



# **GRAYS BAY ROAD AND PORT PROJECT**

**CLOSURE & RECLAMATION PLAN**

**EARLY PERMITTING/IMPACT ASSESSMENT PHASE**

**WKR MP 03**

***Version 1.1***

## Summary

This *Closure & Reclamation Plan* describes what West Kitikmeot Resources Corp. will do to close its work areas at the end of each year.

## Revision Table

Version	Author/Reviewer	Notes	Date	Sent To
1.0	SHC	Internal. First draft sent to WKR	Sept 26, 2024	WKR
1.1	SHC	Revised format	October 15, 2024	WKR

# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Purpose .....	1
1.2	Scope .....	2
1.3	Plan Management .....	2
1.4	Roles and Responsibilities .....	2
1.5	Site Description .....	3
<b>2</b>	<b>Closure Principles &amp; Goals .....</b>	<b>6</b>
<b>3</b>	<b>Facility Description .....</b>	<b>6</b>
<b>4</b>	<b>Seasonal Closure Activities .....</b>	<b>6</b>
4.1	Fuel & Material Storage .....	6
4.2	Waste .....	7
4.3	Water Intake .....	7
4.4	Drills .....	7
4.5	Mobile Equipment .....	7
<b>5</b>	<b>Progressive Reclamation .....</b>	<b>7</b>
<b>6</b>	<b>Reporting &amp; Documentation.....</b>	<b>8</b>
<b>7</b>	<b>References.....</b>	<b>9</b>

## List of Tables

Table 1.1	Related Project documents and authorizations .....	2
Table 1.2	Proponent Contacts and Information .....	3

## List of Figures

Figure 2.1	Grays Bay Road and Port Project.....	5
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## Abbreviations

KIA .....	Kitikmeot Inuit Association
km.....	kilometer
NT .....	Northwest Territories
NU.....	Nunavut
The Company .....	West Kitikmeot Resources Corp
The Plan .....	Closure & Reclamation Plan
The Project .....	Grays Bay Road and Port Project
WKR .....	West Kitikmeot Resources Corp

## Glossary

Backhaul	Transport off-site
Closure goal	Guiding statement that provides the vision and purpose of reclamation, attained once all closure objectives are satisfied.
Closure objectives	What the closure activities are aiming to achieve, guided by the closure principles.
Closure principles	Guide the selection of closure objectives and include four core principles: physical stability; chemical stability; no long-term active care requirements; future use
Environment Manager	Designated WRK staff, responsible for Implementation of this Plan
Kitikmeot Inuit Association	A not-for-profit designated Inuit organization with community-elected leadership representing Inuit of the Kitikmeot Region of Nunavut. Their goal is to support Kitikmeot Inuit, providing them with more educational, employment, and business opportunities (KIA 2024).
Kitikmeot Region	The most western region of the Nunavut territory. It consists of the southern and eastern parts of Victoria Island with the adjacent part of the mainland and includes five permanent communities of: Cambridge Bay, Gjoa Haven, Kugaaruk, Kugluktuk and Taloyoak.
Program	Field studies occurring concurrent with and in support of Project impact assessment, and early permitting
Project	Grays Bay Road and Port research program and all of its components
Seasonal closure	Planned annual site closure
Site	Work areas associated with the Project
Sump	A person-made or natural depression to temporarily contain liquids
Temporary closure	Either a planned or unplanned closure which may occur at any time and not considered to be final
WKR	West Kitikmeot Resources Corp.

# 1 Introduction

West Kitikmeot Resources Corp. (WKR; the Company) is an Inuit-owned, Inuit-led company, based in Cambridge Bay, Nunavut. WKR is primarily focused on the advancement of the Grays Bay Road and Port Project (the Project). The Company's largest shareholder is a wholly-owned subsidiary of the Kitikmeot Inuit Association (KIA).

The Project is proposed as multi-user, multi-use transportation infrastructure to be located on a combination of Inuit Owned Land and Crown land in the Kitikmeot Region of western Nunavut. Subject to approval, the Project would result in the establishment of the first deep-water port in the Canadian Central Arctic at Grays Bay, as well as a 230 kilometre (km) all-season access road between Grays Bay and Jericho station near Contwoyto Lake. The Project will connect to the already approved Tibbitt to Contwoyto Winter Road (TCWR). The multi-user, multi-use Project would allow for the establishment of shared infrastructure with many potential users including the federal and territorial governments, communities, community members, resource companies, and defence agencies.

In support of advancing the design of the Project and of assessing impacts of the Project on the biophysical and socio-economic environment, WKR commenced field studies in July 2024. These studies are a continuation of, or are supplemental to, baseline studies screened and undertaken historically. This includes collecting biophysical environmental data, maintaining existing and installing new scientific instrumentation required to support environmental data collection, and undertaking design-related studies.

These studies occur concurrent with Project impact assessment, and early permitting, and are referred to here as the Program.

## 1.1 Purpose

The purpose of this *Closure & Reclamation Plan* (the Plan) is to outline what tasks occur to secure Program work site(s) upon seasonal closure.

This Plan considers the guidance and requirements provided in the documents listed in Table 1.1, which may be updated from time to time.

**Table 1.1 Related Project documents and authorizations**

Document	Authority
<i>Mine Site Reclamation Policy for Nunavut (2002)</i>	Government of Canada
<i>Transportation of Dangerous Goods Act (1992) and Regulations (2015)</i>	Government of Canada
<i>Canadian Environmental Protection Act (1999)</i>	Government of Canada
<i>Interprovincial Movement of Hazardous Waste Regulations (2002)</i>	Government of Canada
<i>Nunavut Water Nunavut Surface Rights Tribunal Act (2002) and Nunavut Water Regulations (2013)</i>	Government of Canada
<i>Territorial Lands Act (1985) and Land Use Regulations (2016)</i>	Government of Canada
Screening Decision	Nunavut Impact Review Board
Water Licence	Nunavut Water Board
Land Use Licence	Kitikmeot Inuit Association
Land Use Permit	Government of Canada

## 1.2 Scope

This Plan applies to Program activities occurring in the field during the early permitting/impact assessment phase of the Project, and includes progressive reclamation of those areas.

## 1.3 Plan Management

This Plan is reviewed annually at minimum by the Environment Manager or designate and revised as needed to reflect the terms and conditions of Project authorizations, outcomes of ongoing engagement, acquisition of Inuit Knowledge, and needs of both community members and WKR.

This Plan is effective upon approval, is valid throughout the early permitting/impact assessment phase of the Project, and may be updated from time to time.

A copy of this Plan is maintained on the corporate server in a manner such that it is accessible to workers. A copy is also maintained in any field office locations.

## 1.4 Roles and Responsibilities

WKR is responsible for implementation of this Plan. Table 1.2 outlines how to connect with the WKR team.

Drill contractors are responsible for ensuring each drill site is cleaned up to the satisfaction of WRK following each drill move and prior to commencing drilling at a new drill target.

The **Environmental Manager** is responsible for overall implementation of this Plan. Specific duties include: verifying that adequate communication and training occur and adequate procedures are developed for work area management; allocating adequate resources, retaining competent personnel to carry out the work and ensuring sufficient resources are available for seasonal closure of works areas; directing and reviewing incident investigations and related corrective action planning; implementing an assurance program to verify contractor compliance to this Plan.

**Table 1.2 Proponent Contacts and Information**


Item	Detail
Project Name	Grays Bay Road and Port Project
Proponent	West Kitikmeot Resources Corp.
Address	Head office: P.O. Box 6, 30B Mitik Street, Cambridge Bay, NU XOB OCO Project office: Suite 2110, 500 4 Ave SW, Calgary, AB T2P 2V6
Responsible Executive	Elliot Holland, Chief Operating Officer eholland@westkit.ca 867.446.0309
Principal Contact	Gavin Law, Environment Manager & Engagement Lead glaw@westkit.ca 403.837.5677
Website	www.westkit.ca

## 1.5 Site Description

As shown in Figure 1.1, the Project is entirely located within the Kitikmeot Region of Nunavut. Project. The northern extent of the Project area at the proposed port site and road terminus is located approximately 180 km east of Kugluktuk, NU at 505441.56 E / 7521154.57 N, while the southern extent of the Project area and proposed road terminus is located at the Jericho Mine site, approximately 400 km northeast of Yellowknife, Northwest Territories (NT) at 479617.47 E / 7319795.35 N. Main points of access include Kugluktuk, NU, Cambridge Bay, NU and Yellowknife, NT, as well as existing regional mineral project camps site, when operational. The Program area is primarily accessed by helicopter, while most areas can be reached by fixed wing aircraft, boat or snowmobile.

The Project occurs above the tree line in the low arctic tundra, in an area of continuous permafrost (GBEEC 2017). The terrestrial portion of the Project Area along the entire extent of the proposed road is located within the Southern Arctic Ecozone; the majority of the proposed road is within the Takijuk Lake Upland Ecoregion, while the terminus of the proposed road and the port site occur in the Bathurst Hills Ecoregion (ESWG 1995a). Mean monthly temperature reaches a maximum in July (17°C) and minimum in January (-33°C). August sees the greatest amount of precipitation as rain, while the greatest amount of snow falls in October; precipitation decreases northward, towards the Coronation Gulf/ *Qalgiuyap Taryunga*. Freshet flows typically occur in June, with flows decreasing





to minimums in August, with a secondary peak sometimes observed in late August or September due to fall rains. Maximum ice thickness on lakes ranges from 1.8 to 2 m (GBEEC 2017).

The marine portion of the Project area comprising the proposed port site is located within the Arctic Archipelago Marine Ecozone. During the winter, sea ice island-fast, with the ice reaching its maximum thickness in May. In the brief spring and summer periods of the northwestern parts of the ecozone, sea ice normally shatters into massive sheets. The ice persists through summer with the ice sheets separated by narrow channels of open water. Mean daily temperatures range from 10°C in July to -30°C in winter (ESWG 1995b).



## 2 Closure Principles & Goals

Closure principles guide the selection of closure objectives. Core closure principles applicable to the Program are:

- Project components are physically and chemically stable upon closure.
- Long-term active care is not required.
- The closed site is compatible with future uses ensuring future generations of Inuit will be able to enjoy the land as Inuit do today (MWLWB/AANDC 2013).

Seasonal closure goals for the Program are to ensure Program-affected areas are stable and, wherever practicable, compatible with a healthy environment and with human activities.

Progressive reclamation objectives for the work sites are to:

- Ensure environmental protection to the extent necessary to minimize liability to Inuit, and yet support the continued use for Program activities, allowing for future use and benefit to Inuit.
- Ensure that there is no danger to the health or safety of people and wildlife.

## 3 Facility Description

The main facilities that will subject to seasonal closure are geotechnical drill sites and drummed fuel caches. Geotechnical drilling is predominantly focused in the port area, but may occur through the Program area, as data needs arise. Similarly, fuel caches, which are described in greater detail in the *Spill Contingency Plan*, typically occur proximal to drilling areas, but may be established throughout the Program area. Both types of facilities are temporary in nature.

## 4 Seasonal Closure Activities

### 4.1 Fuel & Material Storage

Fuel and other materials such as drill additives, lubricants and coolants may remain in fuel caches for future use. Fuel remaining in caches is inspected to ensure integrity of barrels or other storage containers.

When a fuel cache is decommissioned or relocated, any containment berms are inspected to determine if they are suitable for reuse on other sites. If not suitable for reuse, containment berms are disposed of off-site. Following fuel cache decommissioning, the land underneath is inspected for evidence of leaks resulting in contamination. If any soil contamination is detected, contamination delineation and clean-up is undertaken in consultation with the landowner.



## **4.2 Waste**

Waste generated during the preceding season is managed in accordance with the *Waste Management Plan*.

## **4.3 Water Intake**

Water intake facilities are pumps used to supply water for drilling. Pumps are removed from the watercourse and may be securely stored on site. Fuel is removed from the water pump prior to storage.

## **4.4 Drills**

Drills are deconstructed and either removed from the site or, if future drilling is planned, stored in a designated, durable area. In a drill storage scenario, fuel lines are disconnected, and fuel tanks are either emptied or stored in suitable containment.

Drill cuttings sumps undergo a final inspection to ensure stability. Any drill cuttings that may have been spilled to the surrounding land or ice are collected and placed in a cuttings sump.

Drill steel is pulled or cut flush with the ground surface. Drill holes on land are flagged and staked and capped or sealed. The area around drill stems undergo a final inspection to ensure any areas of subsidence have been backfilled in such a manner as to prevent water accumulation. All drill timbers, hoses, equipment, debris and garbage are removed from the drill site, and may be either backhauled or stored with the drill for reuse.

## **4.5 Mobile Equipment**

Any equipment that may be used in future years may be staged in a designated, durable area. Any equipment staged is drained of fuel with a drip tray placed underneath to capture any fluid leaks.

# **5 Progressive Reclamation**

Progressive reclamation occurs concurrently with drilling and fueling activities, and can include:

- Regularly removing equipment and supplies that are no longer needed from work areas;
- Regularly backhauling waste and empty fuel drums;
- Managing drill sumps and cleaning up drill sites following each drill move;
- Cleaning up any spills as they are detected; and
- Regularly backhauling contaminated and spent spill response materials.



## **6 Reporting & Documentation**

Reporting occurs pursuant to authorizations, where applicable.

Temporary and final closure efforts are photo-documented and geo-referenced.

## 7 References

*Canadian Environmental Protection Act*. S.C. 1999, c.33

*Interprovincial Movement of Hazardous Waste Regulations*. SOR/2002-301

*Nunavut Waters and Nunavut Surface Rights Tribunal Act*. S.C. 2002, c.10

*Nunavut Waters Regulations*. SOR/2013-69

*Territorial Lands Act*. R.S.C. 1985, c. T-7

*Territorial Land Use Regulations*. SOR/2016 R-32, s.1.

*Transportation of Dangerous Goods Act*. S.C. 1992, c.34

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