean snow and water in the construction of snow fills. **SNOWFILL MATERIALS**

22. Prior to spring break-up or completion of the land-use operation, the Permittee shall clean up and either remove or v-notch all snowfills from stream crossings, unless otherwise authorized in writing by an Inspector. **REMOVE OR V-NOTCH SNOWFILLS**

23. Prior to spring break-up or completion of the land-use operation, the Permittee shall clean up and v-notch all ice bridges, unless otherwise authorized in writing by an Inspector. **V-NOTCH ICE BRIDGES**

24.	The Permittee shall not cut any stream bank, unless otherwise authorized in writing by an Inspector.	STREAM BANKS
25.	The Permittee shall minimize approach grades on all Watercourse crossings.	MINIMIZE APPROACH
26.	The Permittee shall not ford wet streams.	NO FORDING OF STREAMS
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.	WATERCOURSE BUFFER
29.	The Permittee shall not excavate land within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector.	EXCAVATE NEAR WATERCOURSE
	26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material	
30.	At least seven days prior to the use of any chemicals that were not identified in the complete application, the MSDS sheets must be provided to the Board and an Inspector.	CHEMICALS
31.	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.	BACKFILL SUMPS
32.	At least ten days prior to backfilling any Oil and Gas Drilling Sump the Permittee shall notify an Inspector.	NOTIFICATION OF OIL AND GAS SUMP BACKFILLING
33.	The Permittee shall maintain a record of all spills. For all reportable spills, in accordance with the GNWT Spill Contingency Planning and Reporting Regulations, the Permittee shall: a) implement the Spill Contingency Plan; b) immediately report each spill to the 24-hour Spill Report Line (867) 920-8130; c) report each spill to an Inspector within 24 hours; and d) submit, to the Board and an Inspector, a detailed report on each spill within 30 days.	REPORT SPILLS
34.	The Permittee shall dispose of all Toxic Material as described in the approved Waste Management Plan.	WASTE CHEMICAL DISPOSAL

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| 35. | The Permittee shall dispose of all combustible Waste petroleum products by removal to an approved disposal facility. | WASTE
PETROLEUM
DISPOSAL |
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26(1)(h) Wildlife and Fish Habitat

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| 36. | The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation. | HABITAT DAMAGE |
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26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage

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| 37. | The Permittee shall adhere to 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 |
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| 38. | The Permittee shall keep all garbage and debris in a secure container until disposal. | GARBAGE
CONTAINER |
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| 39. | The Permittee shall dispose of all garbage, Waste, and debris as described in the approved Waste Management Plan, unless otherwise authorized in writing by an Inspector. | REMOVE GARBAGE |
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| 40. | The Permittee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan. | SEWAGE DISPOSAL
– PLAN |
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26(1)(j) Protection of Historical, Archaeological, and Burial Sites

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| 41. | The Permittee shall not operate any vehicle or equipment within 150 metres of a known or suspected historical or archaeological site or burial ground. | ARCHAEOLOGICAL
BUFFER |
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| 42. | The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site. | SITE DISTURBANCE |
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| 43. | 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) 669-0506 or an Inspector at (867) 695-2626, and the Prince of Wales Northern Heritage Centre at (867) 767-9347 ext. 71251 or ext. 71255. | |

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

Intentionally left Blank

26(1)(l) Security Deposit

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| 44. | Prior to the commencement of the land-use operation, the Permittee shall deposit with the Minister a security deposit in the amount of \$63,600.00. | SECURITY DEPOSIT |
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45.	All costs to remediate the area under this Permit are the responsibility of the Permittee.	RESPONSIBILITY FOR REMEDIATION COSTS
26(1)(m) Fuel Storage		
46.	The Permittee shall: a) examine all Fuel Storage Containers and Tank for leaks a minimum of once per day; and b) repair all leaks immediately.	CHECK FOR LEAKS
47.	The Permittee shall not place any Fuel Storage Containers or Tanks within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector.	FUEL NEAR WATER
48.	The Permittee shall ensure that all fuel caches have adequate Secondary Containment.	FUEL CACHE SECONDARY CONTAINMENT
49.	The Permittee shall set up all refueling points with Secondary Containment.	SECONDARY CONTAINMENT – REFUELING
50.	The Permittee shall locate mobile fuel facilities on land when the facilities are stationary for more than 12 hours.	FUEL ON LAND
51.	The Permittee shall mark all Fuel Storage Containers and Tanks with the Permittee's name.	MARK CONTAINERS AND TANKS
52.	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
53.	The Permittee shall have a maximum of, 28,000 litres of fuel stored on the land use site at any time, unless otherwise authorized in writing by the Board.	MAXIMUM FUEL ON SITE
54.	The Permittee shall adhere to 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
55.	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
56.	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

57.	The Permittee shall clean up all leaks, spills, and contaminated material.	CLEAN UP SPILLS
26(1)(n) Methods and Techniques for Debris and Brush Disposal		
58.	Prior to the expiry date of this Permit, the Permittee shall progressively dispose of all brush and trees and shall complete all brush disposal; all disposal shall be completed.	BRUSH DISPOSAL/ TIME
59.	The Permittee shall not clear areas larger than identified in the complete application.	MINIMIZE AREA CLEARED
26(1)(o) Restoration of the Lands		
60.	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
61.	The Permittee shall dispose of all overburden as instructed by an Inspector.	DISPOSAL OF OVERBURDEN
62.	Prior to the expiry date of this Permit, the Permittee shall level all stockpiles of granular material located within the land use area.	NO STOCKPILES
63.	Prior to the expiry date of this Permit, the Permittee shall complete all cleanup and restoration of the lands used.	FINAL CLEANUP AND RESTORATION
64.	Prior to the expiry date of this Permit, the Permittee shall prepare the site in such a manner as to facilitate natural revegetation.	NATURAL VEGETATION
65.	The Permittee shall carry out progressive reclamation of disturbed areas as soon as it is practical to do so.	PROGRESSIVE RECLAMATION
66.	The Permittee shall restore any trails impacted by the land-use operation by removing fallen trees and any other obstructions from the trails.	TRAILS RESTORATION
26(1)(p) Display of Permits and Permit Numbers		
67.	The Permittee shall keep a copy of this Permit on hand at all times during this land-use operation.	COPY OF PERMIT
26(1)(q) Biological and Physical Protection of the Land		
68.	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.	RESUBMIT PLAN
69.	The Permittee shall adhere to 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

70. All revised plans submitted to the Board shall include a brief summary of the changes made to the plan.
71. The Permittee must submit a progress report to the Board on April 30 and September 30 of each year, or until clean-up and restoration is completed. The progress report must include all work done under the land use permit from the previous six months and all work planned for the upcoming six months.

**SUMMARY OF
CHANGES**

**PROGRESS
REPORTS**



Mackenzie Valley Land and Water Board
7th Floor - 4922 48th Street
P.O. Box 2130
YELLOWKNIFE NT X1A 2P6
Phone (867) 669-0506
FAX (867) 873-6610

Reasons for Decision

Issued pursuant to paragraph 40(2)(c) of the Mackenzie Valley Land Use Regulations (MVLUR)

Land Use Permit Application	
Preliminary Screener	MVLWB
Reference/File Number	MV2018X0002
Company	Prairie Provident Resources Canada Ltd.
Project	Remediation and Reclamation, Near the Community of Fort Liard, NT
Date of Decision	August 2, 2018

These Reasons for Decision set out the Mackenzie Valley Land and Water Board’s (the Board or MVLWB) decision on an Application made by Prairie Provident Resources Canada Ltd. (Prairie Provident) to the Board on February 16, 2018 for Land Use Permit (Permit) MV2018X0002.

1.0 Background

Prairie Provident submitted a new Permit Application for the Mount Coty K-02 (previously permitted under MV2003A0005) and South Pointed Mountain L-68 (previously permitted under MV2010A0016) wellsites on February 16, 2018. This application is to conduct abandonment and reclamation activities and to correct the deficiencies noted at the L-68 and K-02 wellsites. The abandonment and reclamation activities include:

- Mobilization of equipment to the site;
- Improvements or clearing of the access and wellsites, as required;
- Repairing and then removal of bridges and culverts as required;
- Conducting well abandonment;
- Repair of erosion and recontouring;
- Creation of water diversion and erosion control features, as required;
- Removal of scrap and debris;
- Weed management;
- Reseeding of disturbed and bare areas with an approved seed mixture; and
- Demobilization of equipment.

Site activity involving earthwork, such as the downhole abandonment and erosion repair, is anticipated to occur under winter site conditions. Site activities expected to occur in the summer include erosion repair/reclamation, reclamation/weed management, and reclamation monitoring.

The sites will be accessed by a combination of existing winter and all-weather roads from Fort Liard. The majority of the access will be along roads currently permitted to Paramount Resources Ltd. (Paramount). Prairie Provident is in the process of obtaining a road use agreement with Paramount to access this road infrastructure.

Winter access will require the construction of two ice bridges, one at the Petitot River and another at the Liard River. Both ice bridges will be constructed at the same locations as previous operations in the region.

Helicopters may be used for crew changes, movement of equipment, supply flights and for medivac, if required. Pickup trucks and all-terrain vehicles (ATVs) or snowmobiles will be used for ground transportation. It is anticipated that summer reclamation activities may be completed using heli-portable equipment. Should it be required, helicopters will be supplemented by pick-up trucks, ATVs, and other construction equipment. Barges and jet boats may be used to cross the Liard River for work conducted in the summer months, if required. Repair of the barge landings will be conducted, as needed, to make them serviceable for barging operations.

Fuel for project activities will be transported and stored in fuel trucks or fuel sloops. Spill response equipment will be carried on all refueling vehicles. The maximum amount of fuel stored on any site will be 28,000L. All fuel stored on-site will be handled and stored in accordance with the guidelines specified under GNWT's Environmental Protection Act (1998). The tanks will be filled by fuel truck or sloop as needed.

The project will be serviced by a 15-person temporary camp. The number of workers will fluctuate throughout all project phases. However, the maximum occupancy at any one time is anticipated to be 15 persons.

Drinking water will be purchased and transported to the project area. The domestic water supply (camp wash water, showers, and toilets) will be treated prior to use, and will be sourced from the Liard River at the barge landings, or the water treatment plant in Fort Liard and brought to the camp by water truck. The water intake hose used on water pumps will be screened with 2.54mm mesh (as per Department of Fisheries and Oceans (DFO) requirements) to prevent entrainment of fish. Camp water use is estimated to be 1-2m³ per person per day (30m³/day at maximum capacity), and therefore a water licence is not triggered.

Combustible waste, which includes food waste, non-recyclables (plastics) and recyclables (cardboard, paper), will be incinerated. The incinerator will be dual-chambered and will meet the *Canada-Wide Standards for Dioxins, Furans, and Mercury Emissions*. To avoid attracting wildlife all domestic waste will be stored in airtight containers until they are incinerated. Ash and non-combustible municipal wastes will be collected in secure metal containers and hauled by truck to an approved licenced landfill facility, such as the Hamlet of Fort Liard's waste management facilities.

A Waste Management Plan, Spill Contingency Plan, and an Engagement Plan were included with the Application.

Prairie Provident is eligible as per as per subsection 18(a)(i) of the Mackenzie Valley Land Use Regulations.

Prairie Provident has applied for a term of 5 years. As outlined in the Application, remediation will take place during the summer or winter, depending on the activity, between years 2018-2021.

2.0 Public Review

By July 13, 2018, comments and recommendations on the Application were received from 7 reviewers:

- Acho Dene Koe First Nation;
- Environment and Climate Change Canada
- Fisheries and Oceans Canada
- Government of the Northwest Territories – Environment and Natural Resources (GNWT-ENR);
- GNWT – Lands (GNWT-Lands);
- GNWT – Lands Inspector (GNWT-Lands Inspector); and
- Northwest Territories – Office of the Regulator of Oil and Gas Operations (NWT-OROGO).

Prairie Provident responded on July 20, 2018. The Review Summary and Attachments presents the concerns identified through this review.

3.0 Security

Prairie Provident completed the Board’s reclamation security worksheet and determined a total reclamation cost of \$63,840.84. The GNWT-Inspector did not recommend security during the public review. As Prairie Provident’s estimate was conducted using the Board’s security calculation template, it is directly comparable to the Board’s estimate. Table 1 below summarizes the main differences between these estimates (highlighted in yellow); this also accounts for the differences in the calculated multipliers/factors and estimate totals.

Table 1: Analysis of Prairie Provident and Board security estimates for MV2018X0002

Capitol Cost Item	Prairie Provident		Board	
	# of Items	Amount	# of Items	Amount
# of Trailers	2	\$600.00	2	\$600.00
For non-burnable material, # of person days per season	1350	\$1,350.00	1350	\$1,350.00
For burnable material, # of person days per season	1350	\$675.00	1350	\$675.00
Used Oil, Lubes and Antifreeze: number of pieces of heavy equipment	10	\$5,000.00	10	\$5,000.00
Volume of gasoline and diesel	30,000 L	\$13,750.00	28,000 L	\$13,250.00
Fuel within bermed area: safety multiplier	x0.75	-\$3,437.50	x0.75	-3,312.50
Volume of aviation fuel	410 L	\$205.00	410 L	\$205.00
# of hectares disturbed	10.1	\$10,100.00	10.1	\$10,100.00
# of Creek Crossings	18	\$9,000.00	18	\$9,000.00
Well Factor: # of wells	2	\$50,000.00	2	\$50,000.00
# of pieces of heavy equipment	9	\$9,000.00	9	\$9,000.00
# of drills	1	\$1,000.00	1	\$1,000.00
# of light vehicles	10	\$2,500.00	10	\$2,500.00
# of small generators or pumps	4	\$400.00	4	\$400.00
Access multiplier	x1	0	x1	0
Performance Multiplier	x0.85	-\$15,021.38	x0.85	-\$14,965.13
Environmental Risk Factor	x0.75	-\$21,280.28	x0.75	-\$21,200.59
TOTAL		\$63,840.84		\$63,601.78

4.0 Decision

In rendering its decision, the Board is satisfied that:

- notice of the Application was given in accordance with sections 63 and 64 of the MVRMA. The Board is satisfied that a reasonable period of notice was given to communities and First Nations so comments could be provided to the Board;
- the development was screened by the MVLWB on March 18, 2003 for Permit MV2003A0005 and on June 24, 2010 for Permit MV2010A0016 pursuant to subsection 124(1) of the MVRMA and has therefore been exempt from screening pursuant to Part 1(2) of Schedule 1 (Section 2) of the Exemption List Regulations;
- any potential adverse environmental effects are insignificant or mitigable with known technology; and
- there is no likelihood that the proposed development might be a cause of public concern.

After reviewing the evidence and submissions of the Applicant, the written comments and submissions received by the Board and the Staff Report prepared for the Board, the Board, having due regard to the facts, circumstances, the merits of the submissions made to it, and to the purpose, scope, and intent of the MVRMA and Regulations made thereunder, has determined that Land Use Permit MV2018X0002 be issued subject to the term, scope, definitions, and conditions contained therein. The Board's determinations and reasons for this decision are set out below.

- The Board is satisfied that appropriate consultation has been conducted and that advice has been sought and considered, in accordance with sections 63 and 64 of the MVRMA.
- The use of land proposed by the Applicant is of a nature contemplated by the MVRMA.
- The operation will likely contribute to the socio-economic well-being and economic development of the region.
- The Board has reviewed the information contained in the July 26, 2018 Staff Report regarding environmental impacts and/or public concerns.
- The scope of the Permit ensures Prairie Provident is entitled to conduct activities which have been applied for and screened by the Board. In setting the scope, the Board endeavored to provide enough detail to identify and describe the authorized activities without being unduly restrictive or prescriptive, and to allow for project flexibility throughout the life of the Permit.
- Project components that are not part of the reclamation activities proposed by Prairie Provident at this time, however, they were previously included in the scope of either Permit MV2003A0005 or Permit MV2010A0016, including:
 - The airstrips (Fort Liard Airfield, Pointed Mountain Airfield);
 - Quarry sites (at 60° 11' 22.75"N, 123° 39' 30.79" W, 60° 23' 15.5" N, 123° 51' 31.00" W); and
 - Borrow pit (at 1.9 km east of the K-02 wellsite).

As such, the Board has not included these components in Permit MV2018X0002. Since a Final Plan have not been submitted for either of the expired Permits MV2003A0005 or MV2010A0016, the reclamation of those additional project components remain accounted for under those authorizations.

- The conditions set forth in the Permit have been imposed to address the Board's statutory responsibilities and ensure the land-use operation is conducted in a manner which ensures impacts to surrounding lands and waters are minimized.
- The Board has approved the Waste Management Plan, Spill Contingency Plan, and the Engagement Plan because they meet the applicable guidelines and sufficiently reflect the scope of the proposed activities.
- The definitions and conditions in the Permit are from the MVLWB's *Standard Land Use Permit Conditions Template* (Standard Template) and are not discussed in detail in these reasons unless notable due to recommendations or concerns raised by reviewers. After considering the information gathered through the public review, the Board made the following changes, with rationale, to the conditions:

Condition	Change	Rationale
Scope of Permit	Abandonment and reclamation of the wellsites was separated from the rest of the activities.	To better align the scope with the proposed activities.
Security Deposit	A security amount was decided and included.	The Board determined a security amount of \$63,600.00. The Board decided that the maximum amount of fuel onsite would be set at 28,000 liters (as described in Prairie Provident's Application) and not what Prairie Provident provided in their draft Security Estimate Calculations (that of 30,000 liters).

5.0 Conclusion

Land Use Permit MV2018X0002 contains provisions that the Board deems necessary to ensure and monitor compliance with the MVRMA and the Regulations made thereunder, and to provide appropriate safeguards in respect of Prairie Provident's use of the land affected by the Permit.

SIGNATURE

Mackenzie Valley Land and Water Board

Mavis Cli-Michaud, Chair

August 2, 2018

Date