

7th Floor - 4922 48th Street,
P.O. Box 2130, Yellowknife NT X1A 2P6

Tel: 867-669-0506 Fax: 867-873-6610
www.mvlwb.com

August 31, 2020

File: MV2019X0027

Darryl Froese
Government of Yukon
Department of Highways and Public Works
Box 2703 (W-5)
Whitehorse YT Y1A2C6

Sent by email

Dear Darryl Froesel,

**Issuance of Type A Land Use Permit
Dempster Fibre Project**

Attached is Type A Land Use Permit MV2019X0027 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 five (5) years effective August 31, 2020 and expiring August 30, 2025

Permit Conditions

Please read all conditions carefully. For the purpose of submitting plans in accordance with this Permit, the date of this letter, August 30, 2020, is the effective date.

Reclamation Security

In accordance with Permit condition 42 a security deposit in the amount of \$98,811.00 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 \$98,811, 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 land use operation.

Management Plans – Resubmission and Additional Plans Required

The Board hereby requires that Government of Yukon Department of Highways and Public Works (GY-DHPW) to submit the below management plans in accordance with comments made during this review.

.../2

Part C	Item	Date
Condition 14	Sediment and Erosion Plan	Within 90 days of the issuance of this permit, the Permittee shall submit to the Board for approval a Sediment and Erosion Control Plan.
Condition 31	Emergency Frac-Out Response Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, an Emergency Frac-out Response Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 32	Wildlife Management and Mitigation Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Wildlife Management and Mitigation Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 34	Revised Waste Management Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Waste Management Plan.
Condition 38	Heritage Resource Protection Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Heritage Resource Protection Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 54	Revised Spill Contingency Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Spill Contingency Plan .
Condition 61	Interim Closure and Reclamation Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board for approval a Closure and Reclamation Plan.
Condition 70	Revised Engagement Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Engagement Plan .

Condition 71	Construction Environmental Management Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Construction Environmental Management Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 72	Permafrost Protection Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Permafrost Protection Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 73	Inspection and Maintenance Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, an Inspection and Maintenance Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.

Discontinuance

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.

Public Registry

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, with its attached procedures, 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 Government of Yukon Department of Highways and Public Works is anticipated and appreciated. If you have any questions or concerns, please contact AlecSandra Macdonald at (867) 777-4954 or email amacdonald@glwb.com.

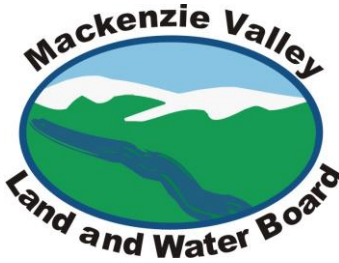
Yours sincerely,



Mavis Cli-Michaud
MVLWB, Chair

Copied to: Distribution List
Charlene Coe, GNWT, Land Use Advisor

Attached: Land Use Permit MV2019X0027
Reasons for Decision



Land Use Permit

Permit Class	Permit No	Amendment No
A	MV2019X0027	

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

Government of Yukon – Department of Highways and
Public Works

Permittee

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

Signature Darryl Froese	Date October 9, 2019
Type of Land Use Operation Miscellaneous	
Location Dempster Highway NWT – YU Border	

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

Dated at Yellowknife this 31 day of August, 2020

Signature Chair

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

Mavis Cli-Michaud

Signature Witness

A handwritten signature in blue ink, appearing to read "Amanda Gauthier".

Amanda Gauthier

Effective Date:
August 31, 2020

Expiry Date:
August 30, 2025

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 # MV201900X27

Part A: Scope of Permit

1. This Permit entitles the Permittee to conduct the following land-use operation:
 - a) Geotechnical drilling;
 - b) Horizontal Directional drilling;
 - c) Use of pre-existing staging areas for equipment and materials;
 - d) The use and storage of fuel;
 - e) Construction of temporary camps to accommodate work crews;
 - f) Clearing of vegetation as required in the right of way;
 - g) **Progressive Reclamation and associated Closure and Reclamation activities;**
 - h) Installation of conduits and fibre optic cable; and
 - i) Ongoing operations and maintenance.
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.

Borehole - a hole that is made in the surface of the ground by drilling or boring.

Closure and Reclamation - the process and activities that facilitate the return of areas affected by the Project to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment, human activities, and the surrounding environment.

Drilling Fluid - 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.

Durable Land - land that is able to withstand repeated use, such as gravel or sand with minimal vegetative cover.

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.

Flowing Artesian Well - a well in which water:

- a) Naturally rises above the ground surface or the top of any casing; and
- b) Flows naturally, either intermittently or continuously.

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.

Permafrost - ground (soil or rock) that remains at or below 0°C for at least two consecutive years.

Professional Engineer - a person registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists to practice as a Professional Engineer in the Northwest Territories as per the territorial *Engineering and Geoscience Professions Act*, and whose professional field of specialization is appropriate to address the components of the Project at hand.

Progressive Reclamation - Closure and Reclamation activities conducted during the operating phase of the project.

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.

Spill Contingency Plan - a document, developed in accordance with Aboriginal Affairs and Northern Development Canada’s *Guidelines for Spill Contingency Planning* that describes the set of procedures to be implemented to minimize the effects of a spill.

Safety Data Sheet - a technical document, typically written by the manufacturer or supplier of a chemical, that provides information about the hazards associated with the product, advice about safe handling and storage, and emergency response procedures.

Sump - a human-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 only conduct this land-use operation on lands designated in the application. | LOCATION OF ACTIVITIES |
| 2. | The Permittee shall locate all camps on Durable Land or previously cleared areas, and a minimum of 100 metres from the Ordinary High Water Mark. | CAMP SETBACK |
| 3. | The Permittee shall not locate any Sump within 100 metres of the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | SUMP SETBACK |

26(1)(b) Time

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| 4. | At least 48 hours prior to the initial commencement of the land-use operation, the Permittee's Field Supervisor shall contact an Inspector at (867) 777-8900. | INITIAL NOTIFICATION – CONTACT INSPECTOR |
| 5. | At least 48 hours prior to returning to the worksite following a seasonal Shut Down Period, the Permittee's Field Supervisor shall notify the Board and contact an Inspector at (867) 777-8900 | SEASONAL NOTIFICATION – CONTACT INSPECTOR |
| 6. | 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:
<ul style="list-style-type: none">a) the name(s) of the person(s) in charge of the field operation;b) alternates; andc) all methods for contacting the above person(s). | IDENTIFY AGENT |
| 7. | At least ten days prior to any seasonal shutdowns the Permittee shall advise an Inspector of:
<ul style="list-style-type: none">a) the plan for removal or storage of equipment and materials; andb) when cleanup and Progressive Reclamation of the land used will be completed. | REPORTS BEFORE SEASONAL REMOVAL |
| 8. | At least ten days prior to the completion of the land-use operation, the Permittee shall advise an Inspector of:
<ul style="list-style-type: none">a) the plan for removal or storage of equipment and materials;b) when final cleanup and reclamation of the land used will be completed; andc) when the Final Plan will be submitted. | REPORTS BEFORE FINAL REMOVAL |

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

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| 9. | The Permittee shall only use equipment of a similar type, size, and number to that listed in the complete application. | USE APPROVED
EQUIPMENT |
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26(1)(d) Methods and Techniques

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| 10. | 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 |
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26(1)(e) Type, Location, Capacity, and Operation of All Facilities

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| 11. | The Permittee shall ensure that the land use area is kept clean at all times. | CLEAN WORK AREA |
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26(1)(f) Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land

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| 12. | The Permittee shall insulate the ground surface beneath all structures associated with this land-use operation to prevent:

a) the melting of Permafrost; and
b) the ground settling and/or eroding. | PERMAFROST
PROTECTION |
| 13. | The land-use operation shall not cause obstruction to any natural drainage. | NATURAL DRAINAGE |
| 14. | Within 90 days of the issuance of this permit, the Permittee shall submit to the Board for approval a Sediment and Erosion Control Plan. | SEDIMENT AND
EROSION PLAN |
| 15. | The Permittee shall install and maintain suitable erosion control structures as the land-use operation progresses. | PROGRESSIVE
EROSION CONTROL |
| 16. | The Permittee shall apply appropriate mitigation at the first sign of erosion. | REPAIR
EROSION |
| 17. | The Permittee shall, where flowing water from a Borehole is encountered:

a) plug the Borehole in such a manner as to permanently prevent any further outflow of water; and
b) immediately report the occurrence to the Board and an Inspector. | FLOWING ARTESIAN
WELL |
| 18. | The Permittee shall prepare the site in such a manner as to prevent rutting or gouging of the ground surface. | PREVENTION OF
RUTTING |
| 19. | The Permittee shall suspend overland travel of equipment or vehicles at the first sign of rutting or gouging. | SUSPEND OVERLAND
TRAVEL |
| 20. | 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 |

21.	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
22.	The Permittee shall not remove vegetation or operate heavy equipment within 100 metres of the Ordinary High Water Mark of any Watercourse, except as described in the application.	EQUIPMENT: WATERCOURSE BUFFER
26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material		
23.	At least seven days prior to the use of any chemicals that were not identified in the complete application, the Safety Data Sheets must be provided to the Board and an Inspector.	CHEMICALS
24.	When drilling within 100 metres of the Ordinary High Water Mark of any Watercourse, and when drilling on ice, the Permittee shall contain all drill water and Drilling Waste in a closed circuit system for reuse, off-site disposal, or deposit into a land-based Sump or natural depression.	DRILLING NEAR WATER OR ON ICE
25.	The Permittee may deposit Drilling Waste that does not contain Toxic Material in a Sump or natural depression. Any Sumps or natural depressions used to deposit Drilling Waste must be located at least 100 metres from the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector.	DRILLING WASTE
26.	The Permittee shall remove all Drilling Waste containing Toxic Material to an approved disposal facility.	DRILLING WASTE DISPOSAL
27.	The Permittee shall not allow any Drilling Waste to spread to the surrounding lands or Watercourses.	DRILLING WASTE CONTAINMENT
28.	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.	RECLAIM NON-OIL AND GAS SUMPS
29.	The Permittee shall dispose of all Toxic Material as described in the approved Waste Management Plan.	WASTE CHEMICAL DISPOSAL
30.	The Permittee shall dispose of all combustible Waste petroleum products by removal to an approved disposal facility.	WASTE PETROLEUM DISPOSAL
31.	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, an Emergency Frac-out Response Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan.	EMERGENCY FRAC- OUT RESPONSE PLAN

26(1)(h) Wildlife and Fish Habitat

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| 32. | A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Wildlife Management and Mitigation Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan. | WILDLIFE
MANAGEMENT AND
MITIGATION
PLAN |
| 33. | The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation. | HABITAT DAMAGE |

26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage

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| 34. | Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Waste Management Plan. | REVISED WASTE
MANAGEMENT PLAN |
| 35. | The Permittee shall comply with 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 |
| 36. | The Permittee shall keep all garbage and debris in a secure container until disposal. | GARBAGE CONTAINER |
| 37. | The Permittee shall dispose of all Sewage and Greywater as described in the approved Waste Management Plan. | SEWAGE DISPOSAL -
PLAN |

26(1)(j) Protection of Historical, Archaeological, and Burial Sites

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| 38. | A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Heritage Resource Protection Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan. | HERITAGE RESOURCE
PROTECTION PLAN |
| 39. | The Permittee shall not operate any vehicle or equipment within 30 metres of a known or suspected historical or archaeological site or burial ground. | ARCHAEOLOGICAL
BUFFER |
| 40. | The Permittee shall not knowingly remove, disturb, or displace any archaeological specimen or site. | SITE DISTURBANCE |
| 41. | The Permittee shall, where a suspected archaeological or historical site, or burial ground is discovered:

a) immediately suspend operations on the site; and
b) notify the Board at (867) 777-4954 or an Inspector at (867) 8900, and the Prince of Wales Northern Heritage Centre at 767-9347 ext. 71255 or ext. 71251. | SITE DISCOVERY AND
NOTIFICATION |

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

This Section left intentionally blank

26(1)(l) Security Deposit

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| 42. | Prior to the commencement of the land-use operation, the Permittee shall deposit with the Minister a security deposit in the amount of \$98,811 | SECURITY DEPOSIT |
| 43. | All costs to remediate the area under this Permit are the responsibility of the Permittee. | RESPONSIBILITY FOR
REMEDATION COSTS |

26(1)(m) Fuel Storage

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| 44. | The Permittee shall:
a) examine all Fuel Storage Containers and Tank for leaks; and
b) repair all leaks immediately. | REPAIR LEAKS |
| 45. | The Permittee shall place Fuel Storage Containers and or Tanks a minimum of 100 metres from the Ordinary High Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector. | FUEL STORAGE
SETBACK |
| 46. | The Permittee shall ensure that all fuel caches have adequate Secondary Containment. | FUEL CACHE
SECONDARY
CONTAINMENT |
| 47. | The Permittee shall set up all refueling points with Secondary Containment. | SECONDARY
CONTAINMENT -
REFUELING |
| 48. | The Permittee shall not allow petroleum products to spread to surrounding lands or Watercourses. | FUEL CONTAINMENT |
| 49. | The Permittee shall locate mobile fuel facilities on land when the facilities are stationary for more than 12 hours. | FUEL ON LAND |
| 50. | The Permittee shall mark all Fuel Storage Containers and Tanks with the Permittee's name. | MARK CONTAINERS
AND TANKS |
| 51. | Within ten days of the establishment of any fuel cache, the Permittee shall report the location and quantity of the cache in writing to the Board and an Inspector. | REPORT FUEL
LOCATION |
| 52. | The Permittee shall seal all outlets of Fuel Storage Containers and store the containers on their sides with the outlets located at 3 and 9 o'clock, except for containers currently in use. | SEAL OUTLET |
| 53. | 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 |

54.	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Spill Contingency Plan .	REVISED SPILLCONTINGENCY 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 immediately	CLEAN UP SPILLS
58.	During the period of this Permit, if a spill occurs or is foreseeable, the Permittee shall: <ul style="list-style-type: none"> a) implement the approved Spill Contingency Plan; b) report it-immediately using the NU-NT Spill Report Form by one of the following methods: <ul style="list-style-type: none"> • Telephone: (867) 920-8130 • Fax: (867) 873-6924 • E-mail: spills@gov.nt.ca • Online: Spill Reporting and Tracking Database c) within 24 hours, notify the Board and an Inspector; and d) within 30 days of initially reporting the incident, submit a detailed report to the Board and an Inspector, including descriptions of causes, response actions, and any changes to procedures to prevent similar occurrences in the future. Any updates to this report shall be provided to the Board and an Inspector in writing as changes occur. 	REPORT SPILLS

26(1)(n) Methods and Techniques for Debris and Brush Disposal

59.	The Permittee shall progressively dispose of all brush and trees; all disposal shall be completed prior to the end of this landuse operation	BRUSH DISPOSAL/ TIME
60.	The Permittee shall not clear areas larger than identified in the complete application.	MINIMIZE AREA CLEARED

26(1)(o) Restoration of the Lands

61.	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board for approval a Closure and Reclamation Plan.	INTERIM CLOSURE AND RECLAMATION PLAN
62.	Prior to the end of the land-use operation, the Permittee shall complete all cleanup and restoration of the lands used.	FINAL CLEANUP AND RESTORATION
63.	Prior to the end of the land-use operation, the Permittee shall prepare the site in such a manner as to facilitate natural revegetation.	NATURAL VEGETATION

64.	The Permittee shall carry out Progressive Reclamation of disturbed areas as soon as it is practical to do so.	PROGRESSIVE RECLAMATION
26(1)(p) Display of Permits and Permit Numbers		
65.	The Permittee shall display a copy of this Permit in each campsite established to carry out this land-use operation.	DISPLAY PERMIT
66.	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		
67.	If nesting areas are encountered during the course of operations, the Permittee shall minimize all activity so as to not disturb them.	MIGRATORY BIRD NEST DISTURBANCE
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 comply with 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.	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Engagement Plan .	REVISED ENGAGEMENT PLAN
71.	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Construction Environmental Management Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.	CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN
72.	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Permafrost Protection Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.	PERMAFROST PROTECTION PLAN
73.	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, an Inspection and Maintenance Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.	INSPECTION AND MAINTENANCE PLAN
74.	All revised plans submitted to the Board shall include a brief summary of the changes made to the plan.	SUMMARY OF CHANGES

Annex A: Table of Items Requiring Submission

Attached to **Land Use Permit MV2019X0027**

Supplemental information to be submitted by Permittee as required through Land Use Permit conditions.

Part C	Item	Date
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Condition 38	Heritage Resource Protection Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Heritage Resource Protection Plan. The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 54	Revised Spill Contingency Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Spill Contingency Plan .

Condition 61	Interim Closure and Reclamation Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board for approval a Closure and Reclamation Plan.
Condition 70	Revised Engagement Plan	Within 90 days of the issuance of this Permit, the Permittee shall submit to the Board, for approval, a revised Engagement Plan .
Condition 71	Construction Environmental Management Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Construction Environmental Management Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 72	Permafrost Protection Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, a Permafrost Protection Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.
Condition 73	Inspection and Maintenance Plan	A minimum of 90 days prior to the commencement of this land-use operation, the Permittee shall submit to the Board, for approval, an Inspection and Maintenance Plan . The Permittee shall not commence Project activities prior to Board approval of the Plan.

Annex B: Revisions to Land Use Permit MV2019X0027

Attached to Land Use Permit MV2019X0027

List of changes that have been made to the Land Use Permit since issuance.

Date	Location of Change	What has changed
-	-	-



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) and Sections 72.25 and 121 of the *Mackenzie Valley Resource Management Act* (MVRMA) and sections 36 of the *Waters Act*

Water Licence and Land Use Permit Applications	
Preliminary Screener	MVLWB
File Number	MV2019X0027 and MV2019L8-0013
Company	Government of Yukon – Department of Highways and Public Works
Project	Miscellaneous (Dempster Fiber Project)
Date of Decision	August 20, 2020

These Reasons for Decision set out the Mackenzie Valley Land and Water Board's (the MVLWB/Board) regulatory process and decisions on Applications made by Government of Yukon – Department of Highways and Public Works (GY-DHPW) to the Board on October 9, 2019 for Water Licence (Licence) MV2019L8-0013 and Land Use Permit (Permit) MV2019X0018 for the Dempster Fiber Project.

1.0 Summary of Applications

On October 9, 2019 GY-DHPW submitted Applications for a new Licence MV2019L8-0013¹ and new Permit MV2019X0027² for its proposed Dempster Fibre Project (Project). The Project includes construction of an approximately 800-km fibre optic line from Dawson City, Yukon, to Inuvik, Northwest Territories. For the purposes of the Land Use Permit and Water Licence application, the project is defined as the section of the Dempster Fibre Project located in the Northwest Territories. The fibre optic cable will enter the Northwest Territories at the Yukon/Northwest Territories border and then travel approximately 271 km north, within the Dempster Highway right-of way to Inuvik. The project is located entirely within the Gwich'in Settlement Area (GSA), passing through the communities of Fort McPherson and Tsiigehtchic. The project will connect to an existing terminal facility in Inuvik and to existing buildings in communities along the route to provide service to those communities.

On October 16, 2019 the Applications were deemed complete and sent for review and comment, on October 23, 2019 the Board received a request to extend the review and comment period. The extension was granted to all reviewing bodies. Comment on the Application were submitted November 14, 2019.

¹ See [Water Licence MV2019L8-0013 Application](#) submitted to the MVLWB on October 9, 2019.

² See [Land Use Permit MV2019X0027 Application](#) submitted to the MVLWB on October 9, 2019.

On November 21, 2019, the Board met and determined that additional studies were needed to consider the application, the specific information that was needed were the responses to the comments from the Proponent. November 21, 2019 was also the end of the 42-day timeline. Also, on November 21, 2019, the responses were received from the Proponent.

On December 2, 2019, an Information Request was issued to the Proponent to address comments and recommendations as well as provide additional information to assist in the drafting of the permit and licence. On March 16, 2020 responses to the Information Request were received.

On March 23, 2020, the responses to the Information Request were distributed for review and comment with recommendations from reviewers due on April 23, 2020. By May 7, 2020 responses to the reviewer comments and recommendations were submitted to the Board by the Proponent.

2.0 Decision

In making its decision and preparing these Reasons for Decision, the Board has reviewed and considered:

1. The evidence and submissions from GY -DHPW received by the Board;
2. The written comments and submissions from parties received by the Board; and
3. The Staff Report prepared for the Board.

Having due regard to the facts, circumstances, and the merits of the submissions made to it, and to the purpose, scope, and intent of the MVRMA and the *Waters Act*, the Board has determined that Permit MV2019X0027 and Licence MV2019L8-0013 should be issued subject to the scope, definitions, conditions, and term contained therein. The Board's determinations and reasons for this decision are set out below.

3.0 General Principles for Land Use Permit MV2019X0027 and Water Licence MV2019L8-0013

In conducting the review process for the Permit and Licence applications, the Board has ensured that all applicable legislative and procedural requirements have been satisfied, as required by section 62 of the MVRMA and as outlined below.

- Notice of the Permit and Licence Applications 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 that they could provide comments to the Board.
- The use of land proposed by the Applicant is of a nature contemplated by the MVRMA.
- It is the opinion of the Board that the terms and conditions attached to LUP MV2019X0027 and WL MV2019L8-013, pursuant to the MVRMA, MVLUR, and the Waters Act, will prevent or mitigate any potential significant environmental impacts which might result from the Dempster Fibre Project. Specific conditions and how they relate to issues raised during the review of the Applications are discussed below.
- The scopes, definitions, terms, and conditions set forth in the LUP and WL have been developed in order to address the Board's statutory responsibilities and the concerns that arose during the regulatory process. These Reasons for Decision focus on the major issues and those that (1) were the subject of substantive argument submitted by one or more parties, or (2) resulted in the use of conditions that differ from those found on the MVLWB Standard Land Use Permit Conditions Template (Standard Template).

4.0 Determinations Pertaining to Water Licence MV2019L8-0013

4.1 Requirements of Section 26 of the Waters Act

4.1.1 Existing Licensees

After reviewing the submissions filed on the Public Registry the Board is satisfied that, with respect to paragraph 26(5)(a) of the Waters Act, the granting of this Licence to YG-DHPW will not adversely affect, in a significant way, any existing Licensee, provided that compliance with the conditions of the WL are adhered to.

4.1.2 Existing Water Users

Paragraph 26(5)(b) of the Waters Act prohibits the issuance of a Licence unless the Board is satisfied that appropriate compensation has been or will be paid by the Applicant to people who were, at the time when the Applicant filed its Applications with the Board, members of the classes of water users depositors, owners, occupiers, or holders listed under paragraph 26(5)(b), who would be adversely affected by the use of waters, or deposit of waste proposed by the Applicant.

The Board received no claims for compensation either during the prescribed period or afterwards. Provided that compliance with the Licence conditions is achieved, the Board does not believe that any users or persons listed in paragraph 26(5)(b) of the Waters Act will be adversely affected by the use of Waters or the deposit of Waste proposed by the Applicant.

4.1.3 Water Quality Standards

With regards to subparagraph 26(5)(c)(i) of the Waters Act, the Board is satisfied that compliance with the Licence conditions will ensure that waste produced by the Project will be collected and disposed of in a manner which will maintain water quality consistent with applicable standards.

4.1.4 Effluent Quality Standards

Not applicable: Effluent discharge is not considered by the application.

4.1.5 Financial Responsibility of the Applicant

The Board must satisfy itself of the financial responsibility of the Applicant under paragraph 26(5)(d) of the Waters Act before it can issue the Licence. In this case, the Board is satisfied that the GY-DHPW is capable of meeting the obligations set out in the MVRMA, Waters Act, and the Licence.

4.1.6 Requirements of Subsection 27(2) of the Waters Act

It is the opinion of the Board that compliance with the Licence terms and conditions it has imposed on GY – DHPW will ensure that any potential adverse effects on other water users, which might arise as a result of the issuance of the Licence, will be minimized.

4.2 Water Licence MV2019L8-0013 Terms and Conditions

The conditions in this Licence MV2019L8-0013 have been drafted with the transboundary nature of the project in mind and to assist in the administrative requirements and enforcement of the Project as a whole.

4.2.1 Water Licence Term

GY-DHPW has applied for a permit term of five years and a licence term of seven years. Subsection 26(2) of the Waters Act allows for a Licence term of not more than 25 years or the duration of the undertaking. After reviewing the submissions made during this regulatory process, and taking into consideration the closely linked Permit, the Board decided to continue the practice of setting the Licence term to coincide with that of the Permit, and therefore set the term of the Licence for 7 years from the date of issuance which takes into account the five-year term of the Permit, plus the possibility of a two-year extension of the Permit's term.

4.2.2 Scope and Definitions

Part A contains the scope of allowable activities, and definitions of terms used throughout the Licence.

Scope

The scope of the Licence ensures the Licensee is entitled to conduct activities which have been applied for and screened by the Board. In setting out the scope of the Licence, the Board endeavoured to provide enough detail to identify and describe the authorized activities, without be unduly restrictive or prescriptive, and to allow for project flexibility throughout the life of the Permit.

Part A, conditions 1(b) through 1(e) are consistent with previous Licences issued by the Board. These conditions ensure that the scope of the authorization includes all water uses and deposits of waste associated with the Project, reflect and comply with all applicable legislation for the life of the authorization, and consider and incorporate scientific and Traditional Knowledge where available in the Licensee's effort to protect the environment.

Definitions

The Board defined terms in the Licence to ensure a common understanding of conditions, to avoid future differences in interpretation, and to use wording similar to that found in previously issued Licences and/or the MVLWB Draft Standard Water Licence Conditions Template.

4.2.3 Part B: General Conditions and Schedule 1

Part B and Schedule 1 of the Licence contain general administrative conditions regarding compliance and conformity with the *MVRMA* and *Waters Act* and is consistent with standard conditions found in previous Licences issued by the Board.

Part B, condition 5, clarifies that all references to policies, guidelines, codes of practice, statutes, regulations or other authorities shall be read as a reference to the most recent versions, unless otherwise denoted. This standard practice allows for flexibility in Licence conditions when documents are updated during the life of the Licence.

This section addresses conformity and compliance with submissions to the Board. Annual review and submission of major updates or changes to management plans are required by Part B, condition 9, for Board approval. Such revisions must be approved by the Board prior to the implementation of activities not identified in existing, approved plans. This condition ensures that all applicable plans are regularly

reviewed and updated so they reflect changes in technology and/or changes and phases of the project throughout the life of the authorization.

Part B, item 13 introduces the Schedules which are annexed to and form part of the Licence. Changes to these Licence components are largely administrative matters and are within the Board's authority.

Part B, condition 18 and Schedule 1 condition 1: Annual Water Licence Report

The requirements for the Annual Water Licence Report are outlined in Part B, condition 18, and Schedule 1, condition 1. The purpose of the Annual Water Licence Report is to provide the Board and all stakeholders the opportunity to be annually updated on project components and activities, and to provide a platform for stakeholders to submit comments, observations, feedback, and questions as necessary. The requirements are intended to provide clarity and summarize information already captured through existing submissions; they are not meant to be onerous. The Board organized these requirements to coincide with the layout of the Licence and to be consistent with recently issued licences.

Part B, conditions 19 and 20: Engagement

The Board assesses engagement adequacy of applications through the Board's *Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits*, and the Board's *Engagement and Consultation Policy*. The Board notes that GY – DHPW's pre-engagement for the Applications was determined to be in accordance with the Guidelines and Policy. GY – DHPW included an Engagement Plan and Log Version 1 in the Applications.

During the public review, GNWT commented that neither the Engagement Record nor Plan contained information pertaining to engagement with the Hamlet of Fort McPherson (GNWT #35)³.

The Engagement Plan cannot be approved at this time and should be revised and re-submitted within 90 days following the effective date of this Licence to reflect updates as agreed to during the public review, to reflect the scope of the proposed activities, to meet the applicable guidelines, and to include the following:

- Engagement Record and Plan for the Hamlet of Fort McPherson

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

Part B, condition 21: Inspection and Maintenance Plan

In the Application, GY – DHPW committed to developing an Inspection and Maintenance Plan, for the purpose of delineating inspection and maintenance protocols and schedules for Project activities and equipment. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or Water and/or the deposit of waste – be submitted to the Board for approval (GNWT #11).

³ See MVLWB public registry for MV2019X0027 MV2019L8-0013 Reviewer Comment Summary Table

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

Part B, condition 22: Wildlife Management and Mitigation Plan

In the Application, GY – DHPW committed to developing a Wildlife Management and Mitigation Plan for the Project, and during the public review GNWT recommended that it – and all management plans that pertain to the use of land or Water and/or the deposit of waste – be submitted to the Board for approval (GNWT #11).

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

Part B, condition 23: Heritage Resource Protection Plan

In the Application, GY – DHPW committed to developing a Heritage Resource Protection Plan for the Project, which will outline best practices and appropriate protocols in the event that heritage resources are discovered as a result of Project activities. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or Water and/or the deposit of waste – be submitted to the Board for approval (GNWT #11).

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

Part B, condition 24: Permafrost Protection Plan

In the Application, GY – DHPW committed to developing a Permafrost Protection Plan for the Project which will describe field level construction protocols and appropriate mitigation measures for the protection of permafrost. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or Water and/or the deposit of waste – be submitted to the Board for approval (GNWT #11).

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

4.2.4 Part C: Conditions Applying to Security Requirements and Schedule 2

The Board is authorized to require the Licensee to provide security to the Minister by subsection 35(1) of the *Waters Act*. Subsection 35(2) of the *Waters Act* specifies how the security may be applied.

Part C of the Licence, by reference to Schedule 2, sets the level of security to be maintained by the Licensee and set out requirements related to posting and updating security. As in other licences, the Board may request a security update from the proponent at any time, and may adjust the security amount at any time, based on available information. Specifically, Part C, conditions 3 and 4 stipulate that the Board can revise the security deposit and that the Licensee will post the revised deposit within 90 days following the Board's decision. This condition pertains to both increases and reductions in security. The conditions in this section are similar to those found in other Licences issued by the Board.

The Board has determined that the total security deposit amount for the Dempster Fibre Project shall be \$ 190, 161.00 (\$91,350.00 is required under the Licence and \$98,811.00 is required under the Permit).

4.2.5 Part D: Conditions Applying to Water Use and Schedule 3

Part D and Schedule 3 of the Licence contains conditions related to water use for the Dempster Fibre Project. These are consistent with standard conditions found in previous Licences issued by the Board.

During the public review GNWT commented that GY-DHPW did not provide the requested annual volumes of water to be withdrawn from each proposed water source, nor did it include information on the sources' capacities (GNWT #10). Board staff determined that this additional information was required to complete a preliminary screening, and to set appropriate terms and conditions for the Water Licence.

On December 2, 2019 Staff issued an information request⁴ to GY-DHPW requiring the applicant to provide:

- a) a finalized list of water sources, including name and location of the water bodies, and the available capacity of each proposed water source;
- b) anticipated daily withdrawal volumes and duration of use, including a comparison of the total annual water volume requested for use against the total water volume available;
- c) any available bathymetric information, including maximum depths and available water under ice,
- d) any available information on other water uses from the source(s), and;
- e) shapefiles delineating the proposed project footprint, for the public registry

On December 23, 2019 GY-DHPW submitted a response to IR #1. The finalized list of water sources included both the sources submitted in the original application, as well as a list of the 58 water crossings that would be crossed by HDD during cable installation. The applicant explained that 'Where possible, water required for the s

mall HDD operations will be sourced directly from the feature being crossed." Daily and annual withdrawal volumes were provided for water sources. Bathymetric and flow data was provided for several of the water courses, however GYDHPW acknowledged that limited data was available. In absence of this data, GYDHPW committed to following Fisheries and Oceans' Canada (DFO) Protocol for Winter Withdrawal from Ice-Covered Waterbodies in the Northwest Territories and Nunavut (2010) a for water withdrawal, including restricting water withdrawals from streams to 10% of the instantaneous flow and to restricting summer lake withdrawals to 10% of the available volume.

Because the 58 water crossings had not been identified as withdrawal sources in the accepted application, the IR#1 response was circulated in order to provide reviewers an opportunity to submit comments on the additional water sources.

By April 23, 2020 comments and recommendations on the response to IR #1 were received from

- Government of the northwest Territories – Department of Environment and Natural Resources (ENR)
- Gwich'in Tribal Council – Department of Cultural Heritage
- Gwich'in Renewable Resources Board

During the Public GNWT recommended that a weekly reporting requirement be included in the Water Licence, in order to capture instantaneous flow rates and water withdrawal rates for each source. (GNWT IR #2). Condition D 8 has been added to reflect this recommendation.

⁴ See MVLWB.com for IR #1

The maximum volume of water to be withdrawn from all identified sources shall not exceed 280 m³ per day. The maximum daily withdraw limits for each source has been identified in Schedule 3 of the Water Licence.

4.2.6 Part E: Conditions Applying to Construction

Part E of the Licence contains conditions applying to construction activities for the Dempster Fibre Project and is consistent with standard conditions found in previous Licences issued by the Board. The Board can ensure that monitoring requirements are in place prior to, during, and post-construction.

Part E, condition 3: Construction Environmental Management Plan

In the Application, GY-DHPW committed to developing a Construction Environmental Management Plan for the Project, which identifies field-level mitigation and best management practices. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or water and/or the deposit of waste – be submitted to the Board for approval.

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

4.2.7 Part F: Conditions Applying to Waste and Water Management

Part F of the Licence contains conditions applying to waste and water management activities for the Dempster Fiber Project and is consistent with standard conditions included in previous Licences issued by the Board. Site-specific conditions were developed where necessary.

Part F, condition 1 sets out the objectives for the management of water and waste for the Dempster Fiber Project. This condition is consistent with the principles of objective-based regulation: it essentially defines the objectives of any required management actions, plans or reports. This condition is standard for Licences issued by the Board and reminds the Licensee of the need to manage water and waste with the goal of minimizing impacts on the receiving environment.

Part F, condition 2: Waste Management Plan

The Boards' authority to regulate the management of waste is described in subsection 26(1) of the MVLUR and sections 11 and 27 of the *Waters Act*. As such, the Board developed, and approved, *Guidelines for Developing a Waste Management Plan*.⁵ These guidelines can be applied to a wide range of projects and is intended to ensure that all waste management activities specific to each project are carried out in a way that is consistent with best practices and applicable guidelines to minimize waste released from the Project. Waste Management Plan is a defined term in the Licence, ensuring that the required Plan adheres to the Board's Guidelines.

Submittal and compliance with a Waste Management Plan is standard for Licences issued by the Board. GY-DHPW included a Waste Management Plan Version 1 in the Application

⁵ See www.mvlwb.com → Resources → Policies and Guidelines: [MVLWB Guidelines for Developing a Waste Management Plan](#) (March 31, 2011).

Throughout the regulatory review process, comments and recommendations were received from GNWT regarding the Waste Management Plan and that further details should be included in the Plan. In response to concerns, GY – DHPW committed to updating the Waste Management Plan

The Waste Management Plan cannot be approved at this time and should be revised and re-submitted by DATE to reflect updates as agreed to during the public review, to reflect the scope of the proposed activities, to meet the applicable guidelines, and to include the following:

- The volume of waste that could be generated by the Project
- The size of waste storage containers that will be available on site
- Details regarding secondary containment for the temporary storage of hazardous waste.

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

Part F, condition 5

Part F condition 5 requires written authorization from an Inspector prior to the deposit of Waste in the Inuvik Solid Waste Disposal Facilities. This is consistent with the Town's municipal water Licence G17L3-001.

Part F, condition 6

Part F, condition 6 specifically prohibits the deposit of waste into a watercourse, or within 100 meters of a watercourse, and was added in response to GNWT recommendation (GNWT #37)

Part F, condition 9 and 10 Sediment and Erosion Control Plan

Part F, condition 9 and 10 outline the requirements for a Sediment and Erosion Control Plan. This Plan is required by the Licence to ensure the Project is managed in accordance with the *Waters Act*, and the objectives listed in Part G, conditions 1 of the Licence.

In the Application, GY – DHPW committed to developing a Sediment and Erosion Control Plan for the Project, to address the potential for in-stream sedimentation that may occur during vegetation clearing, and during the installation and maintenance of the fibre optic line. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or Water and/or the deposit of waste – be submitted to the Board for approval.

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

4.2.8 Part G Conditions Applying to Contingency Planning

Part G of the Licence contains conditions related to spill contingency planning and reporting, reclamation of spills and unauthorized discharges, and emergency response for the Dempster Fibre Project. The purpose of this part is to ensure that GY – DHPW is fully prepared to respond to spills and unauthorized discharges. The planning and reporting requirements in this part ensure that GY – DHPW has identified the lines of authority and responsibility, has an action plan(s) for responses to spills and unauthorized discharges, and has established reliable reporting and communication procedures. This will ensure that

any spills or unauthorized discharges are effectively controlled and cleaned up, with the goal of preventing or limiting damage to the receiving environment. The conditions in Part G are consistent with standard conditions found in previous Licences issued by the Board.

Part G, condition 2 and 3: Spill Contingency Plan

Spill Contingency Plan is a defined term in the Licence, referencing the Indian and Northern Affairs Canada's *Guidelines for Spill Contingency Planning*.⁶ GY – DHPW included Spill Contingency Plan version 1 in the Application.

During the Public Review, GNWT commented that additional information was required in the SCP (GNWT #39)

The Spill Contingency Plan cannot be approved at this time and should be revised and re-submitted within 90 days following the effective date of this Licence to reflect the guidelines, updates as agreed to during the public review, to reflect the scope of the proposed activities and to include the following:

- Regional Contact Information
- Safety Data Sheets

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

Part G, conditions 11 and 12 Emergency Frac-out response Plan

Part G, conditions 11 and 12 outline the requirements for an Emergency Frac-out response Plan. This Plan is required by the Licence to ensure the Project is managed in accordance with the *Waters Act*, and the objectives listed in Part G, conditions 1 of the Licence.

In the Application, GY – DHPW committed to developing a Emergency Frac-out Response Plan for the Project, to be implemented in the event of a release of drilling mud. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or Water and/or the deposit of waste – be submitted to the Board for approval. (GNWT #11)

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

4.2.9 Part H: Conditions Applying to Aquatic Effects Monitoring

The Board did not require conditions in this section to satisfy its mandate and did not receive any comments during the review of the draft Licence.

4.2.10 Part I: Conditions Applying to Closure and Reclamation

Part I of the Licence contains conditions applying to closure and reclamation of the Dempster Fibre Project.

The Licence conditions applying to the security deposit (Part C of the Licence) are closely related to this Part I; the security deposit is directly related to the activities described in the closure plans, and updates

⁶ See www.mvlwb.com → Resources → Policies and Guidelines: [INAC Guidelines for Spill Contingency Planning](#)

to closure plans often result in updates to the security deposit. These conditions are consistent with other Licences issued by the Board.

Part I, condition 2 requires GY – DHPW to submit a Closure and Reclamation Plan a minimum of 90 days prior to the commencement of Project activities.

Part I, condition 2 requires GY – DHPW to submit a Final Closure and Reclamation Plan a minimum two years prior to the end of operations. This is a standard requirement of Licences issued by the Board and will ensure the Project is reclaimed in accordance with established guidelines and expectations of reviewers and the Board.

5.0 Determinations Pertaining to Land Use Permit MV2019X0027

5.1 Term of Permit

GY – DHPW has applied for a term of 5 years for the Permit, with a desire for an extension. Subsections 26(5) of the MVLUR allows for a Permit term of not more than five years. After reviewing the submissions made during this regulatory process, the Board has determined an appropriate term for this land use operation is 5 years.

5.2 Part A: Scope of Permit

The scope of the Permit ensures the Permittee is entitled to conduct activities which have been applied for and screened by the Board. In setting out the scope of the Permit, the Board endeavoured to provide enough detail to identify and describe the authorized activities, without be unduly restrictive or prescriptive, and to allow for project flexibility throughout the life of the Permit.

5.3 Part B: Definitions

The Board defined items in the Permit to ensure a common understanding of conditions, to avoid future differences in interpretation, and to use wording similar to that found in previously issued Permits. For the most part, the definitions used wording from the Board's *Standard Land Use Permit Conditions Template* (Standard Template).

5.4 Part C: Conditions Applying to All Activities

The subheadings below correspond to the headings in the conditions section of the Permit, as outlined in section 26(1) of the MVLUR. Most conditions in the Permit are from the Board's Standard Template, and are not discussed in detail in these Reasons for Decision unless notable due to recommendations or concerns raised during the public review. Where applicable, the Board's reasons for including non-standard conditions are discussed.

26(1)(a) Location and Area

The conditions included in this section are all consistent with the Board's Standard Template.

26(1)(b) Time

The conditions included in this section are all consistent with the Board's Standard Template.

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

The conditions included in this section are all consistent with the Board's Standard Template.

26(1)(d) Methods and Techniques

The conditions included in this section are all consistent with the Board's Standard Template.

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

The conditions included in this section are all consistent with the Board's Standard Template.

26(1)(f) Control or Prevention of Ponding of Water, Flooding, Erosion, Slides, and Subsidence of Land

The Board has included a condition regarding the submission of a Sediment and Erosion Control Plan which is not part of the Standard Template. The Sediment and Erosion Control Plan is intended to explain how erosion and sedimentation will be mitigated and controlled on the land, and to prevent eroded materials from migrating and settling in the water as a result of Project activities. This Plan is also required under Part F, Conditions 9 and 10 of the Licence, and the Board's reasons for including this Plan are described above in section 4.2.7. To ensure consistency between the authorizations regarding the submission of this Plan, the Board has chosen to require Board approval of this Plan prior to commencement of the land-use operation.

26(1)(g) Use, Storage, Handling, and Ultimate Disposal of Any Chemical or Toxic Material

The conditions included in this section are all consistent with the Board's Standard Template.

26(1)(h) Wildlife and Fish Habitat

In the Application, GY – DHPW committed to developing a Wildlife Management and Mitigation Plan for the Project which will detail mitigations to reduce or eliminate impacts to wildlife and wildlife habitat. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or Water and/or the deposit of waste – be submitted to the Board for approval.

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

This Plan is also required under Part B of the Licence and the Board's reasons for including this Plan, and requiring revisions and re-submittals, are described above in Section 4.2.3. The Board mirrored these conditions to the extent possible with the Licence requirements to ensure one submission will satisfy conditions of both the Licence and Permit.

The remaining conditions included in this section are consistent with the Board's Standard Template.

26(1)(i) Storage, Handling, and Disposal of Refuse or Sewage:

A Waste Management Plan is a standard requirement for land use permits issued by the Board. This Plan is intended to ensure that all waste management activities are carried out in a way that is consistent with best practices and applicable guidelines to minimize waste released from the Project. This Plan is also required under Part F of the Licence and the Board's reasons for including this Plan, and requiring revisions and re-submittals, are described above in Section 4.2.7. The Board mirrored these conditions

to the extent possible with the Licence requirements to ensure one submission will satisfy conditions of both the Licence and Permit.

The remaining conditions included in this section are consistent with the Board's Standard Template.

26(1)(j) Protection of Historical, Archaeological, and Burial Sites;

In the Application, GY – DHPW committed to developing a Heritage Resource Protection Plan for the Project, which will outline best practices and appropriate protocols in the event that heritage resources are discovered as a result of Project activities. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or Water and/or the deposit of waste – be submitted to the Board for approval.

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

This Plan is also required under Part B of the Licence and the Board's reasons for including this Plan, and requiring revisions and re-submittals, are described above in Section 4.2.3. The Board mirrored these conditions to the extent possible with the Licence requirements to ensure one submission will satisfy conditions of both the Licence and Permit.

The remaining conditions included in this section are consistent with the Board's Standard Template.

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

The Board did not require conditions in this section to satisfy its mandate and did not receive any comments during the review of the draft Permit.

26(1)(l) Security Deposit

The Board is authorized to require the Permittee to provide security to the Minister by subsection 32(1) of the MVLUR. Subsection 32(2) of the MVRMA specifies how the security may be applied.

The Board has included a requirement for security in the Permit. The Board's reasons associated with this section are described above in Section 4.2.4, in conjunction with reasons for security required by the Licence. The security deposits required by these two instruments are discussed together since the estimates deal with the same project and are intimately linked. The conditions included in this section are consistent with the Board's Standard Template.

26(1)(m) Fuel Storage

A Spill Contingency Plan is a standard requirement for land use permits issued by the Board. This Plan is intended to ensure that an action plan(s) for responses to spills and Unauthorized Discharges, and has established to effectively control and clean up spills and Unauthorized Discharges, with the goal of preventing or limiting damage to the receiving environment. This Plan is also required under Part G of the Licence and the Board's reasons for including this Plan, and requiring revisions and re-submittals, are described above in Section 4.2.8. The Board mirrored these conditions to the extent possible with the Licence requirements to ensure one submission will satisfy conditions of both the Licence and Permit.

The remaining conditions included in this section are consistent with the Board's Standard Template.

26(1)(n) Methods and Techniques for Debris and Brush Disposal

The conditions included in this section are all consistent with the Board's Standard Template.

26(1)(o) Restoration of the Lands

The conditions included in this section are all consistent with the Board's Standard Template.

26(1)(p) Display of Permits and Permit Numbers

The conditions included in this section are all consistent with the Board's Standard Template.

26(1)(q) Biological and Physical Protection of the Land

An Engagement Plan is a standard requirement for land use permits issued by the Board. This Plan is intended to ensure adequate and effective engagement with potentially affected parties has occurred prior to the submission of the Applications (in the form of the Engagement Log) and is planned for throughout the life of the Project. This Plan is also required under Part B of the Licence and the Board's reasons for including this Plan, and requiring revisions and re-submittals, are described above in Section 4.2.3. The Board mirrored these conditions to the extent possible with the Licence requirements to ensure one submission will satisfy conditions of both the Licence and Permit.

In the Application, GY-DHPW committed to developing a Construction Environmental Management Plan for the Project, which identifies field-level mitigation and best management practices for construction activities. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or water and/or the deposit of waste – be submitted to the Board for approval.

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

This Plan is also required under Part B of the Licence and the Board's reasons for including this Plan, and requiring revisions and re-submittals, are described above in Section 4.2.3. The Board mirrored these conditions to the extent possible with the Licence requirements to ensure one submission will satisfy conditions of both the Licence and Permit.

In the Application, GY – DHPW committed to developing a Permafrost Protection Plan for the Project which will describe field level construction protocols and appropriate mitigation measures for the protection of permafrost. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or Water and/or the deposit of waste – be submitted to the Board for approval.

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

This Plan is also required under Part B of the Licence and the Board's reasons for including this Plan, and requiring revisions and re-submittals, are described above in Section 4.2.3. The Board mirrored these conditions to the extent possible with the Licence requirements to ensure one submission will satisfy conditions of both the Licence and Permit.

In the Application, GY – DHPW committed to developing an Inspection and Maintenance Plan, for the purpose of delineating inspection and maintenance protocols and schedules for Project activities and

equipment. During the public review GNWT recommended that it – and all management plans that pertain to the use of land or Water and/or the deposit of waste – be submitted to the Board for approval.

Because it is for Board approval, the Plan will be publicly reviewed, allowing for incorporation of comments or concerns raised.

This Plan is also required under Part B of the Licence and the Board’s reasons for including this Plan, and requiring revisions and re-submittals, are described above in Section 4.2.3. The Board mirrored these conditions to the extent possible with the Licence requirements to ensure one submission will satisfy conditions of both the Licence and Permit.

The remaining conditions included in this section are consistent with the Board’s Standard Template.

6.0 Conclusion

Subject to the scopes, definitions, conditions, and terms set out in the Licence and Permit, and for the reasons expressed herein, the MVLWB is of the opinion that the land-use activities, water use, and waste disposal associated with the Dempster Fiber Project can be completed by Government of Yukon Department of Highways and Public works while providing for the conservation, development, and utilization of waters in a manner that will provide the optimum benefit for all Canadians and in particular for the residents of the Mackenzie Valley.

Water Licence MV2019L8-0013 and Land Use Permit MV2019X0027 contain provisions that the Board deems necessary to ensure and monitor compliance with the MVRMA, *Waters Act*, and the Regulations made thereunder, and to provide appropriate safeguards in respect of GY-DHPW use of the land and water affected by the Licence.

SIGNATURE

Mackenzie Valley Land and Water Board

Mavis Cli-Michaud, Chair

August 20, 2020

Date

Appendices and Annexes

Water Licence and Land Use Permit Applications	
Preliminary Screener	MVLWB
File Number	MV2019X0027 and MV2019L8-0013
Company	Government of Yukon – Department of Highways and Public Works
Project	Miscellaneous (Dempster Fiber Project), Inuvik NT

Appendix 1: Reclamation Security for the Dempster Fibre Project

1.0 Introduction

Government of Yukon and the Government of Northwest Territories determined the below security estimate, which was submitted to the Board by the GNWT during the public review period.

Summary of Costs			
CAPITAL COSTS	COMPONENT NAME	LAND LIABILITY	WATER LIABILITY
WELLS AND FACILITIES		\$0	\$0
BUILDINGS AND EQUIPMENT		\$39,248	\$31,960
CHEMICALS AND CONTAMINATED SOIL MANAGEMENT		\$3,438	\$2,503
SURFACE AND GROUNDWATER MANAGEMENT		-	\$0
INTERIM CARE AND MAINTENANCE		-	\$5,000
	SUBTOTAL: Capital Costs	\$42,686	\$39,463
	PERCENT OF SUBTOTAL	53%	49%
INDIRECT COSTS		LAND LIABILITY	WATER LIABILITY
MOBILIZATION/DEMOBILIZATION		\$15,478	\$14,310
POST-CLOSURE MONITORING AND MAINTENANCE		\$26,988	\$24,950
ENGINEERING	5%	\$2,134	\$1,973
PROJECT MANAGEMENT	5%	\$2,134	\$1,973

HEALTH AND SAFETY PLANS/MONITORING & QA/QC	1%	\$427	\$395
BONDING/INSURANCE	1%	\$427	\$395
CONTINGENCY	20%	\$8,537	\$7,893
MARKET PRICE FACTOR ADJUSTMENT	0%	\$0	\$0
	SUBTOTAL: Indirect Costs	\$56,126	\$51,888
	++42686		
TOTAL COSTS		\$98,811	\$91,350

The Board may consider the following items from subsection 32(2) of the MVLUR in setting the amount of security:

- (a) The ability of the applicant or prospective assignee to pay the costs referred to in that subsection;
- (b) The past performance of the applicant or prospective assignee in respect of any other permit;
- (c) The prior posting of security by the applicant pursuant to other federal legislation in relation to the land-use operation; and
- (d) The probability of environmental damage or the significance of any environmental damage.

The Board chose to set security at \$190,161.00



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