



ROHL Global Networks
Closure and Reclamation Plan
Yukon and Northwest Territories
Dempster Fibre Project

Submitted to MVLWB
Files MV2019X0027 & MV2019L8-0013

Document Overview	
Date Written	2022-02-10
Plan Owner	Engineering and Environmental
Date of Plan Review	2022-05-20
Date of Plan Revision	2022-06-10

Revision History

Date	Owner	Comments
April 14, 2022	ROHL Engineering and Environmental	V1.0 submitted to MVLWB for review
June 10, 2022	ROHL Engineering and Environmental	V2.0 Updated to incorporate recommendations from MVLWB public review

Conformity Table- Permits

LUP	WL	Requirement	Section of Plan
Part C, Condition 61	Part I, Condition 2	Develop a plan that clearly describes the Closure and Reclamation for the Project.	2.0, 3.0

Conformity Table – Revisions

ID	Recommendation	Revision	Section of Plan
1	Update the conceptual plan to state that a final closure plan will be submitted as indicated in Part I of the water licence.	Section 3.0 updated to include statement of final closure plan to be submitted in 2024. Due to the planned timing of construction activities, the Interim Closure and Reclamation and Final Closure and Reclamation Plans were submitted as one document. The construction mitigations relate to the interim closure activities, and the decommissioning activities relate to the final closure of the project.	3.0, page 7
2	Progressive reclamation should be contemplated in areas where natural revegetation may be inhibited.	Section 2.0 “Clearing” and Section 3.0 introductory paragraph updated to specify that progressive reclamation will be implemented per this recommendation.	2.0, page 6 3.0, page 6

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1.0 PROJECT BACKGROUND

Company Name, Location, and Mailing Address

ROHL Global Networks Inc. (RGN)
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Purpose & Scope

The purpose of this plan is to outline the restoration activities to be implemented throughout the duration of the Dempster Fibre Project (DFP). Reclamation activities will be conducted in any project areas where material was staged, where soil or vegetation was disturbed as part of the installation process, and in riparian zones. Reclamation activities will support the return of areas affected by the project to viable and self-sustaining ecosystems. These activities will also support the continuation of a healthy environment and any future human activities that will occur in the project area. This plan is applicable to all construction crew personnel on the Project and outlines the response to construction stage and operations stage restoration.

Effective Date

This plan will be effective from the date of approval by the Mackenzie Valley Land and Water Board and will expire on the date that the permit is closed.

Revisions

Any revisions to the plan will be submitted to the Mackenzie Land and Water Board for approval and regulating agencies prior to implementing any changes.

Distribution

This plan and the most recent revisions will be distributed to all staff and contractors working on the project. The Plan will be presented and reviewed during an orientation prior to the start of construction. The Closure and Reclamation Plan will be included as part of new staff orientation activities.

Licenses, Permits, and Fees

All closure and reclamation activities associated with the construction, operation, and maintenance of the DFP will be done in accordance with this plan, and all applicable federal, territorial, and municipal laws and regulations.

2.0 CONSTRUCTION STAGE RESTORATION

Construction stage activities will include the placement, storing, and use of construction materials and equipment within the project area. The following sections discuss the restoration activities that will be implemented to ensure projects sites are restored to their pre-construction state.

Mobilization and Staging

Staging areas will be used to store material and equipment for the duration of the project. Staging areas will be set up at existing approved quarry sites, either privately owned or government operated, or on privately owned lands, upon approval by the property owner. Following the closure of the project, all material and equipment stored in staging areas will be removed, and the sites will be returned to their pre-construction state. The storage of materials and equipment at staging areas will be done in compliance with all applicable permits, legislation, and regulations. Staging area cleaning will include:

- The removal of all construction equipment and the filling or clearing of any tracks, ruts, or grooves left behind from the tracks or tires of the equipment.
- The removal of all trailers and seacans and filling or clearing of any ruts, grooves, or other surface disturbance left behind from the placement units.
- The removal of all construction materials. Any waste that requires disposal will be disposed of as outlined in the project's approved Waste Management Plan.

Camps

Temporary camps will be used to accommodate construction crews. This will involve the construction of trailers providing temporary dormitory quarters, kitchen and dining areas, wash houses, recreation and living spaces, first aid rooms, and office spaces. Temporary camps will be constructed in existing, approved gravel pits, upon approval by the authority having jurisdiction. No additional clearing of vegetation will be involved in the construction of temporary camps. Following the closure of the project, all camp structures and associated materials and equipment will be removed, and the sites will be returned to their pre-construction state. Temporary camp site closure activities will include:

- The removal of all trailers and the filling or clearing of any ruts, grooves, or other surface damage left behind from the placement of the units.
- The removal of all camp equipment, including but not limited to fuel tanks, septic tanks, garbage containers, and power generators.
- The disposal of all waste in accordance with the project's approved Waste Management Plan.

Clearing

The Project will require clearing of the cable alignment, handhole sites, temporary access trails, and Horizontal Directional Drilling (HDD) sites. The temporary access trails will be required to allow access for personnel and equipment within the ROW. Routes along the ROW will be cleared primarily by mulching and hand slashing. Cleared vegetation will be disposed of as outlined in the project's approved Waste Management Plan.

- All cleared areas will be left to naturally re-vegetate. If it is determined that the vegetative mat or surface soils have been disturbed, re-contouring and re-distribution of organic material will be done to ensure proper surface drainage, reduce potential for erosion, and encourage natural revegetation.

- Progressive reclamation will be implemented in areas where natural revegetation may be inhibited. These areas will be revegetated with native materials to prevent erosion and help seeds germinate.
- Any damage to highway roads, municipal roads, access roads, driveways, lawn areas, trees, shrubs, or other project areas will be immediately remediated to its original condition within 5 work days, weather and ground conditions permitting.
- Restoration will be completed in accordance with the standards and specifications of the Owner, the Consultant, and any additional Authorities Have Jurisdiction

Conduit Placement and Cable Installation

There will be some subsurface disturbance in areas where conduit placement and cable installation are achieved using shallow burial plowing and trenching, HDD, and new aerial installation (if required). During plowing and trenching, the plow slot normally closes behind the plow, minimizing the need to backfill. In areas where plowing is not feasible, trenches will be dug by hand or with light machinery to bury conduit. HDD will be used in locations where the fibre optic cable must be buried for its protection, but trenching is not practical. As the cable is installed, measures will be implemented to restore areas of surface disturbances in order to ensure proper surface drainage, reduce potential for erosion, and encourage natural re-vegetation. This includes:

- Excavation and backfilling will be carried out in such a manner so that the surface soil is returned to its original condition. Topsoil will be replaced and evenly spread across the area from which it was removed.
- Proper compaction of surfaces damaged, disturbed or removed during construction will be done to ensure roadways and driveways are restored to their original condition.
- Any damage to highway roads, municipal roads, access roads, driveways, lawn areas, trees, shrubs, or other project areas will be immediately remediated to its original condition within 5 work days, weather and ground conditions permitting.
- Restoration will be completed in accordance with the standards and specifications of the Owner, the Consultant, and any additional Authorities Have Jurisdiction
- Controls to reduce erosion and sedimentation will be implemented as outlined in the project's Erosion and Sediment Control Plan.

3.0 OPERATIONS STAGE RESTORATION

Following the construction of the Dempster Fibre Line, the Proponent will continue to implement reclamation activities in an ongoing effort to return the project area to its pre-construction state. These activities will be conducted during the regular maintenance and operation of the line. Restoration activities and mitigations that will be implemented during the operations stage include:

- Proponent will re-seed areas where natural revegetation has not been established using a local seed mix. Progressive reclamation will be implemented in areas where natural revegetation may be inhibited.
- Ongoing erosion and sediment control measures will be implemented. All sediment and erosion control will be done in accordance with the Erosion and Sediment Control Plan.

Decommissioning

Decommissioning and closure will be completed with the objective of returning the Project area to a pre-Project state to the extent possible while minimizing ground disturbance. The conceptual plan for decommissioning is as described below.

This objective will be achieved by removing all surface infrastructure related to the fibre optic line, including the following: aerial installation from existing poles, handholes, marker posts and any surface laid cable. At the time of removal, available best practices for decommissioning will be followed and methods to avoid ground disturbance will be used to the extent possible. However, it is inevitable that some ground disturbance will occur as a result of accessing the infrastructure and use of machinery. The ground disturbance will be limited to the highway ROW and is anticipated to involve trampled down vegetation and small ruts from equipment use. In order to minimize ground disturbance, Project components installed beneath the surface will remain in place. The fibre optic line is the primary Project component that will exist below-ground. After 25 years, the ground supporting the underground cable will have settled and revegetation will be occurring above the cable. Therefore, it is expected that the removal of the underground fibre optic line will result in more environmental degradation than leaving it buried in place. Best Management Practices that will be implemented to minimize impacts related to erosion/sedimentation during and after removal of surface infrastructure include re-contouring handhole locations to ensure natural drainage occurs, revegetating areas with native grasses, shrubs and trees, avoiding placement of stockpiles within riparian areas, scheduling removal activities to occur during frozen ground conditions, and scheduling work around watercourses to avoid wet, windy and rainy periods. A Decommissioning Plan will be developed prior to conducting decommissioning activities. The Decommissioning Plan will address both below-ground and above-ground components. The timeframe for decommissioning will be 25 years after substantial completion, estimated to be 2049. A final closure plan will be submitted in 2024 as indicated in Part I of the Project's Water Licence.

4.0 PROCEDURE SIGNOFF

I have received a copy of all relevant documents related to the **Closure and Reclamation Plan** for the **Dempster Fibre Project**. I have received answers to any questions and will complete the reclamation activities per the plan and as directed by ROHL.

Name	Signature	Date of Review