



# Grays Bay Road and Port Project Impact Statement

*Volume 11 – Management Plans*



# Grays Bay Road and Port Impact Statement



<b>Volume 1</b> <b>Impact Statement Summary</b>
Main Document

<b>Volume 2</b> <b>Introduction, Project Description and Alternatives</b>
1 – Introduction 2 – Project Components and Activities 3 – Knowledge and Literature Cited

<b>Volume 3</b> <b>Inuit Knowledge, Indigenous Knowledge, Community Knowledge and Perspectives</b>
4 – Inuit Knowledge, Indigenous Knowledge, and Community Knowledge 5 – Integrating Inuit, Indigenous, and Community Values and Perspectives 6 – Public Engagement 7 – Regional Historical Overview 8 – Knowledge and Literature Cited

<b>Volume 4</b> <b>Effects Assessment Methodology</b>
9 – Effects Assessment Methodology 10 – Knowledge and Literature Cited

<b>Volume 5</b> <b>Atmospheric Environment</b>
11 – Assessment of Potential Effects on Air Quality 12 – Climate 13 – Assessment of Potential Effects on Noise and Vibration

<b>Volume 6</b> <b>Terrestrial Environment</b>
14 – Assessment of Potential Effects on Terrain, Soils, and Permafrost 15 – Assessment of Potential Effects on Vegetation 16 – Assessment of Potential Effects on Caribou 17 – Assessment of Potential Effects on Birds 18 – Assessment of Potential Effects on Other Terrestrial Wildlife

<b>Volume 7</b> <b>Freshwater Environment</b>
19 – Assessment of Potential Effects on Water Resources 20 – Assessment of Potential Effects on Freshwater Fish & Fish Habitat

<b>Volume 8</b> <b>Marine Environment</b>
21 – Assessment of Potential Effects on Marine Water and Sediment 22 – Assessment of Potential Effects on Marine Fish and Fish Habitat 23 – Assessment of Potential Effects on Marine Mammals

<b>Volume 9</b> <b>Human Environment</b>
24 – Assessment of Potential Effects on Traditional Land, Marine, and Resource Use 25 – Assessment of Potential Effects on Food Security and Food Sovereignty 26 – Assessment of Potential Effects on Community Health and Well-being 27 – Assessment of Potential Effects on Employment and Economy 28 – Assessment of Potential Effects on Infrastructure and Services 29 – Assessment of Potential Effects on Non-Traditional Land, Marine, and Resource Use 30 – Assessment of Potential Effects on Heritage Resources

<b>Volume 10</b> <b>Additional Assessments and Conclusions</b>
31 – Holistic Assessment 32 – Cumulative Effects Assessment Overview 33 – Transboundary Effects Assessment 34 – Accidents and Malfunctions 35 – Effects of the Environment on the Project 36 – Conclusion

<b>Volume 11</b> <b>Management Plans</b> <b>YOU ARE HERE</b>
37 – Management Plans

# Grays Bay Road and Port Fact Sheet



## Proponent

- **West Kitikmeot Resources Corp. (WKR):** established by the Kitikmeot Inuit Association in 2014 as an Inuit-owned and Inuit-led company to conduct mineral exploration, primarily on Inuit Owned Lands (IOL) in the Kitikmeot Region of Nunavut

## Location

- **Grays Bay Port** is located at approximately 67° 48' 21.62" N, 10° 52' 17.69" W
- Nearest communities to the port: Kugluktuk (approximately 180 km west) and Cambridge Bay (approximately 280 km northeast)
- Southern end of **Grays Bay Road** is located at Jericho Station; approximately 66° 01' 6.36" N, 111° 28' 28.27" W

## Components and Activities

- Development and operation of a **deep water port** at Grays Bay on the Coronation Gulf including two large vessel wharves, a medium vessel wharf, a barge landing area with two berths, and a small craft harbour for approximately 24 vessels
- Construction and operation of an **Aerodrome** at the port
- Construction and operation of a 230 km **all-season controlled access road** (Grays Bay Road), including the construction and operation of Jericho Station
- Construction and operation of a **winter road** connecting Jericho Station to the Tibbitt Contwoyto Winter Road (TCWR) alignment on Contwoyto Lake (*Tahikyoak*)

## Phases

- **Construction phase** of the Project will take approximately five years to complete (both pre-construction and construction) with a proposed starting date in September 2029
- **Operations and Maintenance phase** of the Project will start in 2035 and will continue in perpetuity

## Knowledge Perspectives

- WKR, as well as the previous proponents, the Government of Nunavut and the Kitikmeot Inuit Association, have been engaging on the Project since 2016
- one primary source: *Kitikmiut Knowledge of the Proposed Kogloктоаkyok (Grays Bay) Port and Road Project* (Banci and Spicker 2024) that was compiled by the Kitikmeot Inuit Association and its consultants from the Naonaiyaotit Traditional Knowledge Project (NTKP), a repository of Inuit Knowledge maintained in a Geographic Information System (GIS)-based database
- Inuit, Indigenous, and community knowledge, as well as feedback from engagement, has been reviewed, considered, and integrated where appropriate into project planning and the IS

## Environment

- Two years of baseline studies building on decades of baseline work completed by previous proponents
- 11 volumes totalling over 7,000 pages of analysis
- With the implementation of mitigation, management, and enhancement measures, residual project and cumulative effects are predicted to be not significant
- Monitoring programs and ongoing engagement will inform adaptive management strategies

## Benefits

- **Economic – Transformative Benefits**
  - approximately **\$750 million** additional annual GDP growth by 2040 because of the Project
  - an estimated **670 jobs** in Nunavut each year during construction
  - an estimated **390 jobs** during operations and maintenance created by the Project and related expenditure
- **Community and Social – Supply Chain Resilience**
  - new transportation route to the western Arctic will strengthen supply chain resiliency by creating alternative access to essential goods
  - enhanced safety for both marine and land travel, supporting more reliable and secure movement within the Coronation Gulf and throughout the Northwest Passage
- **Sovereignty and Security – Strategic Presence**
  - first deep water port in the western Arctic
  - critical year-round strategic presence in the region

# Table of Contents

<b>Abbreviations .....</b>	<b>iv</b>
<b>37 Management Plans.....</b>	<b>37-1</b>
37.1 Environmental Management System .....	37-1
37.1.1 Environmental Management System Framework .....	37-1
37.1.2 Environmental Management Plan Overview .....	37-2
37.1.3 Environmental Management Plans.....	37-2
37.1.4 Mitigation and Monitoring Plans .....	37-3
37.1.5 Follow-up and Adaptive Management.....	37-5
37.1.6 Ecosystemic Environmental Plans .....	37-6
37.1.7 Socio-Economic Environmental Plans.....	37-8
37.1.8 Progressive Reclamation Plan .....	37-9
37.1.9 Roles and Responsibilities .....	37-9

## List of Tables

Table 37.1	Summary of Monitoring Plans for the Project .....	37-4
Table 37.2	Summary of Management Plans for the Project .....	37-7

## **List of Appendices**

Appendix 37A	Road Management Plan (Draft)
Appendix 37B	Wildlife Mitigation and Monitoring Plan
Appendix 37C	Air Quality Monitoring and Management Plan (Draft)
Appendix 37D	Aquatic Effects Management Plan (Draft)
Appendix 37E	Noise and Vibration Abatement Plan (Draft)
Appendix 37F	Progressive Reclamation Plan (Draft)
Appendix 37G	Heritage Resources Management Plan (Draft)
Appendix 37H	Environmental Protection Plan (Draft)
Appendix 37I	Port Management Plan (Draft)
Appendix 37J	Inuit Human Resources and Business Development Plan (Draft)
Appendix 37K	Socio-economic Monitoring Plan (Draft)

## Abbreviations

DFO.....	Fisheries and Oceans Canada
EMS.....	Environmental Management System
EPP .....	Environmental Protection Plan
IS .....	Impact Statement
LAA.....	Local Assessment Area
OHS Plan .....	Occupational Health and Safety Plan
Project, the .....	Grays Bay Road and Port Project
RMERP .....	Risk Management and Emergency Response Plan
SEMP .....	Socio-economic Monitoring Program
VC .....	Valued Component
WKR.....	West Kitikmeot Resources Corp.
WMMP.....	Wildlife Mitigation and Monitoring Plan

## 37 Management Plans

### 37.1 Environmental Management System

The Environmental Management System (EMS) developed for the Grays Bay Road and Port Project (the Project) provides the overarching framework for managing potential adverse environmental and socio-economic effects over the life of the Project. The EMS describes West Kitikmeot Resources Corp.'s (WKR) responsibilities, allocation of resources, and the ongoing evaluation of systems and practices associated with environmental and socio-economic management.

The EMS describes how WKR will continually improve environmental performance through systematic reviews of policies, practices, and systems related to environmental protection. The EMS will guide all Project phases, including Construction, and Operations and Maintenance.

#### 37.1.1 Environmental Management System Framework

The EMS includes WKR's environmental policies and commitments developed through the environmental review process; a framework for adaptive management; and the collection of individual management and mitigation and monitoring plans. These plans will support Construction and Operations and Maintenance phases of the Project; however, not all plans apply to all phases. Where plans span both phases, their requirements will be adapted to reflect phase-specific conditions, and each plan will identify the phase(s) to which it applies.

The EMS and associated management plans are grounded in the integration of Inuit, Indigenous, and Community values and perspectives as described in Volume 3, Section 5, and apply those principles in the design of mitigation, monitoring, and adaptive management for the Project. Engagement with Inuit organizations, Indigenous groups, the public, government agencies, and stakeholders has informed the development of the EMS and its plans. Where practical, plans will outline mechanisms for ongoing involvement of Nunavummiut in the implementation and review of these plans.

Monitoring plans and programs will identify whether and how Inuit Knowledge, Indigenous Knowledge, and Community Knowledge have informed their design and how these knowledge systems will continue to guide adaptive management. Monitoring programs will be developed with consideration of feedback from Inuit organizations, such as Hunters and Trappers Organizations and the Kitikmeot Inuit Association, as well as regulators, to align monitoring indicators and methods with Inuit perspectives, community priorities, and regulatory requirements. Implementation responsibilities will vary across plans. Community based monitoring, such as Guardians initiatives, may be carried out entirely by Inuit organizations, with support from WKR (e.g., providing logistical support, facilitating information sharing, coordinating responses to concerns), whereas monitoring required under regulatory authorizations will be carried out by WKR, with opportunities for Inuit participation.

The EMS and associated plans will incorporate the flexibility to respond to Project design and development plan changes, regulatory requirements, ecosystemic and socio-economic conditions, technological advancements, research results, and evolving understanding of Inuit Knowledge, Indigenous Knowledge, Community Knowledge, and public engagement feedback. WKR is committed to transparent reporting and collaborative engagement to demonstrate these plans reflect community values and regulatory expectations throughout the Project lifecycle.

### **37.1.2 Environmental Management Plan Overview**

Volume 11 outlines the management, mitigation, monitoring, and institutional measures that are needed to mitigate, offset, or reduce the Project's potential effects to acceptable levels. The volume identifies responsibilities for implementing the mitigation measures based on Valued Component (VC) assessments presented in Volumes 5 through 9. The following plans will continue to be updated throughout the Construction and Operations and Maintenance phases in response to monitoring results, engagement feedback, and changes observed or identified over the Project lifecycle.

### **37.1.3 Environmental Management Plans**

#### **37.1.3.1 *Role of Environmental Management Plans in the EMS***

Management plans include appropriate actions designed to reduce potential adverse effects of the Project on the ecosystemic (biophysical) and socio-economic (people and communities) environments and include specific requirements for monitoring (see Sections 37.1.6 and 37.1.7). Management plans consider changes that may be required to accommodate the construction and use of the road, port, and other associated infrastructure.

A risk assessment of economic or other conditions that could impair the effectiveness or implementation of proposed mitigation measures or management will be included. All management plans will be developed with input from Inuit and other Indigenous governments and organizations, users, and information obtained through consultation with regulators.

#### **37.1.3.2 *Standard Content of Environmental Management Plans***

Each management plan includes:

- Objectives and scope of the plan,
- Applicable regulatory/legislative requirements,
- Roles and responsibilities to implement the plan,
- Mitigation measures to be implemented for specific activities,
- Monitoring and reporting, and how the results from monitoring (in any phase of the Project) will be used to refine or modify the design and implementation of mitigation measures and management plans, and
- Proposed criteria or thresholds to trigger mitigation measures if monitoring results warrant.

### **37.1.3.3 Stand-alone Environmental Management Plans**

Each Management Plan to Volume 11 is a stand-alone management plan forming part of the Project's overall EMS. Individual management plans are specific to various aspects, components, activities, and phases of the Project. Plans vary in level of detail depending on the Project's development and refinement throughout the Impact Statement (IS) review and subsequent regulatory processes. The plans are described in more detail in Sections 37.1.6 and 37.1.7, and summarized in Table 37.2.

### **37.1.4 Mitigation and Monitoring Plans**

Mitigation measures identified in each VC assessment are organized into ecosystemic and socio-economic mitigation and monitoring plans. These measures may be implemented through Project design, VC-specific plans, or the Environmental Protection Plan.

The design of all environmental monitoring programs will be relevant to the potential effects of the Project on the environment, and the specific purpose of the monitoring in reference to measurable parameters and will verify compliance with conditions of regulatory authorizations and other legal requirements.

Monitoring may be proposed to:

- Confirm the predictions made in the environmental assessment,
- Confirm mitigation measures are working as intended to reduce adverse effects, and
- Inform changes that may be required to mitigation measures or monitoring as part of an adaptive management approach.

Where monitoring is proposed, indicators will be selected to evaluate mitigation effectiveness and/or identify unanticipated effects to inform adaptive management and feed back into adjusting mitigation measures or activating backup mitigation measures. Where necessary, proposed criteria or thresholds will be identified to trigger additional mitigation if monitoring results warrant, identify next steps, and monitor the effectiveness of mitigation and management responses. Potential follow-up measures will be identified that are aligned with applicable regional efforts to adaptively manage cumulative effects, and where feasible, may discuss opportunities and commitments around Inuit involvement in monitoring programs. Table 37.1 provides a summary of anticipated monitoring plans and plan development responsibilities.

**Table 37.1 Summary of Monitoring Plans for the Project**

Appendix	Monitoring Plan	Description	Plan Developed By
Appendix 37B	Wildlife Mitigation and Monitoring Plan (WMMP)	The plan identifies Project-related adverse effects and mitigation measures related to wildlife and wildlife habitat, such as habitat loss, disturbance, or fragmentation. The plan outlines measures to monitor the effectiveness of mitigation efforts and adaptively manage any unforeseen effects arising from the Project.	WKR
Appendix 37C	Air Quality Monitoring and Management Plan	The plan identifies mitigation measures for compliance with applicable regulations, including strategies to reduce and control emissions generated during Construction and Operations and Maintenance.	WKR
Appendix 37D	Aquatic Effects Management Plan	The plan is based on the <i>Fisheries Act</i> Authorization and the Fisheries and Oceans Canada (DFO) Offsetting Plan (Attachment D1) for the Project. The plan is compliant with applicable regulations and permit conditions related to the aquatic environment. The plan includes the mitigation and monitoring requirements for both marine and freshwater environments. It will be implemented to evaluate the effectiveness of the mitigation efforts and adaptively manage any unforeseen effects arising from the Project through construction, operations, and maintenance.	WKR
<i>Appendix 37D Attachment D1</i>	DFO Offsetting Plan	The plan, a required component of the IS, will summarize the anticipated Project residual effects on fish and fish habitat, describe the options considered for offsetting, and outline the proposed plan to implement the offset measures.	WKR
Appendix 37F	Progressive Reclamation Plan	The plan will outline how areas used temporarily during construction be designed for closure, as well as how they will be reclaimed at the end of their use. The plan outlines measures to restore the ecosystemic integrity of these areas.	WKR
Appendix 37G	Heritage Resources Management Plan	The plan outlines how heritage resources will be managed within the Local Assessment Area (LAA) during all phases of the Project. The plan provides a summary of previous heritage resource assessment and presents action items and communication protocols in the event heritage resources are identified within the LAA.	WKR

Appendix	Monitoring Plan	Description	Plan Developed By
Appendix 37J	Inuit Human Resources and Business Development Plan	The plan includes a description of training programs and opportunities for Inuit, including employment and procurement throughout the Construction and Operations and Maintenance phases of the Project. The plan includes WKR's Labour Relations Strategy; Gender, Equity, and Diversity Policies, including the Employee Code of Conduct, Cultural Awareness, Travel Policy, Employee and Family Assistance Program, No Drug and Alcohol Policy, and Anti-harassment and Discrimination Policy; Training Strategy; and Procurement Strategy.	WKR
Appendix 37K	Socio-economic Monitoring Program (SEMP)	The plan outlines how effects that are directly attributable to the Project and related to the Project's workforce will be managed through monitoring, reporting, and adaptive management.	WKR

### **37.1.5 Follow-up and Adaptive Management**

A central and important strategy in management and monitoring plan development will be to assess the effectiveness of mitigation measures and associated follow-up mechanisms that support adaptive management of Project effects and cumulative effects. This includes using innovative tools and approaches founded in Inuit Knowledge and integrated with science-based methods and frameworks that promote sustainable development.

In each plan, a follow-up program will be described where necessary, to verify effects predictions and/or to verify the effectiveness of mitigation measures. Appropriate follow-up measures will be proposed for consideration by regulatory authorities where the scientific uncertainty of the environmental effects predictions or the effectiveness of mitigation warrants the need for such programs. Where applicable, programs will include compliance measures used to verify that mitigation was applied or to demonstrate compliance with the requirements of environmental laws or regulations, or the conditions of permits, approvals or authorizations issued under such laws or regulations.

Monitoring results will be reported to regulators and discussed with relevant regional socio-economic monitoring committees, as required. WKR is committed to involving Inuit in implementation of effective monitoring and management measures. If follow-up and monitoring is not proposed for a VC, rationale is provided to justify the exclusion.

Management and monitoring plans will be reviewed internally on an annual basis to confirm the effectiveness of the management measures and update as appropriate. Adaptive management will be implemented as appropriate based on results from the implementation of other management plans, monitoring results, and engagement feedback.

WKR is committed to updating the plans before each of the following milestones (as required):

- Prior to the technical meeting/pre-hearing conference;
- After the Pre-Hearing Conference Report is issued and before the final hearing; and
- Final version(s) after the final hearing is completed, if necessary.

### **37.1.6 Ecosystemic Environmental Plans**

The environmental management and monitoring plans developed to address potential adverse effects of the Project on the ecosystemic environment include the Road Management Plan and Port Management Plan, which outline the procedures, monitoring, and mitigation measures for the Construction and Operations and Maintenance phases of the Project (i.e., the complete life span). Other management plans specific to activities or potential effects are described in Table 37.2.

#### **Road Management Plan**

The purpose of the Project is to provide a controlled access, multi-modal transportation system to connect to existing transportation infrastructure and serve future needs in the Kitikmeot Region. These needs include stimulating future resource development (including extraction of critical minerals) within a region where such activities are presently limited by the lack of infrastructure. WKR intends to also manage this road for the public to access and use the multi-user, multi-use infrastructure. A Road Management Plan will establish procedures for safe access and use, as well as parameters for future development tied to the road (Appendix 37A). Care and maintenance measures are included to address temporary or unplanned closures or reduced operations such as during a pandemic or a labour strike.

In consideration that there will be large and heavy vehicles using the road such as haul trucks (B-train or Dual Powered Road Trains) and transport trucks, access to the road will be strictly controlled and monitored through use of sign-in and radio check-in to ensure the safety of all users. WKR will control and monitor access to the road at its southern terminus, located on Inuit Owned Land.

The Road Management Plan includes monitoring and mitigation measures (procedures) to address potential effects of road use on valued resources such as wildlife, and caribou in particular. The Road Management Plan considers input from users, and feedback obtained through consultation with regulators, Inuit and other Indigenous governments and organizations. Annual road use plans will be developed to implement adaptive management measures to protect caribou.

#### **Port Management Plan**

The Port Management Plan outlines mitigation measures for construction and operation of the Grays Bay Port to reduce potential effects on the environment. Care and maintenance measures are included to address temporary or unplanned closures or reduced operations such as during a pandemic or a labour strike. The management plan includes monitoring requirements and thresholds, and reclamation requirements for areas that will not be required during Operations and Maintenance. The permitting regime and tenure of all infrastructure is described, and the proposed approach and management structure for the operation of the port, including how the port will provide services to third parties and the

public. Projected traffic volumes, including types and numbers of vessels, navigational requirements, and anchorages are outlined. The framework for the Port Operations Manual will be included, and operational protocols relevant to conclusions in the IS will be summarized (such as port operational limits, fueling requirements, communication and security considerations). The plan also includes provisions for aerodrome management.

### Other Management Plans

Table 37.2 provides a summary of anticipated management plans and development responsibilities, with the expectation that these will form the basis for subsequent licensing / regulatory processes. Plans will be developed during the review process of the IS and will be refined as Project design advances and additional information become available.

**Table 37.2 Summary of Management Plans for the Project**

<b>Appendix</b>	<b>Management Plan</b>	<b>Description</b>	<b>Plan Developed By</b>
Appendix 37A	Road Management Plan	The plan will be developed for operations and maintenance to reduce potential effects on air quality, watercourses, wildlife and sensitive landforms. The Road Management Plan describes measures to manage access to the road, and measures to reduce effects on caribou/ <i>tuktuit</i> . The Plan also includes measures to reduce the potential for accidents and malfunctions associated with road use.	WKR
Appendix 37E	Noise and Vibration Abatement Plan	The plan outlines the requirements for occupational noise monitoring, control and worker protection. Mitigation and adaptive management measures focused on minimizing the potential effects of noise on select wildlife species are provided in the Wildlife Mitigation and Monitoring Plan.	WKR
Appendix 37H	Environmental Protection Plan	The Environmental Protection Plan (EPP) outlines activity-specific environmental protection measures to be implemented throughout all phases of the Project. The EPP includes related management plans and will provide operational guidance to ensure consistent implementation of mitigation and management measures.	WKR / Construction Contractor
Appendix 37H <i>Attachment H1</i>	Borrow Pit and Quarry Management Plan	The plan provides the management measures that guide the development, use, and closure of borrow pits and quarries.	WKR / Construction Contractor
Appendix 37H <i>Attachment H2</i>	Erosion and Sedimentation Control Plan	The plan includes the erosion and sedimentation measures to be employed during construction and operations and maintenance activities and promotes compliance with applicable regulations.	Construction Contractor
Appendix 37H <i>Attachment H3</i>	Explosives Management Plan	The plan outlines management practices that aim to reduce the environmental and safety risks of manufacturing, transporting, storing, handling and usage of explosives.	WKR / Construction Contractor

<b>Appendix</b>	<b>Management Plan</b>	<b>Description</b>	<b>Plan Developed By</b>
Appendix 37H <i>Attachment H4</i>	Risk Management and Emergency Response Plan (RMERP)	The plan describes details pertaining to incident response, investigation, review, and corrective measures in accordance with the findings of the investigations. The measures in the RMERP will be combined with a spill contingency plan for events that require reaction to emergency spills.	WKR / Construction Contractor
Appendix 37H <i>Attachment H5</i>	Spill Contingency Plan	The plan provides management measures to address unauthorized discharges during Construction and Operations and Maintenance.	WKR
Appendix 37H <i>Attachment H6</i>	Water Management Plan	The plan describes the responsible management of water, including the collection, management and/or treatment of water for the protection of aquatic resources.	WKR / Construction Contractor
Appendix 37H <i>Attachment H7</i>	Waste Management Plan	The plan provides management measures for the generation of waste, including solid waste and wastewater. Measures will be described to ensure that waste is procured, handled, stored, treated, and disposed of in an environmentally responsible manner. The Waste Management Plan will include specific measures related to incinerator management.	WKR / Construction Contractor
Appendix 37I	Port Management Plan	The plan describes management measures for all aspects of the port's operation, including an administration and management framework, operational guidelines, mitigation measures to be implemented to avoid or reduce potential effects on the biophysical VCs, (e.g., wildlife and wildlife habitat and marine resources), and monitoring requirements and thresholds. The plan also outlines provisions for aerodrome management, including protocols for specific air transportation operating procedures in accordance with Transport Canada and International Air Transport Association guidance and standards.	WKR

### **37.1.7 Socio-Economic Environmental Plans**

The management and monitoring plan, policies, and programs developed to address potential adverse effects of the Project to health, social, economic, and cultural aspects will include measures to increase the positive effects of the Project on the socio-economic environment.

#### **Socio-economic Monitoring Program**

A Socio-economic Monitoring Program (SEMP) will be developed and implemented to assess and track the socio-economic outcomes of the Project over time. The SEMP will include the preparation of annual socio-economic monitoring reports, which will be submitted to the Nunavut Impact Review Board, as required. Overall, the SEMP will track a range of socio-economic indicators to monitor Project outcomes, including training, employment, and procurement, and will support adaptive management where required.

## **Inuit Human Resources and Business Development Plan**

The Inuit Human Resources and Business Development Plan will include a description of training programs and opportunities for Inuit, including employment and procurement throughout the Construction and Operations and Maintenance phases of the Project. Also included in this plan are the following policies and plans:

- Labour Relations Strategy to increase local Inuit and youth employment to reduce the need to transport personnel from outside of the region.
- Gender, Equity, and Diversity Policies, including the Employee Code of Conduct, Cultural Awareness, Travel Policy, Employee and Family Assistance Program, No Drug and Alcohol Policy, and Anti-harassment and Discrimination Policy
- A Training Strategy, including an apprenticeship program, to identify specific skill requirements for employment on the Project and to work with local and regional training and educational facilities to increase opportunities for local Inuit employment, and to implement on-the-job training and apprenticeship programs.
- A Procurement Strategy to prioritize Inuit and regional businesses by facilitating access to contracting opportunities at the Project and structuring procurement packages to be accessible to local suppliers. Where practical, the strategy will emphasize the use of local equipment and services to increase regional economic benefits and reduce reliance on externally sourced resources.

### **37.1.8 Progressive Reclamation Plan**

The Project is largely composed of permanent infrastructure; therefore, WKR has not proposed a conceptual closure and reclamation plan for these components. Only a small number of temporary facilities are proposed to be reclaimed following the Project's initial construction, and those not required during operations and maintenance will be reclaimed in accordance with permit conditions. Progressive reclamation will be actively carried out concurrently with final construction and commissioning of the Project.

#### **37.1.8.1 Care and Maintenance Plan**

Care and maintenance measures will be developed to address temporary or unplanned closures or reduced operations such as during a pandemic, or a labour strike. These measures are included in the Road Management Plan and Port Management Plan, as appropriate. Environmental Management System Implementation

### **37.1.9 Roles and Responsibilities**

WKR will establish the necessary human, material, and financial resources to implement the management and monitoring plans. The general roles and responsibilities related to the execution of management and monitoring plans are outlined below. Specific roles and responsibilities will be further detailed as the Project progresses.

**Proponent (WKR):**

- Hold overall responsibility and accountability for the implementation of the Project management and monitoring plans.
- Confirm adequate resources (financial, human, logistical) are allocated for management and monitoring plan activities.
- Maintain compliance with all relevant permits, licences, and regulatory requirements pertaining to the construction, operation and maintenance of the road and port.
- Lead engagement with affected Inuit and Indigenous Peoples and consultation with regulatory agencies regarding the management plans.
- Oversee the adaptive management process and approves substantial changes to management plans.

**General Manager (or equivalent):**

- Manage the day-to-day implementation of the Project management and monitoring plans.
- Coordinate and supervise inspection, monitoring and maintenance activities.
- Serve as the primary point of contact for management plan-related matters.
- Oversee data quality, analysis, interpretation, and timely preparation of monitoring reports.
- Lead the review of inspection results and initiate adaptive management responses as needed.
- Facilitate Inuit and Indigenous participation in inspection activities and information sharing.

**Site Personnel:**

- Adhere to all requirements of Project management and monitoring plans during onsite activities.
- Implement effects management measures as specified in Project plans and contract documents.
- Report any incidents or observations relevant to road and port management and use.



WEST  
KITIKMEOT  
RESOURCES  
CORP

# Appendix 37A

## Road Management Plan

### (Draft)

# Grays Bay Road and Port Project Road Management Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
<b>2</b>	<b>Regulations, Approvals and Guidelines .....</b>	<b>3</b>
2.1	Permits, Licences and Authorizations .....	3
2.2	Related Management Plans.....	6
<b>3</b>	<b>Plan Development and Engagement.....</b>	<b>8</b>
<b>4</b>	<b>Plan Goals and Objectives .....</b>	<b>9</b>
<b>5</b>	<b>Road Operations Management .....</b>	<b>10</b>
5.1	Access Management and Road Safety.....	10
5.1.1	Access Management .....	10
5.1.2	Road Safety and Signage.....	10
5.1.3	Emergency Response .....	13
5.2	Inspection and Maintenance .....	14
5.2.1	All Weather Road Inspection and Maintenance .....	14
5.2.2	Winter Ice Road Inspection and Maintenance .....	16
<b>6</b>	<b>Wildlife Protection Measures .....</b>	<b>17</b>
<b>7</b>	<b>Plan Implementation .....</b>	<b>19</b>
7.1	Roles and Responsibilities .....	19
7.2	Adaptive Management .....	20
<b>8</b>	<b>References .....</b>	<b>21</b>

## List of Tables

Table 2.1	Permits, Licenses and Authorizations Required for the Construction, Operation and Maintenance of Grays Bay Road .....	5
Table 2.2	Related Management Plans.....	6

## List of Figures

Figure 1.1	Project Overview .....	2
Figure 2.1	Land Tenures .....	4

## Abbreviations

CIRNAC.....	Crown-Indigenous Relations and Northern Affairs Canada
DFO.....	Fisheries and Oceans Canada
DPRT.....	Dual-powered road trains
EPP.....	Environmental Protection Plan
ERC.....	Emergency Response Coordinator
GN.....	Government of Nunavut
HTA.....	Hunters and Trappers Association
IOL.....	Inuit Owned Land
NWB.....	Nunavut Water Board
Project, the.....	Grays Bay Road and Port Project
RMP.....	Road Management Plan
RMERP.....	Risk Management and Emergency Response Plan
SCP.....	Spill Contingency Plan
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.
WMMP.....	Wildlife Mitigation and Monitoring Plan

## Glossary

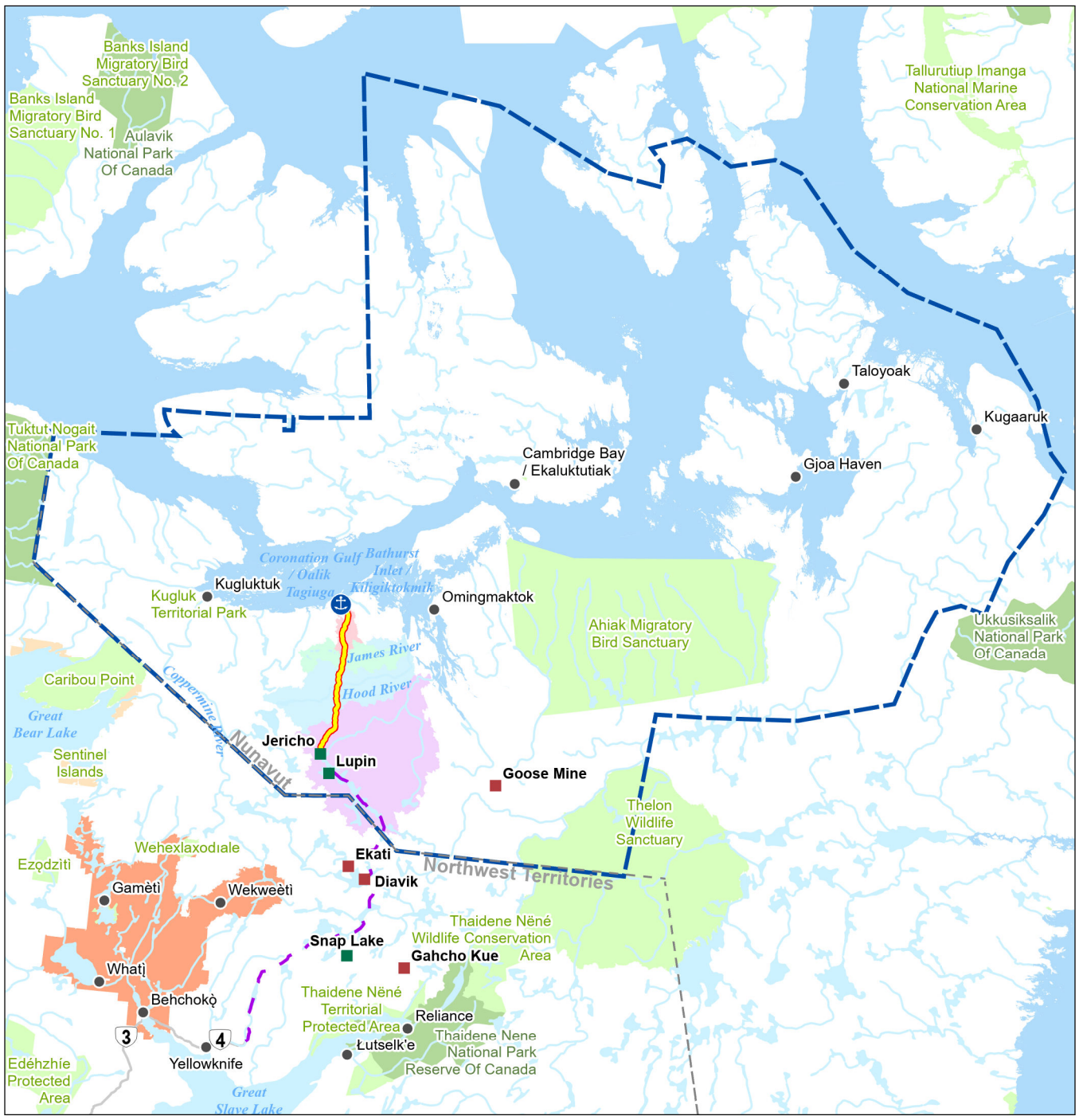
Term	Definition
Community User	Anyone using the road for non-industrial and non-security uses. A Community user can also be a harvester, but they need a permit from the Hunters and Trappers Organizations and Kitikmeot Inuit Association to do so. Community users would also be required to sign an Access and/or Code of Conduct Agreement, promising to abide by the rules of the road and not to harvest without permission.

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR (Figure 1.1).

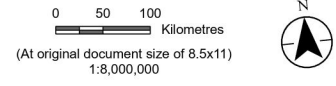
The Grays Bay Road will be a multi-user, multi-use road, that will be of private / contracted user benefit in perpetuity. The road is anticipated to operate permanently. The use of the road will primarily be by third parties; however, operations and maintenance of the road will be managed by West Kitikmeot Resources Corp. (WKR).

This document is a conceptual Road Management Plan (RMP) that outlines the proposed road operations management measures that will be implemented during the Operations and Maintenance phase of the Project. The current RMP focuses on Grays Bay Road but will be expanded to include access roads to the Aerodrome and other facilities as design progresses, and the RMP is updated. The RMP will be updated to include further details based on the Nunavut Impact Review Board project certificate, and applicable permits and authorizations.



**Notes**  
 1. Coordinate System: WGS 1984 UTM Zone 12N  
 2. Data Sources: Government of Nunavut, ESRI, Stantec Consulting Ltd.

- Grays Bay Port
- Grays Bay Road
- Closed Mine Site
- Operating Mine Site
- Major Road
- Territorial Boundary
- Tibbitt to Contwoyto Winter Road
- Watercourse
- Kitikmeot Region
- National Park
- Ocean
- Protected Conserved Area
- Sahtu Settlement Lands
- Tłı̄çǭ Lands
- Waterbody
- Watersheds: Burnside River
- Watersheds: Hood River
- Watersheds: James River
- Watersheds: Kennarctic River



**Project Location** Prepared by SL on 2025-11-19  
 West Kitikmeot Region TR by DS on 2025-11-19  
 Nunavut

**Client/Project** 123514868\_002  
 West Kitikmeot Resources Corp  
 Grays Bay Road and Port

**Figure No.**  
**1.1**  
**Title**  
**Project Location**

I:\Ca0002-ppr\ss05\geomatics\Clients\Nunami\_Stantec\GBRPF\Figures\123514868\_002\_ProjDesc\_Overview\_Mapbook pagx Revised: 2026-02-05 By: slemay

## 2 Regulations, Approvals and Guidelines

### 2.1 Permits, Licences and Authorizations

The Project involves activities on both Inuit Owned Land (IOL) and Crown land, requiring land use permits and leases from two distinct authorities: the Kitikmeot Inuit Association for IOL, and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) for Crown land. Of the approximately 230 km all-season road, approximately 116 km is located within IOL. The remainder of Grays Bay Road (114 km) is on Crown land.

Required authorizations for activities on IOL:

- A land use license for access (indigenous, non-indigenous, and commercial users), road construction, quarry development, and operations and maintenance activities along the road alignment
- A surface lease for the exclusive use of land to establish and operate camps

Required authorizations for activities on Crown land:

- Land use permits under the *Territorial Lands Act* for road access and construction
- Quarry permits and/or leases for the development and operation of quarries
- A land use permit for construction and operations and maintenance activities along the road alignment

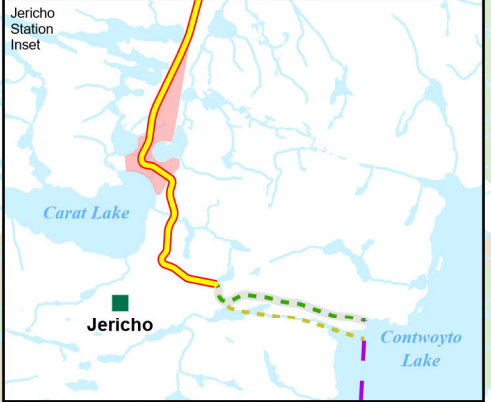
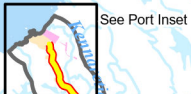
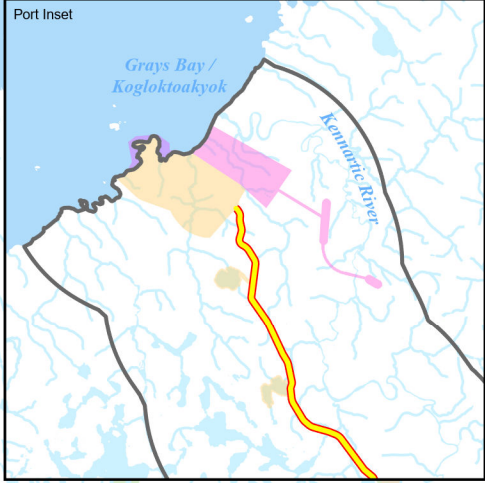
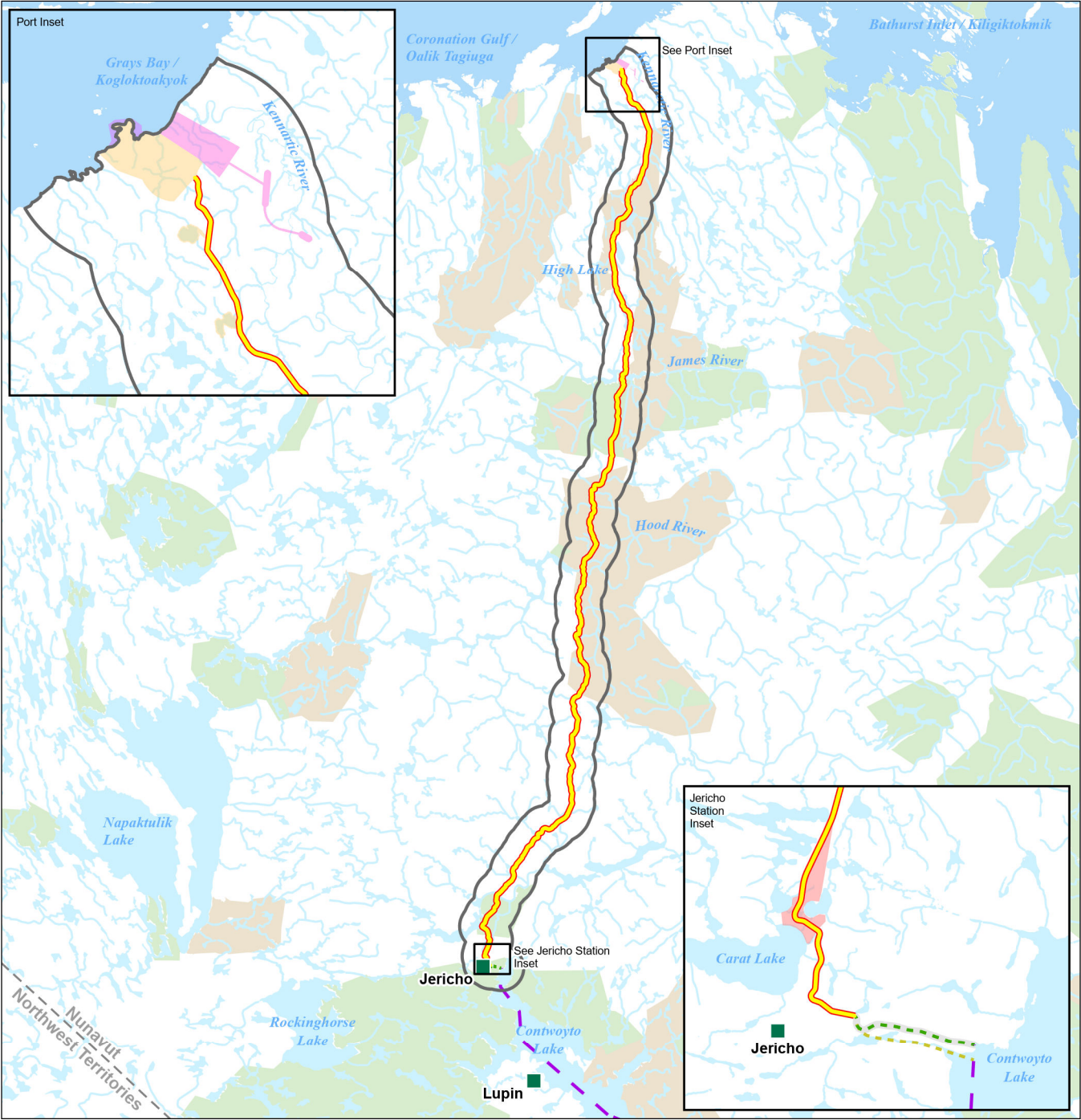
All necessary authorizations and permits will be finalized and secured upon completion of the final Project design. Figure 2.1 illustrates the boundaries of areas where WKR will acquire surface rights through lease or other tenure arrangements.

The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the Nunavut Waters Regulations apply to the Project. The Nunavut Water Board (NWB) is responsible for issuing water use licenses and setting conditions for water use and waste disposal. All water-related activities during construction and operations and maintenance must comply with the terms and conditions of a license issued by the NWB. The NWB also reviews and authorizes civil works, such as bridges, that may encroach upon water bodies or watercourses.

Construction in freshwater environments (i.e. road water crossings) require federal approval under two key statutes:

- *Fisheries Act* – Authorization under section 35(2)(b) is required for any work that may cause harmful alteration, disruption, or destruction of fish habitat. Authorization may also be required for associated infrastructure, such as wharf construction.
- *Navigable Waters Protection Act* – Approval may be required for constructing works in navigable waters, including water crossings.

I:\Ca0002-ppfs05\geomatics\Clients\Nunam\Stantec\GBRP\Figures\123514868\_166\_Land\_Tenures.pagx Revised: 2025-02-05 By: slamay



- Land Use Permit Zone
- Grays Bay Road
- Grays Bay Winter Road
- Grays Bay Winter Road Optional Alignment
- Aerodrome
- Jericho Station
- Port (Landside Infrastructure)
- Port (Marine-based Infrastructure)
- Closed Mine Site
- Territorial Boundary
- Tibbitt to Contwoyto Winter Road
- Watercourse
- Ocean
- Waterbody
- Inuit Owned Lands**
- Subsurface
- Surface Only

0 10 20 Kilometres  
(At original document size of 8.5x11)  
1:1,350,000



Project Location: West Kitikmeot Region, Nunavut  
Prepared by SL on 2025-11-20, TR by DS on 2025-11-20

Client/Project: 123514868\_166

West Kitikmeot Resources Corp  
Grays Bay Road and Port

Figure No. 2.1

**Land Tenures**

**Notes**  
1. Coordinate System: WGS 1984 UTM Zone 12N  
2. Data Sources: Governments of Northwest Territories, Nunavut, ESRI, Stantec Consulting Ltd.

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

**Grays Bay Road and Port Project  
Road Management Plan (Draft)**

Section 2: Regulations, Approvals and Guidelines  
April 2026

Table 2.1 lists required permits, licences and authorizations, along with the responsible agencies for construction of the Grays Bay Road. WKR will continue to engage with rights holders and regulatory authorities to ensure compliance and timely acquisition of all necessary authorizations.

**Table 2.1 Permits, Licenses and Authorizations Required for the Construction, Operation and Maintenance of Grays Bay Road**

<b>Authorization</b>	<b>Agency</b>	<b>Activity</b>	<b>Authorization Number*</b>
Project Certificate	Nunavut Impact Review Board	All	
Water License(s)	Nunavut Water Board	Watercourse crossings, use of water, deposits of waste, storage of fuel and other hazardous material	
Land Use Permit(s) – Class A	Crown-Indigenous Relations and Northern Affairs Canada	Use of heavy equipment; drilling; camp operation; fuel storage; earth moving; road construction; marine infrastructure	
Access to Inuit Owned Land	Kitikmeot Inuit Association	Drilling; fuel storage; camp operation; road construction; quarrying; research	
Land Use Lease	Kitikmeot Inuit Association	Long-term use of land for road and quarrying	
Long-Term Lease	Crown-Indigenous Relations and Northern Affairs Canada	Operation of road	
Fisheries Act Authorization(s) and Letters of Advice	Fisheries and Oceans Canada	Construction of the all-season road (watercourse crossings, monitoring programs).	
Navigable Waters Act Approval	Transport Canada	Construction of road crossings over watercourses	
Quarry Permit(s) and License(s)	Crown-Indigenous Relations and Northern Affairs Canada and Kitikmeot Inuit Association	Quarry development	
Explosives Permit and License	Natural Resources Canada	Storage, transport and use of explosives	
Archaeological Permit(s)	Government of Nunavut Department of Culture and Heritage	Documentation and excavation of archaeological sites or specimens	
Scientific Research License	Nunavut Research Institute	Any field investigations associated with the Project	
Environmental Emergency Plan Approval	Environment and Climate Change Canada	Bulk storage of fuel	
Spill Contingency Plan Approval	Department of Environment	Bulk storage of fuel	

Note:

\* Each Authorization number will include a link to the active authorization

## 2.2 Related Management Plans

Several management plans will outline and guide how various activities are conducted on site, considering operational needs, approval conditions, and regulatory requirements. Some plans will include separate Construction and Operations and Maintenance versions to address phase-specific requirements. Mitigation measures in these plans will also support the avoidance or reduction of potential adverse effects of the Grays Bay Road on Valued Components. Therefore, the RMP should be read in conjunction with the plans listed in Table 2.2, including those related to environmental management during Operations and Maintenance phase of the project.

Additional plans will be developed for WKR during construction planning. These plans are iterative and will be continuously refined throughout all Project stages based on Project advancement, design changes, and permitting and regulatory requirements.

**Table 2.2 Related Management Plans**

<b>Environmental Management Plan</b>	<b>Description</b>	<b>Plan Development By</b>	<b>HyperLink to Plan</b>
Air Quality Monitoring and Management Plan	Will outline the mitigation measures employed specifically to reduce dust and air emissions caused by the Project. The mitigation measures will reduce potential air quality impacts through dust suppression, emission control and ongoing monitoring.	WKR	
Aquatic Effects Management Plan	Will outline the mitigation measures employed specifically to reduce Project effects on the aquatic environment.	WKR	
Fuel Management Plan	Will describe the processes and procedures for the safe transport, storage and handling of fuel to minimize the potential for an accident fuel spill.	WKR	
Hazardous Materials Management Plan	Will outline the collection, segregation, handling, treatment, storage, transport and disposal of hazardous waste, with the objective of safe and efficient management that reduces the risk not only to the site workforce but also to wildlife. The plan will primarily be based on containment of hazardous wastes.	WKR / Construction Contractor	
Spill Contingency Plan (SCP)	Will detail spill response procedures to ensure timely and appropriate spill cleanup on land, water and ice, as well as identifying equipment available for fuel spills in water and on land.	WKR	
Wildlife Mitigation and Monitoring Plan (WMMP)	The WMMP will identify and mitigate Project-related impacts on wildlife and wildlife habitat, such as habitat loss, disturbance, or fragmentation; monitor the effectiveness of mitigation efforts; and adaptively manage any unforeseen effects arising from the Project.	WKR	

**Grays Bay Road and Port Project  
Road Management Plan (Draft)**

Section 2: Regulations, Approvals and Guidelines  
April 2026

<b>Environmental Management Plan</b>	<b>Description</b>	<b>Plan Development By</b>	<b>HyperLink to Plan</b>
Waste Management Plan	Will describe the collection, segregation, handling, treatment, storage, transport, and disposal of non-hazardous waste that minimizes wildlife attraction to the Project by implementing waste segregation, secure food waste storage, and routine monitoring of waste management facilities.	WKR / Construction Contractor	
Water Management Plan	Will describe the responsible management of water including the collection, management and/or treatment of water for the protection of aquatic resources.	WKR / Construction Contractor	
Borrow Pits and Quarry Management Plan	Will describe the responsible management of borrow pits and quarries to mitigation Project effects on the environment	WKR / Construction Contractor	
Explosives Management Plan	Will include procedures for the safe handling, transportation, storage, and use of explosives.	WKR / Construction Contractor	
Environmental Protection Plan (EPP)	The EPP, developed during construction planning, will outline activity-specific environmental protection measures to be implemented throughout all phases of the Project. The EPP will reference related management plans and approvals and will provide operational guidance to ensure consistent implementation of mitigation and management measures.	WKR / Construction Contractor	
Road Construction Management Plan	Will be developed to address potential effects on the road corridor from construction activities. Within the plan, provisions for permafrost protection will describe the responsible design, management and maintenance of Project infrastructure to mitigate potential effects on permafrost.	Construction Contractor	
Erosion and Sediment Control Plan	Will describe mitigation measures to avoid or reduce the potential for erosion and sedimentation from construction and operations activities and will promote compliance with applicable regulations.	Construction Contractor	
Risk Management and Emergency Response Plan (RMERP)	Will be developed to include detail pertaining to incident response, investigation, review, and corrective measures in accordance with the findings of the investigations. The measures in the RMERP will be combined with a spill contingency plan for events that require reaction to emergency spills.	WKR / Construction Contractor	

Note:

\* The hyperlink connects with the latest version of the Management Plan

### 3 Plan Development and Engagement

The RMP was developed at a conceptual level based on the Project Description and informed by Inuit, Indigenous and Community Knowledge as well as established best management practices for the construction and operation of all-season and winter roads. Best management practices for road management were further informed by experience and guidance from comparable northern projects, including the Mackenzie Valley Highway, the Inuvik–Tuktoyaktuk Highway, Sabina Gold & Silver Corporation’s Back River Project, Agnico Eagle Mines Limited’s Meadowbank Complex and associated access roads, and the Baffinland Mary River Project.

Further development and refinement of the RMP will occur through ongoing Project planning initiatives, continued engagement with affected Inuit and Indigenous Peoples, and consultation with relevant government agencies.

## 4 Plan Goals and Objectives

The RMP outlines the construction, operation, and maintenance methods, as well as the best management practices, to be applied to the Grays Bay Road. These approaches are informed by Inuit, Indigenous, and Community Knowledge, along with experience and guidance from comparable northern projects, and are intended to support environmental protection and safety. The primary objective of the management plan is to avoid, reduce, and mitigate potential environmental effects while ensuring the health and safety of all road users.

## 5 Road Operations Management

### 5.1 Access Management and Road Safety

#### 5.1.1 Access Management

Grays Bay Road is a controlled access road which will be controlled through agreements with various user groups. Access will be controlled through security gates operated by WKR staff at the Grays Bay Port and at Jericho Station on the IOL. These access points will manage and monitor road use through sign-in procedures and radio check-ins, helping to track users and ensure the safety of users. WKR will maintain logs recording the entry and exit of all vehicles using the road. Logs will also record any incidents or accidents for regulatory and safety audit purpose. Unauthorized use may lead to security alerts and reports to local authorities.

Mining users will have access to the road on a tolled basis, with port and road use fees to be established through agreements between WKR and mining/exploration companies. Security and other public government users will have access to the road through agreements to be established between WKR and the relevant government department or agency. Community users will have free access to the road for travel and transportation purposes, subject to agreeing to abide by safe operating procedures. Users seeking access to the road for harvesting purposes will require prior approval (permit) from the Kitikmeot Inuit Association and the Hunters and Trappers Association (HTA).

Permits will be issued jointly by the Kitikmeot Inuit Association and the Hunters and Trappers Association (HTA). WKR will be responsible for ensuring that permits and licences are in place before granting access to the road. The processes for access application and permit issuance for harvesting will be established through discussions with the Kitikmeot Inuit Association and the HTA

Harvest licences and species authorization tag(s) will be managed through the existing Nunavut Hunting Regulations.

#### 5.1.2 Road Safety and Signage

Vehicles authorized to use the road are expected to include Heavy transport vehicles (semi-truck trailers, dual-powered road trains (DPRT), etc.) construction and maintenance equipment (graders, snowblowers, etc.) and light vehicles (trucks, atvs, snowmobiles, etc.). The following road safety measures will be implemented:

- Traffic speed will generally be 60 km/h, which may be increased up to 80 km/h, or decreased in certain areas, depending on wildlife considerations, terrain conditions, and geometric constraints
- Speed limits will be posted and enforced on all Project roads
- Signs will advise drivers of the posted speed limit, of approaching one-way bridges, right of ways, of approaching curves, and/or areas of lower visibility (e.g., blind hills or obstructed curves) and distance to refueling.
- Speed signage will be posted approximately every 5 km along the roads

- Kilometre markers will be posted along the all-season road (from Jericho Station to the Port) in 1 km increments
- Reflective flags/markers will be posted along one side of the road to assist drivers in identifying the road shoulder in blizzard or poor weather conditions
- Signage will be posted at the winter road indicating when the road is open, maximum gross vehicle weight limits, speed limits and warn motorists of potential hazards. Traffic signs will be adjusted to meet changing road conditions as required.
- Signage pertaining to known wildlife crossings and key wildlife habitat areas will be posted
- Use of seat belts by all drivers and passengers will be mandatory
- Driving under the influence of alcohol or intoxicating drugs will be strictly prohibited
- The use of cell phones including “hands free units” will not be permitted in Project vehicles at any time
- Designated refuge and rest areas/temporary emergency shelters will be established on the road. Details of locations of refuge areas will be provided to all road users
- Project and contractor personnel will complete driver training which will include defensive driving; weather related hazards and wildlife avoidance
- Project and contractor vehicles will undergo inspection and regular maintenance
- Project and contractor vehicles will be equipped with radio communication controls set to the requisite road frequency to maintain communications at all times. The system will be used to report conditions on the road such as:
  - Vehicle locations
  - Accidents or stranded vehicles
  - Unauthorized vehicle use of the road
  - Presence of wildlife on the road
  - Road conditions
- Proper radio use protocols will be observed.
- Stay on the designated channel at all times while travelling
- Convoy calling is allowed.
- The lead vehicle is responsible for calling all vehicles in the convoy.
- It is the responsibility of the vehicle joining or leaving the convoy to inform and to receive confirmation from the lead vehicle.
- Never overtake any vehicle without notifying them on the radio and receiving the “OK” or seeing them pull clear.
- Headlights and/or running lights are mandatory at all times. (Driving lights and fog lights must be turned off when meeting oncoming traffic).
- All vehicles shall maintain a safe following distance that road conditions allow.
- No vehicle shall park on any bridge or in the centre of any roadway or on any curve.

- All signs, posting, notices, closures and barriers shall be observed and obeyed.
- All vehicles will yield to heavy equipment and emergency vehicles
- Passing vehicles with loads is not permitted unless radio communication is established.
- All vehicle incidents, road hazards and/or other safety concerns are to be reported as soon as reasonably possible.
- All loaded trucks are expected to check their loads at designated areas for security and ensure that all loads are secure before transporting. Ensure decks are clean and any load in or on any vehicle is adequately secured so that it will not scatter debris in case of a rollover.
- Chains may be required for extra traction during different times of the year. Improper use of chains may result in unnecessary road maintenance costs. (No tire chains permitted on bridge decks at any time).
- It is recognized that members of the public (Community Users) may be present on the road without road radios.
- Project and contractor vehicles will be required to have beacon lights and flagging
- Most bridges are anticipated to be one lane only. This will require at least one of the vehicles to stop prior to crossing the bridge. The bridge approaches will be designed with a maximum 2% gradient approach for 200 m with widened pullout areas on both sides of the bridges to allow vehicles to have adequate sight distance to see opposing vehicles and stop safely in the pullouts.
- All wildlife has the right-of-way on roads and personnel must remain within their vehicle while waiting for animals to pass
- Use of firearms within the designated one mile (1.6km) safety buffer zones around operations is prohibited, as per Section 5.7.17 of the Nunavut Land Claims Agreement Act.

Specific to the winter road beginning at Jericho and connecting to the approved TCWR winter road alignment, the following requirements will be implemented:

- Vehicles operating at the upper end of the allowable load limit of the ice cover will travel at a maximum of 25 km/h
- Vehicles weighing more than 12,500kg will maintain a minimum spacing of 500m between vehicles to avoid exceeding allowable stress limits on the ice
- Where loaded vehicles are required to pass each other in opposite directions vehicles will reduce their speed to 10 km/h
- A loaded vehicle is not permitted to pass another loaded vehicle. If necessary to do so, the lead vehicle will come to a temporary stop on the ice cover and the passing vehicle will reduce speed to 10 km/h until it has passed the stationary vehicle

### **5.1.3 Emergency Response**

As Grays Bay Road is a controlled access road, WKR will provide emergency response capabilities to respond to an emergency during use of the road.

A Risk Management and Emergency Response Plan (RMERP) will be developed to include detail pertaining to incident response, investigation, review, and corrective measures in accordance with the findings of the investigations. The measures in the RMERP will be combined with an SCP for events that require reaction to emergency spills. The RMERP will be developed in accordance with federal and territorial laws and regulations, in addition to the Government of Nunavut (GN) policies and procedures that are protective of the environment and human health. The RMERP will be enforced with subcontractors and workers for the duration of the Project construction and operations and maintenance.

The Project-specific RMERP will include:

- Scope of plan and types of emergencies covered by the plan (e.g., vehicle incident, fire, medical, security)
- Responsibilities of the GN, contractor, and other responders
- Communications plan for alerting employees, communities and the GN during an emergency
- Evacuation and response plan
- Government agencies and communities to be notified
- Training (including Incident Command System Training), testing, and reporting

The RMERP will detail the specific actions to be taken in the event of a vehicle accident on the road, however generally the following actions will be taken:

- The condition of the people involved in the incident will be assessed and first aid administered if required
- Radio dispatch will report the location and nature of the incident and dispatch assistance as required (e.g., medical, fire, mechanical, environmental cleanup)
- The accident site will be secured to prevent further incidents occurring. This may involve closing the road in the event of a serious incident
- If safe to do so the site will be secured to prevent environmental damage i.e., leakage of contaminants

Upon notification of an accident or incident, including incidents involving wildlife, WKR personnel will activate the emergency response procedures as appropriate. Dependent upon the severity of the incident, the incident details may be passed to the WKR Emergency Response Coordinator (ERC) for further action. The ERC will assume the role of Incident Commander and will be responsible for establishing command, maintaining control, and coordinating the overall emergency response, including initial reporting and coordination with appropriate authorities and mobilizing and directing the appropriate emergency response personnel to the incident site.

Once the incident scene has been stabilized, all injured or affected individuals have been assisted, and any immediate safety hazards have been addressed, the ERC will formally transfer responsibility for the site to WKR Safety personnel. At that time, an incident investigation will be initiated in accordance with WKR procedures. For incidents involving contractor vehicles, the contractor will be required to conduct an investigation and submit the findings to WKR for review and follow-up, including follow-up incident reporting to appropriate authorities as required. Appropriate authorities may include the Kitikmeot Inuit Association, Royal Canadian Mounted Police, Nunavut Water Board (NWB), Fisheries and Oceans Canada (DFO), Nunavut Spill Line, Environment Canada or GN Department of Environment.

Medical facilities will be located at Grays Bay Port and Jericho Station with trained medical personnel. In the case of severe injury, the individual(s) will be stabilized at the facility before evacuating off-site for medical treatment. All construction camps will include a medical support team.

In the event of a vehicle or mobile equipment accident on the road, it is anticipated that emergency response capabilities at the Project site(s) (e.g., firefighting, medical services, emergency evacuation) will be sufficient for most accidents; however, an accident involving multiple injuries may require support from the surrounding communities or service providers, such as the need for evacuations or additional emergency services.

Third party users (e.g., resource companies, federal and territorial governments, local communities and defence agencies) will also be able to utilize the Project facilities for the storage of emergency response supplies, locating emergency response personnel and coordination of response activities to bolster their response capabilities.

## **5.2 Inspection and Maintenance**

Although Grays Bay Road will be utilized by third parties, WKR has the sole responsibility for ongoing inspection and maintenance of the road and associated infrastructure, i.e., culverts, water crossings, quarry sites and access roads. Operations and maintenance of the northern half of the road will be based out of the administration offices located at Grays Bay Port, while the southern half will be covered by staff based at Jericho Station.

### **5.2.1 All Weather Road Inspection and Maintenance**

Grays Bay Road and associated all weather road(s) at the Port and Jericho Station (excluding future spur roads to mines), will be inspected on a regular schedule and adaptively managed as appropriate. Inspections during the summer will focus on identifying evidence of seasonal freeze and thaw adjacent to the toe of the road embankment. Such movements are expected and may lead to longitudinal cracking and thaw settlement especially for portions of the road founded on thaw-susceptible (ice-rich) soil. Ponding of water, either on the surface or along the sides of the road, will also be tracked and addressed as appropriate (e.g., by grading or additional culvert installation).

Permanent quarries along the road will be used for ongoing road operations and maintenance such as surfacing and repair. Heavy equipment and rock crushers will be maintained at these locations to support operations. An estimated 50,000 m<sup>3</sup> to 100,000 m<sup>3</sup> of granular material will be required annually for road maintenance. Summer maintenance activities are anticipated to include gravel resurfacing/reshaping and repair of embankment and culvert repairs.

The inspection schedule during fall, winter and spring will be adjusted according to weather conditions. Inspection frequency will increase during the following periods:

- Prior to freshet to ensure culverts and stream crossings can accommodate the rapid spring thaw
- During freshet to ensure that culverts and stream crossings are operating as designed and to implement mitigations/repairs as necessary to avoid wash outs
- After heavy rainfall events to ensure culverts and diversion/collection channels are operating as designed to prevent water pooling, and to implement mitigations/repairs as necessary

#### **5.2.1.1      *Dust Suppression***

The amount of dust generated along the road(s) is dependent on the dryness of the surface, the number of vehicles, weight and speed, and maintenance of the driving surface. Regular grading of the road combined with the addition of granular material to the surface is anticipated.

Dust will be actively suppressed from roads (water and/or other dust suppressants) when necessary to manage excessive dust from affecting the surrounding environment. Dust suppression will follow Nunavut's Environmental Guideline for Dust Suppression on Unpaved Roads (GN 2023). Use of active suppression will depend on season, weather, topography, traffic levels, accessibility, and other factors.

Reduced speed limits may be temporarily posted during periods of drier conditions to reduce fugitive dust generation.

Additional details related to dust managed on the Project are provided in the Air Quality Monitoring and Management Plan.

#### **5.2.1.2      *Watercourse Crossing Inspection and Maintenance***

The annual road maintenance and inspection program will include a specific component for watercourse crossings. Regular inspections of water course crossings will:

- Identify any defects, cracks or other risks to the structural integrity and hydraulic function of crossing. Particular attention will be paid to the inlet and outlet structures of culverts
- Identify sediment or other debris accumulation impeding the free flow of water. Maintenance will include hand removal of debris
- Identify bed erosion or scour around the crossing and in the upstream and downstream channel, and implementing mitigation measures as appropriate

- Ensure structural repairs and alterations are conducted in timely manner
- The effects of heavy precipitation events are tracked and adaptive mitigation measures implemented, including the potential addition/re-location of culverts

In stream maintenance activities will follow DFO guidelines “Measures to Avoid Causing Harm to Fish and Fish Habitat” (DFO 2013).

### **5.2.1.3      *Snow Clearing***

Winter maintenance activities will focus on managing snow accumulation to maintain safe and reliable road access. Due to strong winter winds, the Project area is expected to experience snow drifting along sections of the road. Routine snow management will include the removal of snow where accumulations compromise road safety or impede travel. Snow accumulation near watercourse crossings will be managed to ensure that water can move freely through culverts and waterways during freshet. Snow will be managed in a manner that avoids creating barriers to wildlife movement and maintains continued wildlife passage.

### **5.2.2      *Winter Ice Road Inspection and Maintenance***

During winter ice road operations, the 3 km winter road segment from Jericho Station, connecting to the existing TCWR between Jericho Station, will be inspected and maintained in accordance with the “Guidelines for Safe Ice Construction” published by the Northwest Territories Department of Transportation. The frequency of inspections depends upon the phase of construction and operating level of the road but vary between once per 7-10 days to daily (Northwest Territories Department of Transportation 2015).

Maintenance inspections will require the following:

- Look for snow drifting, overflow, wet or dry cracks, and icing. If a hazard is discovered, warning devices such as flags, delineators, or flares will be placed. If possible, remedial action will begin at once. Warning signs will be set if the repair will take some time to complete.
- Check for missing or damaged traffic signs and make immediate repairs or replacements.
- Check for and remove debris from the roadway.
- Report the unauthorized erection of signs or the construction of accesses to WKR.
- Report abandoned vehicles for subsequent removal.
- Check for and report spills of oil or dangerous goods.

## 6 Wildlife Protection Measures

Wildlife is anticipated to be observed on or immediately along the side of the road at varying times of the year. Caribou have been identified by Inuit and other Indigenous peoples as a focal species and key terrestrial wildlife species in the region that play a central role in sustenance, culture, identity, and the overall ecosystem. WKR recognizes the importance of caribou to Inuit and other Indigenous peoples, as well as concerns previously raised about the potential effects of the Project on caribou. WKR will apply lessons learned from other similar projects in the Kitikmeot Region, as well as those within other regions of Nunavut and the Northwest Territories, to design and construct the road in ways that reduce potential effects on caribou and other wildlife.

Prior to using the road all commercial and Community Users will be required to sign an Access and/or Code of Conduct Agreement, which will include road use rules and expectations, including those measures implemented for the protection of wildlife.

The following measures will be implemented for the protection of wildlife:

- All wildlife has the right-of-way on roads and personnel must remain within their vehicle while waiting for animals to pass
- Personnel will not feed, harass, or hunt wildlife while working on the Project
- All personnel will take wildlife awareness training as part of site orientation. The awareness training will include bear safety, reporting procedures for wildlife-related incidents, protocols to follow when a wildlife feature (e.g., nest, den) is identified, as well as wildlife sightings
- All traffic signs and speed limits will be obeyed, and all employees and contractors will receive on-site training.
- Wildlife observations will be reported to the WKR environment department, including carcasses observed on or in close proximity to Project roads, as soon as possible.
- All sightings of caribou or muskox will be reported to the WKR environment department immediately.
- All incidents involving interactions with wildlife, use of deterrence, or injury of wildlife will be documented, evaluated by environment department staff, and reported in the Wildlife Management and Monitoring Plan annual report.
- Construction and operations and maintenance personnel will be prohibited from using all-terrain vehicles and snowmachines for recreational purposes while working on the Project.
- Speed limits shall be posted along the complete portions of the road during construction activities. Posted speed limits shall not exceed 80 km/h. Slower speed limits (i.e., 60 km/h) shall be posted in areas of high potential for caribou or other wildlife occurrences (i.e., identified wildlife road crossing locations).
- Caribou and/or other wildlife will have the right-of-way at all times as per the following:

- Wildlife will have the right-of-way when they occur on or immediately adjacent to the roadway. All vehicles and equipment must slow down to 30 km/h when caribou or other wildlife occur within line of sight of the driver and must stop for 20 minutes when wildlife are within 100 m of the road and show intent to cross; vehicles may proceed after 20 minutes or wildlife no longer show intent to cross. When animals are on the road, drivers must come to a complete stop and wait for the animals to leave the area. If caribou and/or other wildlife do not leave the road after 20 minutes since stopping, vehicles are to move forward no faster than a walking pace until the individuals leave the road and may resume the posted speed limit once the vehicle drives past the animals.
- A near-miss between a vehicle and an animal will be reported as a wildlife incident.
- Machinery will be maintained and regularly inspected for fuel, oil, or other fluid leaks.
- Equipment will be properly maintained to manage noise levels.
- Project personnel will be trained in vehicle and mobile equipment safe operations, defensive driving, weather-related hazards, and wildlife migration periods.
- Signage pertaining to speed limits, active construction areas, and emergency shelters will be posted on the Project roads including Grays Bay Road.
- Signage pertaining to known wildlife crossings and key wildlife habitat areas will be posted on the Grays Bay Road.
- Project-related vehicle operators will exercise caution in areas frequented by wildlife.
- Project-related traffic will be limited to the right-of-way and approved workspace when completing construction activities.
- Snow will be managed in a manner that avoids creating barriers to wildlife movement and maintains continued wildlife passage
- Embankments will be constructed at a 3H:1V or flatter slope, where possible, to facilitate caribou movements across the entire alignment. Embankment slope surface at high potential crossing locations will be finished with finer material, similar to a well graded 150mm minus aggregate, where possible.
- high potential crossing locations will be identified using Inuit and Community knowledge, and monitoring of caribou movement along the road.
- Restricted road use during sensitive periods or when caribou are observed in close proximity to the road.

## 7 Plan Implementation

### 7.1 Roles and Responsibilities

#### **Proponent (West Kitikmeot Resources Corp.):**

- Hold overall responsibility and accountability for the implementation of the RMP.
- Confirm adequate resources (financial, human, logistical) are allocated for RMP activities.
- Maintain compliance with all relevant permits, licences, and regulatory requirements pertaining to the construction, operation and maintenance of the road.
- Lead engagement with affected Inuit and Indigenous Peoples and consultation with regulatory agencies regarding the RMP.
- Oversee the adaptive management process and approves substantial changes to the RMP.

#### **General Manager (or equivalent):**

- Manage the day-to-day implementation of the RMP.
- Coordinate and supervise inspection, monitoring and maintenance activities.
- Serve as the primary point of contact for RMP-related matters.
- Oversee data quality, analysis, interpretation, and timely preparation of monitoring reports.
- Lead the review of inspection results and initiate adaptive management responses as needed.
- Facilitate Inuit and Indigenous participation in inspection activities and information sharing.

#### **Emergency Response Coordinator:**

- Fulfill role of Incident Commander and be responsible for establishing command, maintaining control, and coordinating overall emergency response,
- Responsible for mobilizing and directing the appropriate emergency response personnel to the incident site.
- Responsible for reporting and coordination with appropriate authorities
- Contribute to Incident Investigations and follow up actions post incident

#### **Site Personnel:**

- Adhere to all requirements of the RMP and associated Project management plans during onsite activities.
- Implement effects management measures as specified in Project plans and contract documents.
- Report any incidents or observations relevant to road management and use.

## **7.2 Adaptive Management**

The RMP will be reviewed internally on an annual basis, or as needed, to confirm the effectiveness of the management measures and update as appropriate. Adaptive management will be implemented as appropriate based on results from not only the RMP but also the implementation of other management plans such as the Wildlife Mitigation and Monitoring Plan.

## 8 References

DFO (Fisheries and Oceans Canada). 2013. Measures to Avoid Causing Harm to Fish and Fish Habitat. Available at: <https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html>

GN (Government of Nunavut). 2023. Nunavut's Environmental Guideline for Dust Suppression on Unpaved Roads. Available at: <https://www.gov.nu.ca/sites/default/files/publications/2024-05/Dust%20Suppressants%202023-03.pdf>

Northwest Territories Department of Transportation. 2015. Guidelines for Safe Ice Construction. Available at: [https://www.inf.gov.nt.ca/sites/inf/files/resources/0016-001\\_norex\\_ice\\_road\\_constr\\_web.pdf](https://www.inf.gov.nt.ca/sites/inf/files/resources/0016-001_norex_ice_road_constr_web.pdf)



WEST  
KITIKMEOT  
RESOURCES  
CORP

# Appendix 37B

## Wildlife Monitoring and Mitigation Plan

# Grays Bay Road and Port Project Wildlife Mitigation and Monitoring Plan

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
<b>2</b>	<b>Regulations, Approvals and Guidelines .....</b>	<b>2</b>
2.1	Wildlife Harvest Management .....	5
2.2	Project-specific Management Plans.....	5
<b>3</b>	<b>Plan Development and Engagement.....</b>	<b>7</b>
<b>4</b>	<b>Plan Goals and Objectives .....</b>	<b>8</b>
<b>5</b>	<b>Potential Project Effects Overview.....</b>	<b>9</b>
<b>6</b>	<b>Human Activity Management in Relation to Wildlife .....</b>	<b>10</b>
6.1	Level 1 – Normal Activities.....	10
6.2	Level 2 – Site Notification .....	10
6.3	Level 3 – Site Alert.....	11
6.4	Level 4 – Temporary Shutdown of Infrastructure or Human Activity .....	12
<b>7</b>	<b>Mitigation Measures.....</b>	<b>13</b>
7.1	General Mitigations .....	13
7.2	Wildlife Feature Setback Distances .....	18
7.3	Listed Bird Species Nests .....	19
<b>8</b>	<b>Wildlife Monitoring.....</b>	<b>21</b>
8.1	Monitoring Objectives and Framework .....	21
8.2	Project Effects Monitoring .....	22
8.2.1	Monitoring Programs .....	22
8.2.2	Impact Statement Predictions .....	23
8.3	Monitoring to Trigger Wildlife Mitigations .....	26
8.3.1	Active Wildlife Monitoring .....	26
8.3.2	Incidental Observations.....	27
8.3.3	Caribou Monitoring .....	28
8.3.4	Grizzly Bear and Wolverine Monitoring .....	28
8.3.5	Bird Nest Sweeps .....	30
8.3.6	Marine Mammal Management and Monitoring.....	31
<b>9</b>	<b>Adaptive Management Program .....</b>	<b>32</b>
9.1	Adaptive Management and Plan Updates .....	32
9.2	Design the Adaptive Management Process.....	32
9.3	Implement the Effects Management Measures and Evaluate Their Effectiveness .....	32
9.4	Adjust the Effects Management Measures .....	33

**Grays Bay Road and Port Project  
Wildlife Mitigation and Monitoring Plan**

Table of Contents  
April 2026

---

<b>10</b>	<b>Implementation.....</b>	<b>34</b>
10.1	Training and Orientation.....	34
10.2	Roles and Responsibilities.....	34
10.3	Reporting Requirements .....	35
10.4	Change Management.....	36
<b>11</b>	<b>References.....</b>	<b>37</b>

## List of Tables

Table 2.1	Federal Legislation that Applies to the Project .....	2
Table 2.2	Territorial Legislation that Applies to the Project .....	3
Table 2.3	Best Management Practices and Guidance Documents for Wildlife that are Relevant to the Project's WMMP .....	3
Table 2.4	Other Relevant Management Plans.....	5
Table 6.1	Sensitive Time Periods for Wildlife to Inform Site Notifications .....	10
Table 7.1	Mitigation Measures to Prevent or Reduce Project-related Effects on Terrestrial Wildlife.....	14
Table 7.2	Wildlife Feature Minimum Setback Distances .....	18
Table 7.3	Description of the Nest Type and Typical Nesting Location for Bird Species Listed as Either Endangered, Threatened, or Extirpated That May Occur in or near the PDA.....	20
Table 8.1	Primary Monitoring Metrics for Focal Wildlife Species.....	21
Table 8.2	Zone of Influences for Focal Wildlife Species.....	24

## Abbreviations

ATV .....	all-terrain vehicle
BC .....	British Columbia
BCH.....	Bathurst Caribou Herd
BMP.....	Best Management Practice
DFO.....	Fisheries and Oceans Canada
DUH.....	Dolphin and Union Caribou Herd
e.g. ....	<i>exempli gratia</i>
ECCC .....	Environment and Climate Change Canada
EPP .....	Environmental Protection Plan
GN.....	Government of Nunavut
GN-DOE.....	Government of Nunavut- Department of Environment
GNWT .....	Government of Northwest Territories
GPS.....	Global Positioning System
i.e.....	<i>id est</i>
IAG .....	Inuit Advisory Group
IS .....	Impact Statement
MCCM .....	Mobile Caribou Conservation Measure
NIRB.....	Nunavut Impact Review Board
NT.....	Northwest Territories
NU .....	Nunavut
NWMB .....	Nunavut Wildlife Management Board
PDA.....	Project Development Area
SARA.....	<i>Species at Risk Act</i>
SK.....	Saskatchewan
TAH .....	Total Allowable Harvest
TARP.....	Trigger Action Response Plan
VC .....	Valued Component
WKR.....	West Kitikmeot Resources Corp.

WMMP.....Wildlife Mitigation and Monitoring Plan  
ZOI ..... Zone of Influence

## Symbols and Units of Measure

< .....less than  
> .....more than  
≤ .....less than or equal to  
≥ .....more than or equal to  
km..... kilometre  
km/hr ..... kilometres per hour  
m ..... metre

# 1 Introduction

West Kitikmeot Resources Corp. (WKR) is an Inuit-owned, Inuit-led company focused on the advancement of the Grays Bay Road and Port Project (the “Project”) in the Kitikmeot Region of Nunavut. WKR’s largest shareholder is a wholly-owned subsidiary of the Kitikmeot Inuit Association. 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. The multi-user, multi-use transportation system will allow for the establishment of shared infrastructure with many potential users including the federal and territorial governments, community members, resource companies, and defense agencies.

The Project is comprised of two phases: construction; and operations and maintenance. Project construction (i.e., defined as the start of onsite works) is proposed to begin in September 2029, with construction activities expected to span approximately five years. Operations and maintenance activities are scheduled to commence in 2035 and continue indefinitely as the Project components are considered permanent infrastructure. Caribou, Birds, and Other Wildlife (Muskox, Grizzly Bear, Wolverine and Moose) and Marine Mammals were assessed as Focal Species or Species Group as part of the Grays Bay Road and Port Impact Statement (IS) for the Project, submitted to the Nunavut Impact Review Board (NIRB). Based on the findings of this assessment, the Project will interact with wildlife and may influence a change to their habitat, movement, as well as mortality and/or injury risk.

The Project is committed to monitoring potential effects to inform wildlife mitigation during all phases of the Project. This Wildlife Mitigation and Monitoring Plan (WMMP) provides a conceptual framework that aims to reduce effects on wildlife and wildlife habitat, monitor the results of mitigation to promote effectiveness, validate the accuracy of predictions made in the IS and adaptively manage for any unanticipated effects from Project activities.

This version of the WMMP is presently not intended to provide detailed monitoring approaches and methods (e.g., site-specific study designs, cost estimates, or schedules); rather, it provides a conceptual outline of the requirements for mitigating and monitoring Project-related effects on wildlife that have been proposed in the IS. The WMMP will be updated as further details and monitoring design are developed in continued discussions with governing bodies, working groups, and other interested parties, and will include regulatory approval and/or permitting conditions.

## 2 Regulations, Approvals and Guidelines

Mitigation measures and monitoring strategies to prevent or reduce Project-related effects on wildlife and wildlife habitat take into consideration federal (see Table 2.1) and territorial (see Table 2.2) legislation and regulations, as well as best management practices and guidance documents (see Table 2.3) relevant to wildlife. Recommendations in land use plans and designations are also considered. Each of the documents listed in the tables below were considered when identifying the Project’s potential effects on wildlife to develop mitigation measures and monitoring strategies.

**Table 2.1 Federal Legislation that Applies to the Project**

Name	Description
<i>Migratory Birds Convention Act, 1994 S.C., 1994, c. 22</i>	The <i>Migratory Birds Convention Act</i> , 1994 protects and conserves migratory birds, eggs, and nests through the implementation of the Migratory Birds Regulations and the Migratory Birds Sanctuary Regulations. According to the Act, removal of migratory birds, their eggs, or nests from a site is only permissible if the migratory birds are causing or may cause damage to property and equipment (subject to permitting). Deposit of harmful substances to birds in areas or waters frequently visited by migratory birds is prohibited.
<i>Species at Risk Act, S.C., 2002, c. 29</i>	The <i>Species at Risk Act</i> (SARA) aims to: Prevent Canadian indigenous species, subspecies, and distinct populations from becoming extirpated or extinct. Provide for the recovery of endangered or threatened species. Encourage the management of other species to prevent them from becoming at risk (SARA Public Registry 2012). All environmental assessments must identify any species at risk or critical habitat that is likely to be affected, and “... <i>must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and action plans</i> ” (SARA; Subsection 79 (2)). Additionally, if the project is likely to affect a listed wildlife species, the proponent must promptly notify the relevant minister.
<i>Fisheries Act R.S.C., 1985, c. F-14</i>	The federal <i>Fisheries Act</i> is administered by Fisheries and Oceans Canada (with the exception of Section 36, which is administered by Environment and Climate Change Canada) and concerns the protection of fish and fish habitat. Under the Act, marine fish are defined as: “(a) parts of fish, (b) shellfish, crustaceans, marine animals, and any parts of shellfish, crustaceans, or marine animals, and (c) the eggs, sperm, spawn, larvae, spat, and juvenile stages of fish, shellfish, crustaceans, and marine animals”. Regulations regarding marine mammals occur primarily through the Marine Mammal Regulations (SOR/93-56) of the <i>Fisheries Act</i> . Under these regulations, marine mammals are classified as “fish” for regulatory purposes. Section 7 of the Marine Mammal Regulations prohibits the disturbance of marine mammals except for fishing purposes under the authority of the Regulations.

**Grays Bay Road and Port Project  
Wildlife Mitigation and Monitoring Plan**

Section 2: Regulations, Approvals and Guidelines  
April 2026

**Table 2.2 Territorial Legislation that Applies to the Project**

Name	Description
<i>Nunavut Land Claims Agreement Act</i> , S.C.1993, c. 29	The <i>Nunavut Land Claims Agreement Act</i> provides guidance for the NIRB review of potential environmental and social effects of development projects. The <i>Act</i> defines the harvesting rights of Inuit for cultural and subsistence needs and establishes a co-management system through the Nunavut Wildlife Management Board (NWMB) to set conservation goals and harvest levels for caribou.
<i>Wildlife Act</i> , S.Nu. 2003, c. 26	The <i>Nunavut Wildlife Act</i> outlines the management and conservation of wildlife in Nunavut. The <i>Act</i> provides guidelines on wildlife harvesting, habitat protection, respectful conduct toward wildlife, and the designation and protection of species at risk and their habitat. The <i>Act</i> translates decisions made by the NWMB into enforceable regulations.  Associated regulations include the <i>Wildlife General Regulations</i> (1999), and <i>Wildlife Licenses and Permits Regulations</i> (1999).
<i>Nunavut Planning and Project Assessment Act</i> , S.C. 2013, c. 14, s. 2	The <i>Nunavut Planning and Project Assessment Act</i> provides the legal framework for land use planning and project assessment, which inherently includes considerations for wildlife and their habitats. The <i>Act</i> formally establishes the NIRB and grants it legal authority to screen, review, and assess the potential ecosystem and socio-economic effects of proposed projects that may influence wildlife populations in Nunavut.

**Table 2.3 Best Management Practices and Guidance Documents for Wildlife that are Relevant to the Project’s WMMP**

Name	Description
Recommended Nunavut Land Use Plan (Nunavut Planning Commission 2023)	The Recommended Nunavut Land Use Plan is a legal requirement under the Nunavut Agreement and the <i>Nunavut Planning and Project Assessment Act</i> to guide and direct short-term and long-term development in the Nunavut Settlement Area. Guiding principles include: <ul style="list-style-type: none"> <li>• protecting and sustaining the environment</li> <li>• encouraging conservation planning</li> <li>• building healthier communities</li> <li>• encouraging sustainable economic development.</li> </ul>
<i>2024–2029 Nunavut Wildlife Management Board (NWMB) Strategic Plan</i> (NWMB 2024)	The 2024–2029 NWMB Strategic Plan outlines NWMB’s mission to manage wildlife in Nunavut, balancing conservation with the role of Inuit harvesting for the well-being of current and future generations. It aims to guide Nunavut’s move towards implementing the Nunavut Lands and Resources Devolution Agreement in 2027. The plan focuses on strengthening Inuit Qaujimajatuqangit and Inuktut in their work, collaborating with other Inuit organizations, and enhancing awareness of the NWMB’s role.
<i>Bathurst Caribou Range Plan 5-Year Review – Workshop Report</i> (Compass Resource Management Ltd. 2025)	The Bathurst Caribou Range Plan 5-Year Review – Workshop Report summarizes the outcomes of the 5-year review for the range plan based on a workshop (June 25–26, 2025) involving the range plan working group. Short-, medium-, and long-term priorities for the herd’s management were identified for the following key topics: guardianship, road management, habitat and disturbance, and mobile caribou conservation measures.

**Grays Bay Road and Port Project  
Wildlife Mitigation and Monitoring Plan**

Section 2: Regulations, Approvals and Guidelines  
April 2026

Name	Description
<i>Bathurst Caribou Zone of Influence Literature Review</i> (ERM Consultants Canada Ltd. 2025)	A literature review document prepared for the Government of Northwest Territories that summarizes the understanding of Zone of Influence literature for barren-ground caribou.
<i>Dolphin and Union Caribou Herd Total Allowable Harvest Order</i> , R-005-2021 (Government of Nunavut (GN) 2021)	The Dolphin and Union Caribou Herd Total Allowable Harvest Order defines annual limits for total allowable harvest of the Dolphin and Union Caribou Herd in Nunavut.
The Cape Bathurst, Bluenose-West, and Bluenose-East Barren-ground Caribou Herds Management Plan (Advisory Committee for Cooperation on Wildlife Management 2021)	The <i>Cape Bathurst, Bluenose-West, and Bluenose-East Barren-ground Caribou Herds Management Plan</i> addresses the need to develop a cooperative approach to managing for the herds, protect the habitat in the herds' range, and make decisions on the shared harvests in an open and fair manner. It was developed in consultation with the communities that harvest from the three herds.
Bathurst Caribou Management Plan (Bathurst Caribou Advisory Committee 2021)	The <i>Bathurst Caribou Management Plan</i> provides a management framework and recommendations for the recovery and sustainable management of the Bathurst herd across Northwest Territories (NT), Nunavut (NU), and Saskatchewan (SK). The Management Plan reflects the diverse interests of governments (Indigenous, territorial, provincial, and federal), communities, and stakeholders across the herd's range.
Bathurst Caribou Range Plan (Government of Northwest Territories (GNWT) 2019)	The <i>Bathurst Caribou Range Plan</i> was prepared to help decision-makers manage activities on the land in a way that supports the recovery of the Bathurst herd, while providing clarity on land use and access for developers, regulators and residents of NT, NU, and SK. The Range Plan includes a Cumulative Land Disturbance Framework for managing the overall amount of disturbance on the land, as well as management tools to reduce and manage impacts to caribou and caribou habitat. The framework identifies range assessment areas that include Nunavut (Area 1 – Nunavut Tundra).
Management Plan for the Dolphin and Union Caribou in the Northwest Territories and Nunavut (GN and GNWT 2018)	The <i>Management Plan for the Dolphin and Union Caribou in the Northwest Territories and Nunavut</i> is a joint territorial plan to meet the Northwest Territories <i>Species at Risk Act</i> requirements and NU management needs. The goal of the Plan is to maintain a healthy and viable caribou population, ensuring its long-term persistence and providing sustainable harvest opportunities. The Plan emphasizes collaborative co-management among the relevant authorities that integrates Inuit Knowledge and Indigenous Knowledge.
Bathurst Caribou Herd Total Allowable Harvest Order, R-017-2017 (GN 2017a)	The Bathurst Caribou Herd Total Allowable Harvest Order defines annual harvest limits for total allowable harvest for the Bathurst Caribou Herd.
<i>Non-Inuit Grizzly Bear Sport Hunt Quota</i> (NWMB and Government of Nunavut- Department of Environment (GN-DOE) 2019)	The Non-Inuit Grizzly Bear Sport Hunt Quota documents an agreement between the NWMB and the Nunavut Minister of Environment to increase the annual level of grizzly bear harvesting in the Kitikmeot Region by non-Inuit sport hunters from 10 to 15 tags. Accepted on July 2, 2019.
<i>Nunavut Grizzly Bear Co-Management Plan</i> (GN 2017b)	The Nunavut Grizzly Bear Co-Management Plan (2017) provides a collaborative framework for conserving and managing grizzly bear across Nunavut. It was developed by the NWMB and the Government of Nunavut's Department of Environment and integrates scientific research and Inuit Qaujimagatuqangit (Inuit knowledge). The plan provides Total Allowable Harvests (TAH), recommends sustainable sex-specific harvest rates, and identifies research and monitoring priorities. Further, it aims to maintain viable bear populations while supporting sustainable harvest for cultural and subsistence use.

## 2.1 Wildlife Harvest Management

The Government of Nunavut (GN) regulates the harvest of wildlife species by non-Inuit (GN 2024b). A total allowable harvest (TAH) on the Bathurst Caribou Herd (BCH) has been in effect since 2017 to limit the annual harvest of the BCH in NU (GN 2017a). In 2020, the TAH was set at 30 bulls/year, but was reduced to 10 bulls/year in 2023. In the Northwest Territories (NT), the harvest of the BCH has been prohibited since 2015 (GNWT 2019). For the Dolphin and Union Caribou Herd (DUH), a TAH has been in effect to limit the annual harvest since 2020 (42 caribou at the time) in response to the herd’s continued decline and conservation status (GN 2020). The interim TAH was replaced in 2021 by a formal order setting the TAH at 105 caribou per harvest period (July 1 to the following June 30, annually) (GN 2021). This TAH remains in place for the herd. Recent harvest records provided by the Government of Nunavut – Department of Environment (GN-DOE) indicate that 600 individuals from the DUH were harvested between 2017 and 2023 in the Kitikmeot Region (GN 2024a); the TAH limit has consistently been met in the 2023/24 and 2024/25 harvest periods.

For other wildlife species, the GN-DOE regulates their harvest by non-Inuit (GN 2024b). At the time of this WMMP being drafted, muskox has a total allowable harvest (TAH) for MX-11, within which the Project is located, which represents the maximum harvest rate set to achieve management goals. TAHs are established for each management unit and allocated among communities. The TAH for MX-11 is currently 350 individuals. The GN-DOE also regulates moose harvest (GN 2024b). Moose populations are not actively managed for conservation in the territory, but harvest is regulated for residents and non-residents, with a limit of one, but no closed season harvest (GN 2024b). Grizzly bear is managed by the *Nunavut Grizzly Bear Co-Management Plan* (GN 2017b) and the *Non-Inuit Grizzly Bear Sport Hunt Quota* (NWMB and GN-DOE 2019) as identified in Table 2.3. The annual level of grizzly bear harvesting in the Kitikmeot Region by non-Inuit sport hunters is 15 tags (NWMB and GN-DOE 2019). The spatial assessment boundaries for grizzly bear coincide with Game Management Subzones 509-511, 522-524, and 526. Wolverine is classified as a furbearer in Nunavut, with both hunting regulations (GN 2024b) and trapping regulations (Wildlife Act - Consolidation of Trapping Regulations, 1999).

## 2.2 Project-specific Management Plans

The Project will have management plans that outline how various activities are performed on site in consideration of operational needs and regulatory requirements. Environmental protection measures detailed in these management plans will be implemented on site to reduce the potential effects of the Project on wildlife. Some of the plans that are particularly relevant to the protection of wildlife are summarized below in Table 2.4.

**Table 2.4 Other Relevant Management Plans**

Management Plan	Description
Air Quality Monitoring and Management Plan	An Air Quality Management Plan framework will be developed to promote compliance with applicable regulations, including strategies to reduce and control emissions generated during construction and operations and maintenance.
Aquatic Effects Management Plan	The Aquatic Effects Management Plan will outline the mitigation measures employed specifically to reduce Project effects on the aquatic environment

**Grays Bay Road and Port Project  
Wildlife Mitigation and Monitoring Plan**

Section 2: Regulations, Approvals and Guidelines  
April 2026

<b>Management Plan</b>	<b>Description</b>
Borrow Pit and Quarry Management Plan	A Borrow Pit and Quarry Management Plan framework will be developed to guide site preparation, development, closure, and reclamation (where required). The plan is a framework, to reflect that one or more individual quarries will require their own plans to reflect site-specific conditions.
Environmental Protection Plan (EPP)	The EPP, developed during construction planning, will outline activity-specific environmental protection measures to be implemented throughout all phases of the Project. The EPP will reference related management plans and approvals and will provide operational guidance to ensure consistent implementation of mitigation and management measures. The plan will describe how Inuit are and will remain engaged in its development and implementation.
Explosives Management Plan	The Explosives Management Plan will outline management practices that aim to reduce the environmental and safety risks of manufacturing, transporting, storing, handling and using these explosives.
Fuel Management Plan	The Fuel Management Plan will include procedures for safe handling, transportation, storage, and use of combustible substances.
Hazardous Materials Management Plan	A Hazardous Materials Management Plan will be developed in accordance with the <i>Canadian Environmental Protection Act, 1999</i> and the Environmental Emergency Regulations. The Hazardous Materials Management Plan will identify terrestrial hazardous material spill prevention, protection and emergency response measures to be implemented.
Noise and Vibration Abatement Plan	A Noise and Vibration Abatement Plan will outline the requirements for occupational noise monitoring, control and worker protection. Mitigation and adaptive management measures focused on minimizing the potential effects of noise on select wildlife species are provided in the Wildlife Mitigation and Monitoring Plan.
Port Management Plan	A Port Management Plan will be developed to guide all aspects of the port's operation. It will include an administration and management framework, operational guidelines, mitigation measures to be implemented to avoid or reduce potential effects on the biophysical Valued Components (VC), including wildlife and wildlife habitat and marine resources, monitoring requirements and thresholds. The Port Management Plan will include provisions for aerodrome management, including protocols for specific air transportation operating procedures in accordance with Transport Canada and International Air Transport Association guidance and standards.
Road Management Plan	A Road Management Plan will be developed for operations and maintenance to reduce potential effects on air quality, watercourses, wildlife and sensitive landforms. The Road Management Plan will describe measures to manage access to the road, and measures to reduce effects on caribou/ <i>tuktuit</i> . The Plan will also include measures to reduce the potential for accidents and malfunctions associated with road use.
Spill Contingency Plan	A Spill Contingency Plan will be developed to address unauthorized discharges during construction and operations and maintenance.
Water Management Plan	Will describe the responsible management of water including the collection, management and/or treatment of water for the protection of aquatic resources.
Waste Management Plan	The Waste Management Plan will provide guidelines for dealing with the generation of waste, including solid waste and wastewater. Measures will be described to ensure that waste is procured, handled, stored, treated, and disposed of in an environmentally responsible manner. The Waste Management Plan will include specific measures related to incinerator management.

### **3 Plan Development and Engagement**

In accordance with the guidance provided by the Inuit Advisory Group to WKR, and a suggestion to not “re-create the wheel” when it comes to protection measures (Inuit Advisory Group (IAG) 2025), best management practices to avoid or reduce Project-related effects on the land, water, and the animals that use it were adapted from previously approved major development projects in the Arctic. The projects considered by WKR to be relevant sources of best practices included the Mackenzie Valley Highway, The Inuvik Tuktoyaktuk Highway, the Sabina Gold and Silver Corporation’s Back River Project, Agnico Eagle Mines Limited – Meadowbank Complex and associated access roads, Agnico Eagle’s Hope Bay Mine, Agnico Eagle’s Meliadine Division, the Baffinland Mary River Project, and Mineral and Metals Group’s Izok Corridor Project. Developed with Inuit, Indigenous, and Community Knowledge, best practices from these projects, along with information shared with WKR in workshops with the Inuit Advisory Group (IAG) and engagement with communities, form the basis of the mitigation measures and monitoring strategies presented in this document.

The WMMP was developed at a conceptual level, drawing upon information from an understanding of the Project Description and general best practices for wildlife mitigation and monitoring. Further development and refinement of the WMMP will occur through ongoing Project planning initiatives, continued engagement with affected Inuit and Indigenous governments and organizations and potentially affected communities, and consultation with relevant government agencies.

## **4 Plan Goals and Objectives**

The purpose of the WMMP is to identify and mitigate Project-related effects on wildlife and wildlife habitat such as habitat loss, sensory disturbance, or potential injury or mortality risk. To achieve this, a variety of monitoring strategies need to be implemented to evaluate the effectiveness of mitigation efforts and adaptively manage any unforeseen effects arising from the Project. Adaptive management will be continually emphasized throughout the Project, with strategies and mitigation measures updated as new information and monitoring results become available, providing responsible Project oversight and ongoing environmental stewardship.

The WMMP is designed to enable wildlife to continue using habitats in areas adjacent to the Project Development Area (PDA) and within surrounding areas, while reducing the risk of Project-related injury or mortality to wildlife and addressing operational and human health and safety requirements.

Further details regarding the mitigation and monitoring strategies will be developed through ongoing discussions with governing bodies and other interested parties, and any working groups established to monitor Project-related effects.

The WMMP objectives are to:

- Identify and mitigate the potential adverse effects of the Project on wildlife and wildlife habitat
- Monitor the effectiveness of implemented effects management measures designed to protect wildlife and wildlife habitat
- Provide data to support an adaptive management approach, allowing for adjustments to effects management measures as needed based on monitoring outcomes
- Validate the accuracy of predictions made in the Grays Bay Road and Port Impact Statement and adaptively manage for any unanticipated effects from Project activities
- Contribute to the overall environmental objectives and commitments of the Project

## 5 Potential Project Effects Overview

In accordance with the *Guidelines for the Preparation of an Impact Statement for West Kitikmeot Resources Corp's Grays Bay Road and Port Proposal* (NIRB File No. 24XN038; Impact Statement (IS) Guidelines), the effects assessment evaluated potential effects on targeted VCs, as outlined in the Impact Statement (IS). Focal wildlife species considered in the Project's effects assessment and for which this WMMP is intended include:

- Caribou:
  - Bathurst Caribou Herd (BCH) and Dolphin and Union Caribou Herd (DUH)<sup>1</sup>
- Other Wildlife:
  - Ungulates: Muskox, Moose
  - Carnivores: Grizzly Bear and Wolverine
- Birds:
  - Passerines
  - Waterbirds (seabirds, shorebirds and waterfowl)
  - Raptors
- Marine Mammals

Project-related potential effects evaluated for each of the focal wildlife species were species-dependent and included some of the following:

- **Change in Habitat:** Direct habitat loss will occur due to site preparation and clearing for the PDA. Sensory disturbances (i.e., noise, dust, visual stimuli, human presence) caused by Project-related activities can indirectly influence habitat use, whereby the habitat may not be considered suitable by some wildlife due to its proximity to the Project.
- **Change in Movement and/or Behaviour:** Project infrastructure could potentially be a filter (i.e., semi-permeable barrier) or physical obstruction to wildlife movement. For some species, the barrier could potentially influence population fragmentation if individuals are unable to move across the infrastructure. Infrastructure and/or activities resulting in noise, artificial lighting, or dust may cause sensory disturbances that affect wildlife movement and/or behaviour.
- **Change in Mortality and/or Injury Risk:** Onshore project activities could increase mortality risk to terrestrial wildlife due to vehicle collisions, increased predation risk, increased harvest, or destruction in defence of human life or property. Marine mammals could experience a change in mortality and/or injury risk due to vessel strikes, direct contact, and/or underwater noise.

---

<sup>1</sup> Although Bluenose East and Beverly/Ahiak interact infrequently with the Project, when and if they do, their space use and movements are similar to those of the BCH. Therefore, the WMMP applies to those herds as well.

## 6 Human Activity Management in Relation to Wildlife

The management of Project human activity is essential for limiting project-related effects on wildlife. Project personnel will be informed when wildlife may be in the area, and what their responsibilities are when wildlife occurs in proximity to them. The levels of different instances of wildlife occurrence and how personnel will be informed are provided below.

### 6.1 Level 1 – Normal Activities

Construction, Operations, and Maintenance activities occur year-round. Active monitoring for wildlife occurrence and distribution occurs throughout the year. Additional levels are triggered when certain wildlife species (e.g., caribou, muskox, grizzly bear, wolverine) are identified in proximity to the Project that will replace normal activities.

### 6.2 Level 2 – Site Notification

Site notifications are triggered by the Site Manager during sensitive time periods or chance encounters by Project personnel when wildlife may be in proximity to the Project. Site notifications include reminders to all personnel working or using the Project of their responsibilities to adhere to wildlife protection measures. Site notifications will include a combination of methods, including email or radio communications, postings on information boards, and discussions during morning meetings.

Site notifications will be issued for the sensitive time periods for indicator wildlife species based on their sensitive time periods (see Table 6.1).

**Table 6.1 Sensitive Time Periods for Wildlife to Inform Site Notifications**

Species	Sensitive Time Period	Comments
Dolphin and Union caribou herd	November 1 to November 30; April 15 to May 30	Migration periods when herd is moving across Coronation Gulf.
Bathurst caribou herd	April 20 to September 6	Time period for spring migration, calving/post-calving and summer seasons. Herd primarily occurs between the Hood River and Contwoyto Lake during this time.
Wolverine	February 1 to May 15	Year-round resident; high-sensitive denning season
Grizzly bear	May 1 to October 16	Year-round resident: period when grizzly bears are active (i.e., not in hibernation).
Migratory birds	May 15 to August 31	General nesting period for most birds, depending on the species.

## **6.3 Level 3 – Site Alert**

A site alert can be triggered when certain wildlife are observed in proximity to the Project. All personnel onsite will be alerted by radio when certain wildlife are identified in the area. The alert will include communication on personnel's responsibilities for protecting wildlife and preventing interactions, and if certain activities need to be reduced or temporarily suspended. Site alerts will also include email communications, postings on information boards, and discussions during morning meetings.

Site alerts can be triggered when the following wildlife are identified in proximity to the Project:

- A group of at least 25 caribou identified within sight of the Project; a group is defined as a cluster of nearby individuals with similar behaviours (e.g., individuals walking across landscape in the same general direction; individuals bedded down in an area), and the group size is the number of individuals within that cluster
- A muskox identified within 500 m of the Project footprint
- A predator (e.g., grizzly bear, wolverine, wolf, fox) identified near Project buildings, other infrastructure, or places where humans frequently occur, or within sight of the Project
- An active bird nest located on Project buildings or other infrastructure
- A moose identified near Project buildings or places where humans frequently occur

When a site alert is issued, the Site Manager and Environment Supervisor will prepare for a potential reduction or temporary suspension in human activities (see Level 4 below), depending on where the wildlife occur in relation to Project activities. Some examples of Project activities that may be influenced include:

- Vehicle and equipment activities may be reduced or temporarily suspended where wildlife occur, based on information derived from the Environmental Monitors' observations, or from a potential risk to human life or property.
- Temporary no-disturbance buffers may be established around any active nest or den sites located in proximity to the Project or areas of human activity.
- Helicopters and fixed-winged aircraft will be notified when wildlife occurs in proximity to the aerodrome or other Project infrastructure, and that appropriate horizontal and/or elevation buffers must be maintained.
- All site foremen will be notified that a temporary suspension of activities may occur where they are working and instructed to plan accordingly.

## 6.4 Level 4 – Temporary Shutdown of Infrastructure or Human Activity

A temporary shutdown of Project infrastructure or human activity may be required when there is the potential for a high-risk interaction with wildlife that could lead to harm or mortality risk to either wildlife or humans. A temporary shutdown can be initiated by the Site Manager. All personnel onsite will be alerted by radio when a temporary shutdown occurs and for what area of the Project, and what everyone's responsibilities are for the temporary shutdown. Temporary shutdowns will also include email communications, postings on information boards, and discussions during morning meetings. Some examples of occurrences that may result in a temporary shutdown include:

- Caribou calving on or near the road or other infrastructure, or caribou with calves within sight of the PDA during the calving and post-calving seasons (June 2 to June 28)
- At least 10 caribou cows with calves moving onto or towards the road or other infrastructure during the caribou summer season (i.e., June 29 to September 6)
- Wildlife (i.e., caribou, muskox, moose) at the aerodrome.
  - Ground personnel will attempt to escort wildlife away from the airstrip. If the wildlife cannot be escorted away from the airstrip in a reasonable time, the flight crew will be instructed to divert to another location
    - Any helicopters currently in flight may need to use a secondary landing zone.
    - Fixed-winged aircraft in the air may need to land at an alternate airstrip until wildlife have left the aerodrome area.
- A predator (e.g., grizzly bear, wolverine, wolf, fox) exhibiting aggressive behaviour towards humans, and/or destroying property or infrastructure
- Other wildlife with young present within or near the Project that exhibit aggressive or defensive behaviour (e.g., cow moose with young that is stomping the ground when personnel are nearby, birds displaying either feigning or aggressive behaviour towards humans that are near a nest or their young)

Temporary shutdowns are informed from the monitoring strategies identified in Section 8. Additional temporary shutdown examples may arise that can be implemented by the Site Manager when there's a perceived risk of interaction that may result in adverse effects on either wildlife or humans.

## 7 Mitigation Measures

### 7.1 General Mitigations

A robust set of mitigation measures were identified to reduce Project-related effects on wildlife and wildlife habitat. These mitigation measures are backed by a suite of monitoring programs to trigger different levels of human activity management (see Section 8) when necessary. Table 7.1 lists mitigation measures for terrestrial wildlife. A similar table will be developed with specific mitigations for marine mammals. The mitigations identified follow best management practices (BMPs) and align with mitigations approved for other Projects in Nunavut and Northwest Territories (see Section 2).

**Table 7.1 Mitigation Measures to Prevent or Reduce Project-related Effects on Terrestrial Wildlife**

Activity / Concern	Mitigation Measure	Wildlife Indicator Species	Metric for Measuring Effectiveness	Personnel Monitoring Effectiveness	Effectiveness Monitoring Schedule	Potential Corrective Action
Project Footprint Design	The PDA will be confined to a specific design layout to reduce the Project's potential effect on habitat loss and effectiveness.	All Wildlife	Disturbance occurs within the design layout boundaries during construction, and operations and maintenance activities.	WKR Representative	Yearly	Design layout modified based on agreed collaboration between Site Manager, WKR, GN, and NIRB.
	The Project will use previously disturbed areas for project activities, project infrastructure and workspaces, to the extent practical (e.g., Jericho Station).	All Wildlife	Previously disturbed areas are fully used to the extent that is practical, as per the specific design layout.	WKR Representative	Yearly	Any modifications during construction activities will consider using previously disturbed areas first, where practical.
	The all-season roadside slopes, where possible, will be designed to 3:1 ( $\leq 18.5$ degrees) to facilitate caribou and other wildlife crossings using finer material where applicable in "high potential areas" identified by: 1) local knowledge; 2) caribou collar data; 3) experience during road operations; 4) wildlife camera monitoring.	All Wildlife	Road design is not a filter or barrier to wildlife movement across it.	Construction Site Foreman; Environmental Monitor	Daily during construction activities	Site-specific design modifications will be considered in areas where the road construction cannot meet design criteria due to topography.
Site Clearing	Site clearing will be limited to areas required for construction and safe operations and maintenance (i.e., to the width of the Road PDA).	All Wildlife	No vegetation clearing or ground disturbance occurs outside of the defined boundaries	Environmental Monitor	Daily during construction activities	Additional staking or marking of Project boundaries; Construction personnel using a spotter to aid in identifying disturbance limits.
	Wildlife sweeps will be completed to identify wildlife sensitivities (i.e., active nests, dens, other wildlife features) ahead of construction activities. No-disturbance buffers will be established around any sensitivities identified. If disturbance within a no-disturbance buffer is unavoidable, site-specific protection measures will be developed by a Qualified Professional.	All Wildlife	No wildlife sensitivities disturbed, damaged, or destroyed during construction activities.	Environmental Monitor	Daily during construction activities	Temporary suspension of construction activities until wildlife sweep has been completed. Additional awareness training to construction personnel.
	Vegetation clearing and ground disturbance will be completed, where practicable, outside the migratory bird nesting period of May 15 to August 18 (Zone N9; Environment and Climate Change Canada (ECCC) 2018).	Birds	No bird nests or birds damaged or destroyed during construction activities	Site Manager	Daily during construction activities	Wildlife sweeps will be completed to identify any nests or young with limited mobility ahead of construction activities. No-disturbance buffers will be established around any sensitivities identified. If disturbance within a no-disturbance buffer is unavoidable, site-specific protection measures will be developed by a Qualified Professional.
	Riparian vegetation will be maintained whenever possible.	Grizzly Bear	Riparian vegetation maintained as much as possible within and adjacent to the Project footprint.	Environmental Monitor	As needed	No-disturbance buffers applied around riparian vegetation by the Environmental Monitor in consultation with the Construction Foreman.
Road Construction	Road construction activities will be temporarily suspended when groups of caribou (>25 individuals) are identified within line of sight of the active work area (i.e., the front of the new road being built). Road construction can recommence when a wildlife monitor reports that the caribou have either habituated (i.e., tolerating the disturbance) or left the area and are >100 m from the construction zone.	Caribou	Road construction activities allow caribou to travel through the work area.	Environmental Monitor	Daily during construction	Decrease group size trigger to $\geq 10$ individuals and/or increase the distance trigger to >250 m for apparent tolerant caribou. Decreasing the group size and increasing the distance would initiate work pauses sooner than the original mitigation.

**Grays Bay Road and Port Project  
Wildlife Mitigation and Monitoring Plan**

Section 7: Mitigation Measures  
April 2026

Activity / Concern	Mitigation Measure	Wildlife Indicator Species	Metric for Measuring Effectiveness	Personnel Monitoring Effectiveness	Effectiveness Monitoring Schedule	Potential Corrective Action
Road Management	Speed limits will be posted along the completed portions of the road during construction activities. Traffic speed will be limited to 60 km/h on project road surfaces, which may be decreased in certain areas, depending on terrain conditions and geometric constraints, and in areas of high potential for caribou or other wildlife occurrence (i.e., identified wildlife road-crossing locations). In instances where terrain conditions and geometric constraints allow, and in areas of low potential for caribou or other wildlife occurrence, speeds may be increased to 80 km/h.	All Wildlife	No wildlife-vehicle collisions.	Site Manager	Weekly	Additional awareness training to personnel operating vehicles and equipment on speed limits. Written warning for repeated infractions with possible personnel termination at the Site Manager's discretion.
	Wildlife will have the right-of-way when they occur on or immediately adjacent to the roadway. All vehicles and equipment must slow down to 30 km/h when wildlife occur within line of sight of the driver and must stop for 20 minutes when wildlife are within 100 m of the road and show intent to cross. Vehicles may proceed after 20 minutes when wildlife no longer show intent to cross. When animals are on the road, drivers must stop and wait for them to leave the area. If wildlife do not leave the road after 20 minutes since stopping, vehicles are to move forward no faster than a walking pace until the individuals leave the road, and may resume the posted speed limit once the vehicle has driven past the animals.	All Wildlife	No wildlife-vehicle collisions.	Site Manager	Weekly	Additional awareness training to personnel on what to do when operating vehicles or equipment, and encountering wildlife. Written warning for repeated infractions with possible personnel termination at the Site Manager's discretion.
	Random speed audits shall occur when the road is operational, administered by WKR to encourage driver compliance.	All Wildlife	No wildlife-vehicle collisions.	Road Foreman	As needed.	Additional awareness training to personnel on speed limits. Written warning for repeated infractions with possible personnel termination at the Site Manager's discretion.
	Wildlife 'hotspots' will be discussed daily during tailgate meetings with drivers on the road.	All Wildlife	No wildlife-vehicle collisions.	Road Foreman	Daily	Environmental Monitor to relay any new information on wildlife 'hotspots' over the radio.
	Drivers must call out on the radio for wildlife observed on or immediately adjacent to the road (i.e., the nearest kilometre marker).	All Wildlife	Radio call-outs help inform other drivers so that no wildlife-vehicle collisions occur.	Road Foreman	Daily	Additional awareness training to personnel on what to do when operating vehicles or equipment, and encountering wildlife. Written warning for repeated infractions with possible personnel termination at the Site Manager's discretion.
	Wildlife signs will be displayed along the road in areas where wildlife are commonly observed to inform drivers.	All Wildlife	No wildlife-vehicle collisions.	Road Foreman	Daily	Drivers calling out on radio when wildlife are observed in areas where no signage occurs to inform other drivers.
Mobile Caribou Conservation Measures (MCCM)	A caribou trigger action response plan (TARP) to manage road Construction and Operations and Maintenance activities. As part of the TARP framework, MCCMs will inform adaptive road closures. If lead caribou (cows or cows with calves) or groups of caribou (≥25 animals) are observed near the road by Environmental Monitors, or if collar data provided by GN/ GNWT suggest that caribou are on a trajectory to cross the road, then vehicle traffic will be suspended. Road closures will be lifted once road monitoring, supported by collar data, indicates that cows/ calves or groups of caribou have moved out of the road area.	Caribou	Project road is a limited movement filter (not a barrier).	Environmental Monitor	Year-round; monitoring intensity varies by caribou sensitivity period	Additional awareness training to personnel on reporting caribou sightings. Increased line-of-sight monitoring frequency and intensity by Environmental Monitors along the road.

**Grays Bay Road and Port Project  
Wildlife Mitigation and Monitoring Plan**

Section 7: Mitigation Measures  
April 2026

Activity / Concern	Mitigation Measure	Wildlife Indicator Species	Metric for Measuring Effectiveness	Personnel Monitoring Effectiveness	Effectiveness Monitoring Schedule	Potential Corrective Action
Vehicles and Equipment	All-terrain vehicle (ATV), utility task vehicle, and snow machine use will be limited to within the PDA boundaries during construction. Any deviation of use outside of the PDA must be pre-approved by the WKR representative on site.	All Wildlife	No unauthorized disturbance to wildlife habitat by utility vehicles during construction activities.	WKR Representative	As needed.	Additional awareness training to personnel on vehicle and equipment use requirements. Written warning for repeated infractions with possible personnel termination at the Site Manager's discretion.
	Construction and operations and maintenance personnel will be prohibited from using all ATVs, utility task vehicles, and snowmachines for recreational purposes while working on the Project.	All Wildlife	No unauthorized disturbance to wildlife habitat from personnel using ATVs, utility task vehicles, or snow machines.	Site Manager	Yearly	Additional awareness training to personnel on vehicle and equipment use requirements. Written warning for repeated infractions with possible personnel termination at the Site Manager's discretion.
	All machinery, equipment, and vehicles are required to be clean (i.e., decontaminated) and in good working order before coming to the PDA. Machinery, equipment, and vehicles will be regularly maintained and inspected to reduce noise-related sensory disturbance.	All Wildlife	Inspections documented for when machinery, equipment, and vehicles arrive onsite being clean, and regular maintenance and inspection logs.	Site Manager	Yearly	Additional awareness training for contractors responsible for the machinery, equipment, and vehicles onsite.
Quarries and Blasting	Quarries will not be situated on sensitive habitat features like watercourses, water bodies, or land bridges.	All Wildlife	No quarries are located on sensitive habitat features like watercourses, water bodies, or land bridges.	Site Manager	As needed during construction.	New quarry sites are proposed to the GN if any sensitive habitat features are identified at proposed quarry sites.
	Blasting at quarries will be suspended if mammals are identified within 500 m of the blast site, or if a group of caribou (i.e., ≥25 individuals) are identified within the line of sight (i.e., >500 m) from the blast area. Blasting may continue once all wildlife move outside of the 0.5 km exclusion zone, and no caribou groups (i.e., ≥25 individuals) occur within the line of sight from the blast area.	Caribou, Muskox, Moose, Grizzly Bear, Wolverine	No wildlife indicator species are injured or perish during blasting activities.	Blast Manager	Whenever blasting occurs	Personnel may establish additional searches from a safe location to confirm no wildlife within exclusion zone prior to blasting, as instructed by the Blast Manager.
	A wildlife sweep will be completed of the blast site and surrounding area prior to any blasting activities occurring.	All Wildlife	No wildlife injured or perish during blasting activities	Blast Manager	Whenever blasting occurs	If any wildlife is identified in search area, obtain additional mitigations to address wildlife concerns from Environment Manager during construction, and Site Manager during operations.
Aircraft and Airstrip	All aircraft will conduct an initial fly-by of the airstrip to confirm no wildlife located on or in proximity to it before landing. If wildlife are observed on or near the airstrip, pilots will notify ground personnel who will escort wildlife away from the airstrip so aircraft can land safely.	All Wildlife	No aircraft-wildlife collisions when aircraft land at the airstrip.	Site Manager; Pilots	Daily when aircraft are using airstrip.	Discuss additional mitigation strategies in collaboration with Inuit, Transport Canada, the GN, and a Wildlife Expert. Implement any new proposed mitigation for the safety of humans and wildlife.
	Aircraft will maintain a minimum cruising altitude of 610 m above ground level except during landing and take-off at the airstrip, or for safety reasons due to inclement weather or when operationally required.	All Wildlife	Wildlife on the ground show no signs of disturbance from aircraft flying at the minimum cruising altitude	Pilots, Environmental Monitor	As needed.	Consider increasing minimum cruising altitude if wildlife are documented to show adverse behaviour consistently when aircraft are flying overhead at the minimum cruising altitude. Altitude increase must be done in consultation with Transport Canada.
Wildlife features (e.g. nests, dens, mineral licks)	Wildlife sweeps will be completed to identify wildlife sensitivities (i.e., active nests, dens, other wildlife features) ahead of construction activities. No-disturbance buffers will be established around any sensitives identified. If disturbance within a no-disturbance buffer is unavoidable, site-specific protection measures will be developed by a Qualified Professional.	All Wildlife	No wildlife features are disturbed, damaged, or destroyed by Project activities.	Environmental Monitor	As needed.	Some wildlife features may be removed under the guidance of a Wildlife Qualified Professional and with approval from the GN.
Lighting	All permanent outdoor light fixtures at the port will be pointed downwards where practicable to reduce light disorientating flying birds, except where required for safety reasons.	Birds	No birds show signs of disorientation around lighting, resulting in birds colliding with Project infrastructure.	Environmental Monitor	As needed.	Adjustments to lighting (e.g., lower lumens, different orientation, light deflectors) will be investigated and monitored to prevent bird disorientation.
	Turn off or dim deck and exterior lights on vessels except those used for navigation during low visibility periods (e.g., fog, rain, nighttime periods).	Birds	No birds show signs of disorientation from vessel lighting resulting in a bird-vessel collision.	Vessel Captain	As needed.	Explore alternatives as per Transport Canada recommendations that don't influence vessel or human safety.

**Grays Bay Road and Port Project  
Wildlife Mitigation and Monitoring Plan**

Section 7: Mitigation Measures  
April 2026

Activity / Concern	Mitigation Measure	Wildlife Indicator Species	Metric for Measuring Effectiveness	Personnel Monitoring Effectiveness	Effectiveness Monitoring Schedule	Potential Corrective Action
Wildlife Occurrence on Project Footprint	Personnel will not feed, harass, or hunt wildlife while working on the Project.	All Wildlife	No human-wildlife interactions occur that may result in an adverse effect for either wildlife, or humans.	Site Manager	Yearly	Additional awareness training to personnel on the importance of avoiding interactions with wildlife. Written warning for repeated infractions with possible personnel termination at the Site Manager's discretion.
Public Access to Project Footprint	WKR will control access to the road through user agreements with organizations and individuals. For safety reasons, no access to the port, aerodrome, or the road will be allowed during the Construction phase.	All Wildlife	No public access which may result in human-wildlife interactions during construction activities.	Site Manager	Yearly	Any public arriving onsite will be met by the Site Manager or their designate and advised of the need to leave site due to safety concerns.
	Public access to active borrow sites and quarries, and associated access roads will be restricted.	All Wildlife	No public access which may result in human-wildlife interactions, or other safety concern.	Site Manager	Yearly	Additional awareness training to the public on restricted access areas of the Project during Operations and Maintenance.
Snowbanks	Snowbanks will be maintained so they are not an obstruction to movement for caribou and other wildlife. Creation of snowbanks will generally be avoided (for operational reasons to avoid snow drifts on the road on the lee side of the bank), except where not technically feasible; the height of snowbanks will maintained at less than 1 m and snow plowing will be conducted in such a way as to limit the angle and vertical height of the snowbank edge.	All Wildlife	Snowbanks are not a barrier to wildlife movement.	Road Maintenance Foreman	As needed.	Additional awareness training to snow removal operators.
Wildlife Carcasses	Any dead wildlife on or immediately adjacent to the roadway will be moved at least 100 m away from the road to reduce the potential for wildlife-vehicle collisions with scavengers.	All Predator Species	No wildlife-vehicle collisions with scavengers.	Environmental Monitor	As needed	Wildlife carcasses may be removed and incinerated at the waste management facility onsite.
Human - Predator Conflicts	A bear deterrent procedure will be developed that follows guidance in the GN's document <i>Bear Safety: Reducing Bear-People Conflicts in Nunavut</i> and consultation with the GN's bear deterrent specialist to determine appropriate bear deterrents (e.g., temporary fencing, bear bangers) and safety procedures.	Grizzly Bear	No human-bear conflicts that causes injury or death to either a grizzly bear, or a human.	Environmental Monitor	Yearly	Discuss additional mitigation strategies with the GN's bear deterrent specialist if existing strategies are ineffective.
	Raised, heated buildings will be skirted to prevent wildlife access under the buildings for use as shelters, dens or building entry points; skirting should use wire mesh, sheet metal sheathing, or other chew-resistant material.	All Predator Species	No wildlife establishing a den or residence under Project buildings.	Environmental Monitor	As needed	Investigate additional innovative mitigation strategies if skirting does not work, in consultation with a wildlife expert.

## 7.2 Wildlife Feature Setback Distances

When a wildlife feature is identified in proximity to the Project, an appropriate setback distance is required. The setback distance required can vary depending on the species and the type of human activity. Setback distances are necessary to limit human disturbance from influencing wildlife use of the feature (see Table 7.2).

**Table 7.2 Wildlife Feature Minimum Setback Distances**

Wildlife Feature	Sensitive Time Period	Specific Conditions	Minimum Setback Distance (m)	Reference
<b>Dens</b>				
Bear (grizzly, polar bear)	October 30 to May 16	General industrial activities	750	(Agnico Eagle Mines Limited 2025)
		Blasting and Port pile-driving.	1,000	(Agnico Eagle Mines Limited 2025)
Wolf	May 1 to July 30	General industrial activities.	750	(Agnico Eagle Mines Limited 2025)
		Blasting and Port pile-driving.	1,000	(Agnico Eagle Mines Limited 2025)
Wolverine	February 1 to May 15	General industrial activities.	750	(Agnico Eagle Mines Limited 2025)
		Blasting and Port pile-driving.	1,000	(Agnico Eagle Mines Limited 2025)
Fox (arctic, red fox)	May 1 to July 15	General industrial activities including blasting activities	150	(GNWT 2015) (Agnico Eagle Mines Limited 2025)
<b>Nests</b>				
Passerines (Ptarmigan included)	May 15 to August 15	General industrial activities near active bird nests	30	(Agnico Eagle Mines Limited 2025)
Waterfowl (Ducks)	May 15 to July 30	General industrial activities near active bird nests	150	(Agnico Eagle Mines Limited 2025); (Agnico Eagle Mines Limited 2022)
(Geese)		General industrial activities near active bird nests	500	(Agnico Eagle Mines Limited 2025); (Agnico Eagle Mines Limited 2022)
(Swans and cranes)		General industrial activities near active bird nests	750	(Agnico Eagle Mines Limited 2025); (Agnico Eagle Mines Limited 2022)

<b>Wildlife Feature</b>	<b>Sensitive Time Period</b>	<b>Specific Conditions</b>	<b>Minimum Setback Distance (m)</b>	<b>Reference</b>
Shorebirds	May 15 to August 15	General industrial activities near active bird nests	100	(Agnico Eagle Mines Limited 2022) (Agnico Eagle Mines Limited 2022)
Raptors (Cliff-nesters)	May 1 to August 31	General industrial activities	500	(Agnico Eagle Mines Limited 2022)
(Ground-nesters)		General industrial activities	400	(Agnico Eagle Mines Limited 2022)
Colonial Nesting Birds	Year around	General industrial activities	300	(Baffinland Iron Mines Corporation 2023)
<b>Other</b>				
Mineral/salt licks	April 1 to July 15	General industrial activities	250	(GNWT 2015)

### **7.3 Listed Bird Species Nests**

Bird species listed under the SARA as either Endangered, Threatened, or Extirpated have protections that prohibit damaging or destroying their nests whether the nest is active or not, anywhere they occur, including private lands and lands within a territory.

Four bird species listed under the SARA that meet this designation (as of 2025) have the potential to occur in or near the PDA. Table 7.3 provides a summary and description of these bird species nest types and typical nesting location in the Arctic. These nests have year-round protective measures as per the SARA. A Qualified Professional is required to confirm if an active nest site belongs to one of the SARA-listed species in Table 7.3. Nests can only be confirmed to belong to a SARA-listed species in Table 7.3 from presence of a bird during the nesting period.

**Table 7.3 Description of the Nest Type and Typical Nesting Location for Bird Species Listed as Either Endangered, Threatened, or Extirpated That May Occur in or near the PDA**

Species	Nest Type	Typical Location	Comments
Red Knot ( <i>rufa</i> ssp.)	Shallow Scrape located on gravelly or stony ground	Dry tundra slopes/gravel ridges	Solitary nester species that use single nest and arrive in the Arctic around late May. They avoid anthropogenic structures in High Arctic.
Ivory Gull	Moss/Seaweed Cup	Nunataks or remote rocky cliffs	Colonial species (2–100+ pairs) that uses single nest. They are known to be scavengers near human camps/structures, but nest remotely.
Ross's Gull	Scrape or Moss Cup	Wet tundra or gravel reefs	Colonial species but loose (2–10 pairs, often with Arctic Terns). They use single nests and rarely use anthropogenic structures.
Barn Swallow	Mud Cup	Ledges/cliffs	Typically nest colonially and are early migratory arrivals (mid-May). They frequently reuse old nests and often return to the same nesting sites year after year. They establish nest on anthropogenic structures (buildings/bridges), however it is rare to find them in the high Arctic.

## 8 Wildlife Monitoring

### 8.1 Monitoring Objectives and Framework

The objectives of the monitoring framework are:

- To verify effects predictions in the project’s effects assessment
- To verify effectiveness of mitigation and measures

Monitoring efforts will focus on various spatial and temporal scales, depending on the focal species. Most monitoring efforts will focus on the scale of the project footprint (e.g., wildlife mortality monitoring), while some monitoring efforts will occur at a broader scale to adequately quantify and/or qualify effects (e.g., wildlife distribution within a certain radius of the PDA, or some other scale to confirm the Project’s Zone of Influence [ZOI] on wildlife).

The monitoring framework is based on the following principles:

- Monitor species occurrence and distribution in relation to the PDA
- Monitor and evaluate the effectiveness of mitigation measures implemented
- Identify unanticipated effects
- Provide an early warning of undesirable changes in the environment
- Inform adaptive management measures that expand mitigation and/or monitoring approaches

Monitoring programs will assess and quantify the effects of interactions between project activities and components of the receiving environment, concentrating on measurable parameters or indicators. Monitoring will be completed throughout all project phases.

Table 8.1 highlights the primary metrics for focal species monitoring.

**Table 8.1 Primary Monitoring Metrics for Focal Wildlife Species**

Focal Species	Primary Monitoring Metrics
Caribou	<ul style="list-style-type: none"> <li>• Amount of direct and indirect selected habitat loss</li> <li>• Species occurrence and distribution (within and outside of an expected ZOI)</li> <li>• Timing and location of PDA crossings</li> <li>• Mortality events</li> </ul>
Other Wildlife	<ul style="list-style-type: none"> <li>• Species occurrence and distribution (within and outside of an expected ZOI)</li> <li>• Tracking wildlife and human encounters</li> <li>• Mortality events and the follow-up investigations</li> </ul>
Birds	<ul style="list-style-type: none"> <li>• Species occurrence and distribution</li> <li>• Nesting activity within the PDA and adjacent areas</li> <li>• Bird mortality events and follow-up investigations</li> </ul>
Marine Mammals	<ul style="list-style-type: none"> <li>• Species occurrence and distribution within the RAA</li> <li>• Vessel strikes with marine mammals</li> </ul>

## 8.2 Project Effects Monitoring

Several annual monitoring programs will be implemented to verify IS predictions of project effects on wildlife:

- Remote cameras will provide passive, continuous monitoring of wildlife near the Project
- Caribou collaring programs led by the GN and Government of Northwest Territories (GNWT) will provide location data on mainland and island caribou interacting with the Project
- Active monitoring by Environmental Monitors who will tour the Project PDA and document wildlife occurrences
- Incidental wildlife observations that document interactions with the Project, equipment, or personnel

Monitoring programs will address the following IS predictions:

- Direct habitat loss and surface disturbance from the PDA
- Indirect habitat loss from sensory disturbances (i.e., noise, dust, human activity)
- Mortality events from interactions with vehicles (e.g., right-of-way compliance, speeds), predators (including predator occurrence near the Project), and hunters (location and timing of harvesting)
- Movement and migration filters from the PDA

### 8.2.1 Monitoring Programs

#### 8.2.1.1 Remote Cameras

Remote cameras will provide passive, continuous monitoring of wildlife occurrences near the Project. A Qualified Professional will design the study to locate cameras in several locations along the PDA and at distances beyond the PDA. Maintenance checks of the cameras will be completed by Environmental Monitors on a pre-determined schedule as instructed by the Qualified Professional. Camera data will be analyzed and summarized annually to identify patterns in wildlife occurrence and distribution.

#### 8.2.1.2 Caribou Collars

WKR will form data sharing agreements with the GN and GNWT for annual access to caribou collar data for the BCH, DUH, Beverly/Ahiak herd, and Bluenose-East herd. For the BCH, monitoring will primarily focus on when individuals interact with the Project during spring migration (April 20 to June 1), calving/post-calving (June 2 to 28), and summer (June 29 to September 6). For the DUH, monitoring will focus on when individuals migrate to the mainland (post-fall migration, November 9 to 30), during winter residency on the mainland, and when individuals prepare to migrate towards Victoria Island (pre-spring migration staging, April 15 to May 28). Caribou from other herds like the Beverly/Ahiak or Bluenose-East herds may interact with the Project, but collar data suggest these interactions are infrequent. Collar data will be analyzed annually to assess caribou habitat use and movement.

### **8.2.1.3      *Active Monitoring***

Environmental Monitors will travel the PDA to document wildlife interactions with the Project, including the line of sight surrounding the PDA. Environmental Monitors will document wildlife occurrences, counts, crossings, and distribution. When possible, interactions between wildlife will be documented, including predator-prey interactions, as well as interactions between wildlife and humans, including trappers and hunters.

### **8.2.1.4      *Incidental Observations***

All project personnel and third-party users of the Project will be advised to document incidental wildlife observations, including interactions with the Project, equipment, and humans. Wildlife logbooks will be distributed at facilities throughout the Project for individuals to transcribe and submit their observations. Information from wildlife logbooks will be entered into a central Excel database and provided annually to a Qualified Professional for review.

## **8.2.2      Impact Statement Predictions**

### **8.2.2.1      *Direct Habitat Loss and Surface Disturbance***

#### **Objective**

The objective of monitoring direct habitat loss and surface disturbance is to determine whether the Project's actual disturbance footprint aligns with the IS predictions for changes in habitat for all focal wildlife species.

#### **Methods**

Disturbance footprints will be delineated using satellite imagery on an annual basis during the construction phase. The overall amount of disturbance will be quantified and compared to the IS predictions.

#### **Trigger for Adaptive Management**

If the Project's disturbance footprint exceeds IS predictions, WKR will notify the GN to discuss resolution options. Any proposed disturbances that are not included in the Project Description will need to be discussed with the GN and the NIRB for regulatory requirements.

### **8.2.2.2      *Indirect Habitat Loss***

#### **Objective**

The objective of monitoring indirect habitat loss is to determine whether sensory disturbances (i.e., noise, dust, human activity) from the Project cause wildlife to avoid or reduce habitat use of areas near the Project consistent with IS predictions.

## Methods

Indirect habitat effects are best described as the ZOI around human disturbances. The ZOI is the distance within which human activities may alter wildlife behaviour or habitat use. ZOI varies amongst wildlife species due to their tolerance towards human activity, depending on the different types and extents of human activity. For example, areas with continuous and intense human activity likely have larger ZOIs than areas infrequent and moderate human activity. Table 8.2 provides the Project ZOIs used for focal wildlife species that informed the IS predictions.

**Table 8.2 Zone of Influences for Focal Wildlife Species**

<b>Focal Species</b>	<b>Project Component</b>	<b>Zone of Influence (m)</b>
Caribou	Port PDA and Aerodrome PDA	4,000
	Road PDA	1,000
Muskox	Port PDA and Aerodrome PDA	4,000
	Road PDA	1,500
Grizzly Bear	Port PDA and Aerodrome PDA	2,000
	Road PDA	800
Moose	Project PDA	300
Wolverine	Project PDA	1,000
Passerines	Project PDA	300
Waterbirds	Project PDA	250
Raptors	Project PDA	1,500

Verification of indirect habitat effects relies on two sources of information: (1) the occurrence and distribution of wildlife species, and (2) the magnitude and extent of sensory disturbances that cause wildlife avoidance responses. A Qualified Professional will evaluate both sources of information to determine whether indirect habitat effects match IS predictions. The type of wildlife occurrence data used in the evaluation will depend on the species. For caribou, information on occurrence and distribution will be informed by remote camera photos and Global Positioning System (GPS) collar locations. For other wildlife (e.g., muskox, grizzly bear, moose, and possibly wolverine), occurrence and distribution will be informed by remote camera photos. Additionally, occurrence and distribution of all focal wildlife species will be informed by active monitoring (i.e., Environmental Monitors) and incidental observations, where possible. Information on sensory disturbances is collected through the respective management or monitoring plans (e.g., Air Quality Monitoring Plan for dust, Noise Monitoring Plan for noise, human activity locations are known during construction activities, as well as during operations and maintenance).

Verification of IS predictions will be quantitative or qualitative, depending on the data available for each focal species. For example, verification of indirect effects on caribou habitat will employ a modelling technique that uses GPS collar data, as demonstrated in the IS (see Section 16.4.2 of the IS), and extend that method to estimate the Project's ZOI. In contrast, verification of indirect effects on other wildlife or

birds will rely on a qualitative (or semi-quantitative) comparison between occurrence data and predicted ZOIs in the IS. Information on sensory disturbances (e.g., dust, noise, activity locations) will be assessed qualitatively for all focal wildlife species by comparing the magnitude and extent of those sensory disturbances to predicted ZOIs in the IS.

### **Trigger for Adaptive Management**

If analysis identifies a difference in the actual ZOI on any of the wildlife species from the effects assessment predictions, discussions will occur to determine the overall effect to the focal wildlife species, in collaboration with the Kitikmeot Inuit Association and the GN. Additional mitigation measures may be introduced to reduce Project-related effects.

#### **8.2.2.3      *Direct and Indirect Mortality***

##### **Objective**

The objective of monitoring direct and indirect mortality is to determine whether Project-related mortalities from vehicle collisions, hunters, and predators are consistent with IS predictions.

##### **Methods**

Active monitoring by Environmental Monitors and incidental observations by Project personnel and third-party users will provide information on mortality events or close encounters. These findings will help inform the management of human activity outlined in Section 6. Efforts will be made to prevent a wildlife mortality event based on the mitigations identified in Table 7.1. Iterations to these methods will be included in the Final WMMP and will be determined in consultation with the Kitikmeot Inuit Association, the GN, and the GNWT.

### **Trigger for Adaptive Management**

If a wildlife mortality event occurs that is directly (e.g., vehicle collision) or indirectly (e.g., facilitated predation) attributed to the Project, an investigation will be completed to understand the circumstances that caused the mortality event. If the investigation identifies an unforeseen circumstance that may result in an increased mortality risk to wildlife (e.g., illegal harvesting or poaching), adaptive management will be triggered. WKR will consult with the Kitikmeot Inuit Association, the GN, and the GNWT on proposed adaptive mitigation measures to prevent or reduce the increased mortality risk to wildlife.

#### **8.2.2.4      *Movement and Migration***

##### **Objective**

The objective of monitoring movement and migration is to determine whether the Project affects the timing and location of wildlife crossings and, if so, whether these effects are consistent with IS predictions.

## **Methods**

The methods used to verify Project effects on movement and migration will depend on the focal species. For caribou, local movements (e.g., road crossings) and broader migration will be informed through the analysis of GPS collar locations. The relatively high frequency of GPS locations (~3 per day) is sufficient to identify crossing locations, verify migration pinch points, and analyze delays in migration. For other wildlife, local movements (e.g., crossing locations) will be informed by remote camera photos, where possible. Other methods like active monitoring active monitoring (i.e., Environmental Monitors) and incidental observations will provide further information on local movements by focal wildlife species.

## **Trigger for Adaptive Management**

Triggers for adaptive management will be included in the Final WMMP and will be determined in consultation with Kitikmeot Inuit Association, IAG, GN and GNWT. Adaptive management measures may include work pauses or temporary shutdown of Project components at designated locations and times that coincide with frequent wildlife crossings or migration corridors/ pinch-points.

## **8.3 Monitoring to Trigger Wildlife Mitigations**

Wildlife monitoring is required to understand when animals may interact with the Project so that human management and mitigation measures can be triggered to protect wildlife and humans. The monitoring programs to help inform on wildlife occurrences include:

- Active wildlife monitoring
- Incidental observations
- Caribou collar data monitoring

### **8.3.1 Active Wildlife Monitoring**

#### **Objective**

The objective of active wildlife monitoring is to identify when wildlife are identified in the vicinity of Project activities and infrastructure that may trigger human management and mitigation measures as outlined in Section 6 and Section 7, respectively.

#### **Methods**

Environmental Monitors will tour the Project PDA and document any wildlife observed. Depending on the species and its proximity to the Project or human activity, human management measures may be implemented as outlined in Section 6. Mitigation measures will be implemented as described in Table 7.1.

## **Trigger for Adaptive Management**

If the mitigation measures outlined in Table 7.1 or the management of human activity as described in Section 6 do not achieve the desired result, adaptive management for the activity or concern is triggered. If there is a potential concern that wildlife may exhibit aggressive behaviour towards personnel, a temporary shutdown of human activity will be implemented until the wildlife are no longer in proximity to the area of interest, as confirmed by the Environmental Monitors.

### **8.3.2 Incidental Observations**

#### **Objective**

The objectives of documenting incidental wildlife observations are:

- To help inform personnel of when wildlife occur in proximity to the Project, and their geographical location
- Managing the avoidance of wildlife by aircraft, vehicles and equipment, and other human activities
- Identifying potential conflicts with the Project such as high-risk areas for wildlife-vehicle collisions or other potential situations of an increased mortality risk to either wildlife or humans

#### **Methods**

All project personal and third-party users of the Project will be advised to report wildlife observations in the wildlife logbooks that are distributed throughout the Project. If caribou, muskox, grizzly bear, or wolverine are identified near the Project (i.e., <500 m), personnel must communicate the observation to the Environmental Supervisor and Site Manager immediately via radio. Human activity management may be implemented as described in Section 6, with mitigation measures implemented as described in Table 7.1.

For birds, any instances of feigning (e.g., broken wing movements) or aggressive behaviour to personnel (e.g., dive-bombing), personnel must cease their activities and report these instances to the Environmental Monitors so they can assess the area. As well, any active nest sites discovered incidentally should have a temporary barrier placed around the nest, and the nest must be reported immediately to the Environmental Monitors. Human activity management may be implemented as described in Section 6, with mitigation measures implemented as described in Table 7.1.

## **Trigger for Adaptive Management**

Triggers for adaptive management will be included in the Final WMMP and will be determined in consultation with the Kitikmeot Inuit Association and the GN.

### 8.3.3 Caribou Monitoring

#### Objective

Regional monitoring from continuous review of GPS collar data (see Section 8.2.1.2), and local-scale monitoring along the Project Road by dedicated Environmental Monitors (see Section 8.3.1, will provide early warning systems as part of the caribou trigger action response plan (TARP). Caribou collaring data will help identify when caribou are approaching or near Project infrastructure (i.e., Port site, Road, Aerodrome, Jericho Station) but beyond the line of sight of the PDA. GPS locations from collared caribou will be used to anticipate Project interactions and initiate Level 2 (site notification) human activity management measures to mitigate Project effects on caribou. Observations through active monitoring by Environmental Monitors will identify caribou proximity and behaviour within the line of sight of the PDA. These observations would initiate Level 3 (site alert) or Level 4 (temporary shutdown of infrastructure) human activity management measures. The frequency and intensity of monitoring by Environmental Monitors will depend on sensitivity timings for caribou. Daily active monitoring will occur from April 20 to September 6 for the BCH, and from November 1 to November 30 and April 15 to May 30 for the DUH. During the remainder of the year, active monitoring will occur weekly.

Specific caribou-related triggers will be included in the Final WMMP and will be determined in consultation with the Kitikmeot Inuit Association, the GN, and the GNWT.

### 8.3.4 Grizzly Bear and Wolverine Monitoring

In addition to the monitoring strategies presented in Sections 8.3.1 and 8.3.2, there are a number of monitoring programs to trigger mitigation and management for grizzly bear and wolverine. These include:

- Wildlife den monitoring
- Project infrastructure monitoring for wildlife use
- Waste management monitoring

#### 8.3.4.1 *Wildlife Den Monitoring*

#### Objective

The objective of monitoring wildlife dens identified either from pre-construction wildlife sweeps or incidental observations is to determine den status (i.e., active, not active) to help inform appropriate mitigation measures.

#### Methods

All den sites identified either from pre-construction wildlife sweeps or incidental observations will be documented with coordinates and potential species use during the construction phase. Buffers will be applied around all active dens sites during the construction phase as identified in Section 7.2. If the construction zone overlaps with the buffer for an active den, construction will be temporarily suspended from that area until the den is determined to no longer be active. Environmental Monitors will monitor the

den site location from a safe distance using binoculars or spotting scopes to determine status (i.e., active, not active). Once the den is deemed no longer active by Environmental Monitors, construction activities may resume.

During the operations and maintenance phase, any den sites located within 1,000 m of the Project footprint will be checked for status (i.e. active, not active). Any den sites deemed active will be monitored for activity. Human activity in proximity to the active den may be managed as per Section 6.

### **Trigger for Adaptive Management**

If wildlife are suspected to abandon a den site from either monitoring efforts or from other Project-related activities, a Qualified Professional will revisit the monitoring protocol and/or the buffer distances to reduce Project-related effects on wildlife using a den. WKR will collaborate with the Kitikmeot Inuit Association and the GN regarding changes to mitigation and/or monitoring strategies related to active wildlife dens.

#### **8.3.4.2 Project Infrastructure Monitoring for Wildlife Use**

##### **Objective**

The objective of Project infrastructure monitoring is to identify if predators like grizzly bear or wolverine are interacting with infrastructure that may result in a high-risk situation for a mortality event to either wildlife or humans.

##### **Methods**

Project infrastructure will be checked daily by the Environmental Monitors for signs of wildlife activity. This includes looking for signs of digging activity around buildings or other infrastructure, damage to skirting around buildings from wildlife, or potential kill sites of wildlife.

##### **Trigger for Adaptive Management**

If no wildlife is deemed present, the area will be temporarily blocked for future use by wildlife, and repairs will be made by maintenance personnel to prevent further use or activity by wildlife. If wildlife are confirmed present or are potentially present, Environmental Monitors will adhere to the *Wildlife Deterrence Program* from the Government of Nunavut.

If a potential wildlife kill site is identified, the Environmental Monitors will adhere to the mitigation for wildlife carcasses identified in Section 6. If the wildlife carcass is located near an area of high human activity, the carcass will be removed for disposal and incineration at the waste management facility to protect humans.

### **8.3.4.3 Waste Management Monitoring**

#### **Objective**

The objective of the waste management monitoring program is to evaluate whether the waste management practices at the Project are sufficient and effective in preventing wildlife, in particular carnivores such as grizzly bear and wolverine, from being attracted to the sites and risking negative wildlife-human interactions.

#### **Methods**

Weekly inspections will occur of all waste management facilities on the Project by the Environmental Monitors. All personnel will be responsible for following strict waste management protocols and recording any incidental observations of incorrect waste management. The regular inspections will also look for signs of wildlife activity (e.g., wildlife tracks, scat or chew/claw marks).

#### **Trigger for Adaptive Management**

If wildlife (particularly predator species like grizzly bear or wolverine) become a problem (i.e., habituated to the site) environment personnel may have to implement adaptive mitigation as per Nunavut's *Wildlife Deterrence Program*.

### **8.3.5 Bird Nest Sweeps**

#### **Objective**

The objective of the pre-construction bird nest sweeps is to protect active bird nests and/or flightless young from incidental take during construction activities. Monitoring to trigger mitigation and management for waterbirds will comprise wildlife sweeps for bird nests ahead of construction activities.

#### **Method**

Under the guidance of a Qualified Professional, environmental personnel will complete wildlife sweeps ahead of construction activities during the bird nesting season (i.e. May 15 to August 18). Any active bird nests identified will have a buffer zone identified based on the setback distances identified in Section 7.2.

#### **Trigger for Adaptive Management**

Any active bird nests identified will have a no-disturbance buffer identified based on the setback distances identified in Section 7.2. No construction activity will be allowed until the young have fledged or the nest is deemed abandoned by the Environmental Monitors. Any deviation from the recommended setback distance from active nests must be pre-approved with additional mitigations provided by the Qualified Professional.

Any SARA-listed bird species' nest sites (see Section 7.3) identified during the wildlife sweeps will be protected year-round. If a nest site is identified in an active work zone or within the Project footprint, discussions will occur with Environment and Climate Change Canada (ECCC) regarding options.

Triggers for adaptive management will be included in the Final WMMP and will be determined in consultation with ECCC.

### **8.3.6 Marine Mammal Management and Monitoring**

A Marine Mammal Management and Monitoring program will be implemented for the Project. As previously noted, monitoring plans will be developed in further detail as the Project design progresses. Project design and detailed construction methods (i.e., pile installation, in-water blasting, and dredging) are particularly relevant to guide the marine monitoring program. As such, the program will be developed as construction details become available and with continued discussions with governing bodies, working groups, and other interested parties, and will include regulatory approval and/or permitting conditions.

The primary objective of the plan will be to detail mitigation measures and monitoring protocols that will be employed to reduce the potential for adverse effects on marine mammals during Construction, Operations and Maintenance. This will include information on requirements for:

- Monitoring activities
- Procedures for reporting Project interactions with marine mammals
- Implementation of best management practices (BMPs) and mitigation measures as identified in the Impact Statement and approval conditions

Mitigation and monitoring will primarily focus on managing the potential effects of acoustic disturbance and risk of mortality/injury. Canada does not currently have formal regulatory acoustic thresholds for underwater sound levels that should not be exceeded. However, there are existing best management practices and guidelines that will be incorporated into the plan, which are applicable to construction activities with the potential to increase noise in the marine environment (i.e., general shoreline works, pile installation, in-water blasting, near-shore land-based blasting).

The Fisheries and Oceans Canada (DFO) has developed a policy document, *Guidelines for the Use of Explosives in or Near Canadian Fisheries Waters*, which outlines methods and practices for the conservation and protection of fish, marine mammals, and fish habitat from the potential effects arising from the destructive forces of explosives. Among these guidelines is the directive that no explosive is to be knowingly detonated within 500m of a marine mammal.

The British Columbia (BC) Marine and Pile Driving Contractors Association and DFO have developed a policy document— *Best Management Practices for Pile Driving and Related Operations*, which identifies the BMPs for pile installation activities that occur on the water in BC. These include recommended practices for installing piles of varying materials, styles, and sizes and using a variety of methods (e.g., drop, impact, or vibratory hammer). While these guidelines were designed primarily to prevent fish mortality, they provide a basis point from which to prioritize activities that may require mitigation for marine mammals as well.

## 9 Adaptive Management Program

### 9.1 Adaptive Management and Plan Updates

Adaptive management is a systematic and iterative process aimed at enhancing effects management measures and reducing uncertainty over time by learning from monitoring outcomes. It offers a structured approach to respond when monitoring results indicate wildlife management objectives are not being met, when effects management measures are less effective than expected, or when unexpected adverse environmental effects on wildlife arise. This process involves defining problems based on monitoring data, designing and implementing adjustments to management practices, ongoing engagement, and continuously monitoring to evaluate the effectiveness of those adjustments.

### 9.2 Design the Adaptive Management Process

The adaptive management process is designed around monitoring components and the effects management measures. It will rely on the following considerations:

- **Clear Objectives, Indicators, and Metrics:** As defined in the WMMP goals and monitoring program.
- **Data Analysis and Interpretation:** Regular analysis of monitoring data to compare observed conditions against baseline data, predictions, and established targets or thresholds.
- **Action Levels/Triggers:** Pre-defined thresholds or condition ratings that trigger a review and potential adaptive management response. These may be quantitative (e.g., exceeding a specific guideline) or qualitative (e.g., confirmed presence of a new high-priority invasive species, observed decline in rare plant population health). Specific triggers will be developed during detailed monitoring plan design, along with engagement with affected Inuit and Indigenous governments and organizations and potentially affected communities, and consultation with regulators.
- **Potential Adaptation Options:** A suite of potential adjustments to effects management measures or monitoring protocols that can be implemented if triggers are reached.

### 9.3 Implement the Effects Management Measures and Evaluate Their Effectiveness

This stage of the adaptive management process involves the core cycle of adaptive management actions during Project implementation:

1. **Implement.** Effects management measures will be implemented as planned.
2. **Monitor.** The monitoring programs will be conducted according to the defined methods, locations, and frequencies. Data on the indicators and metrics will be collected.

3. **Evaluate.** Monitoring data will be analyzed and interpreted. Observed results and trends will be compared against baseline conditions, impact assessment predictions, and the targets/trends. The effectiveness of effects management measures will be evaluated based on these comparisons. Evaluation will occur regularly, typically coinciding with annual reporting or more frequently if required by specific triggers. This evaluation will be completed by qualified professionals in collaboration with WKR's environmental management team, with opportunities for input from Inuit and other Indigenous governments and organizations and potentially affected communities.

A sequence of actions, starting with investigation and potentially leading to adjustments, is triggered if monitoring data indicate environmental performance is poorer than predicted, targets are not being met, or triggers/action levels have been reached.

## **9.4 Adjust the Effects Management Measures**

If the evaluation stage indicates that adjustments are necessary, the following steps will be taken:

1. **Investigate Cause.** Determine the root cause of the deviation from expected outcomes or the trigger exceedance. This may involve reviewing monitoring data, operational practices, incident reports, or conducting further targeted investigations.
2. **Select/Design Adaptation.** Identify appropriate adjustments from the conceptual options outlined in the WMMP, or develop new, suitable adaptations based on the investigation findings. The selection will consider feasibility, cost-effectiveness, and the likelihood of successfully addressing the identified problem.
3. **Engage/Consult and Seek Approval.** Proposed adjustments will be discussed with affected Inuit and Indigenous governments and organizations, potentially affected communities, and relevant regulatory agencies. Necessary notifications and/or approvals (e.g., permit amendments) will be obtained before implementation, making sure all parties are informed.
4. **Implement Adjustment.** The revised or new effects management measure(s) will be implemented.
5. **Monitor and Evaluate.** Monitoring will continue, potentially with adjustments to focus on the effectiveness of the newly implemented measures. The adaptive management cycle may be restarted to confirm the success of the adjustment.

All adaptive management actions, including investigations, rationale for adjustments, engagement and consultation records, and evaluation of effectiveness, will be documented and reported annually.

## 10 Implementation

The implementation of this WMMP will fulfil the plan's goals and objectives to mitigate Project-related effects on wildlife. It involves clearly defined roles and responsibilities, effective information management and reporting, a structured approach to managing changes to the WMMP, and transparent communication with governing bodies, Inuit and Indigenous governments and organizations, potentially affected communities, and other interested parties.

### 10.1 Training and Orientation

All Project personnel wildlife receive an on-site orientation. One component of the orientation will address wildlife safety, awareness, monitoring, and observation requirements to help prevent or reduce Project-related effects on wildlife. This orientation will include:

- Applicable Project construction and operating conditions
- General mitigation measures described in this WMMP
- Wildlife awareness tailored to the focal species identified in Section 5
- Predator awareness training
- Instructions on recording wildlife observations in wildlife logbooks which will be provided at multiple locations throughout the Project

### 10.2 Roles and Responsibilities

This section outlines the key roles and responsibilities associated with the implementation of the WMMP. Details will become more refined as the WMMP evolves with future revisions.

#### **West Kitikmeot Resources Corp. Representative**

- Hold overall accountability for the WMMP being implemented for the Project
- Confirm adequate financial, human, and logistical resources are allocated
- Maintain compliance with all relevant permits, licenses, and regulatory requirements pertaining to wildlife
- Lead engagement with affected Inuit and Indigenous governments and organizations and potentially affected communities, and consultation with regulatory agencies regarding the WMMP
- Oversee the adaptive management process and approve substantial changes to the WMMP

#### **Environmental Manager (or equivalent)**

- Manage day-to-day WMMP implementation
- Coordinate and supervise monitoring activities
- Serve as the primary point of contact for WMMP matters

- Oversee data quality, analysis, interpretation, and reporting
- Lead review of monitoring results and initiate adaptive management responses
- Facilitate Inuit and Indigenous participation in monitoring activities

#### **Site Manager**

- Hold overall responsibility for the WMMP by providing personnel access to the document, and confirm that all personnel undergo a site orientation that addresses the WMMP requirements
- Monitor mitigation effectiveness as identified in Table 7.1

#### **Site Personnel**

- Follow all WMMP requirements and related environmental management plans
- Implement effects management measures during onsite activities
- Report incidents or observations related to vegetation or wildlife to the Environmental Manager

#### **Environmental Monitors**

- Conduct active wildlife monitoring for all Project components
- Inform personnel when wildlife have been identified in proximity to the Project, and communicate mitigation measures to prevent or reduce concerns
- Inform Site Manager of wildlife occurrences and provide recommendations regarding human activity management
- Advise personnel when wildlife are no longer in the area and that activities can resume

#### **Appropriately Qualified Professionals / Environmental Consultants**

- Design detailed monitoring programs and methodologies
- Conduct or oversee wildlife monitoring fieldwork and data collection
- Complete data analysis, interpretation, and technical reporting
- Provide expert advice on wildlife behaviour, ecology, and adaptive management

### **10.3 Reporting Requirements**

Annual Reporting will summarize monitoring results from the previous year. The report content will meet NIRB Project Certificate requirements that will include:

- A summary of monitoring methods
- Results of monitoring for each component
- Comparison of results against baseline conditions, environmental assessment predictions, and relevant targets/thresholds
- An evaluation of the effectiveness of implemented effects management measures

- Details of any adaptive management actions undertaken or recommended
- A summary of any engagement with Inuit or Indigenous governments and organizations, potentially affected communities, and regulatory agencies

The Annual Report will be distributed to governing bodies, Inuit and other Indigenous governments and organizations and potentially affected communities for their review, input, and information, as appropriate. Summaries of monitoring results may be made available to other interested parties and the public, as appropriate.

## 10.4 Change Management

The WMMP is a living document and may be updated or amended as part of the adaptive management process or in response to other factors, including:

- Results of monitoring and evaluation leading to adaptive management actions
- New or revised regulatory requirements or guidelines
- New scientific information, best practices, or technological advancements relevant to monitoring or management
- Feedback or new information from Inuit or Indigenous engagement or interested parties consultation
- Substantial changes to the Project design, schedule, or activities
- Unanticipated environmental events

Should updates or amendments to the WMMP be initiated, the process for change management will involve:

- **Identification and Proposal:** A proposed change, along with its rationale, will be documented by the Environmental Manager or designated Qualified Professional.
- **Internal Review:** WKR management and relevant technical staff will review the proposed change.
- **Engagement:** For substantial proposed amendments, WKR will engage with affected Inuit and Indigenous governments and organizations and potentially affected communities and consult with relevant regulatory agencies to discuss the proposed changes and solicit feedback.
- **Approvals:** If required, necessary regulatory approvals or permit amendments for changes to the WMMP will be obtained.
- **WMMP Update:** Once approved and finalized, the WMMP document will be formally updated, including version control notation.
- **Communication:** Updated versions of the WMMP and summaries of substantial changes will be communicated to relevant Project personnel, contractors, Inuit and Indigenous governments and organizations, potentially affected communities, and regulatory agencies.

## 11 References

- Advisory Committee for Cooperation on Wildlife Management. 2021. Taking Care of Caribou: The Cape Bathurst, Bluenose-West, and Bluenose-East barren-ground caribou herds management plan. Yellowknife, NT.  
<https://static1.squarespace.com/static/5d24b5101204ac00011a8705/t/6604440c0c01923bbe9ca2b6/1711555603510/Taking+Care+of+Caribou+Management+Plan+2021.pdf>
- Agnico Eagle Mines Limited. 2022. February. Agnico Eagle—Meliadine Division. Terrestrial Environment Management and Monitoring Plan.
- Agnico Eagle Mines Limited. 2025. April. Wildlife Mitigation and Monitoring Plan—Agnico Eagle Hope Bay.
- Baffinland Iron Mines Corporation. 2023. Mary River Project—Terrestrial Environment Mitigation and Monitoring Plan (Version 2).
- Bathurst Caribou Advisory Committee. 2021. Bathurst Caribou Management Plan (p. 66).  
[https://www.gov.nt.ca/ecc/sites/ecc/files/resources/bathurst\\_caribou\\_management\\_plan\\_aug\\_2021\\_1.pdf](https://www.gov.nt.ca/ecc/sites/ecc/files/resources/bathurst_caribou_management_plan_aug_2021_1.pdf)
- Compass Resource Management Ltd. 2025. Bathurst Caribou Range Plan 5-Year Review – Workshop Report (p. 21) [Report on file with Stantec/Grays Bays client]. Prepared for Government of Northwest Territories, Department of Environment and Climate Change.
- ECCC (Environment and Climate Change Canada). 2018. Nesting periods. Available at:  
<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html>. Accessed July 21, 2025.
- ERM Consultants Canada Ltd. 2025. Bathurst Caribou Zone of Influence Literature Review (p. 18). Prepared for the Government of Northwest Territories.
- GN (Government of Nunavut). 2017a. Bathurst Caribou Herd Total Allowable Harvest Order, Nu Reg 017-2017. CanLII. <https://www.canlii.org/en/nu/laws/regu/nu-reg-017-2017/latest/nu-reg-017-2017.html>
- GN. 2017b. Nunavut Grizzly Bear Co-Management Plan (p. 15). Government of Nunavut, Department of Environment.
- GN. 2020. Interim Total Allowable Harvest Limit Set for Dolphin and Union Caribou Herd.
- GN. 2021. February 26). Dolphin and Union Caribou Herd Total Allowable Harvest Order, R-005-2021.
- GN. 2024a. Dolphin and Union Caribou Harvest Data (2017 to 2023) [Dataset].

**Grays Bay Road and Port Project  
Wildlife Mitigation and Monitoring Plan**

Section 11: References  
April 2026

---

GN. 2024b. Summary of the Nunavut Hunting Regulations 2024|2025 (p. 15).

[https://www.gov.nu.ca/sites/default/files/documents/2024-12/Nunavut\\_Hunting\\_Regulations\\_Guide\\_2024-25.pdf](https://www.gov.nu.ca/sites/default/files/documents/2024-12/Nunavut_Hunting_Regulations_Guide_2024-25.pdf)

GN and GNWT (Government of Nunavut and Government of Northwest Territories). 2018. Management plan for the Dolphin and Union Caribou (*Rangifer tarandus groenlandicus* x *pearyi*) in the Northwest Territories and Nunavut 2018 (p. 107).

[http://publications.gc.ca/collections/collection\\_2018/eccc/En3-5-95-2018-eng.pdf](http://publications.gc.ca/collections/collection_2018/eccc/En3-5-95-2018-eng.pdf)

GNWT (Government of Northwest Territories). 2015. Northern Land Use Guidelines: Northwest Territories Seismic Operations. Government of Northwest Territories, Department of Lands.

[https://www.lands.gov.nt.ca/sites/lands/files/resources/nlug\\_seismic\\_2015\\_english\\_-\\_16\\_sept\\_2015.pdf](https://www.lands.gov.nt.ca/sites/lands/files/resources/nlug_seismic_2015_english_-_16_sept_2015.pdf)

GNWT. 2019. Bathurst Caribou Range Plan (p. 86). Environment and Natural Resources, Government of the Northwest Territories.

IAG (Inuit Advisory Group). 2025. Grays Bay Road and Port Project What We Heard Report—Inuit Advisory Group Workshop Summary 1 (Inuit Knowledge Integration Methods and Mitigation Strategies, p. 85). Prepared for West Kitikmeot Resources Corp. by Nunami Stantec Ltd.

Nunavut Planning Commission. 2023. Recommended Nunavut Land Use Plan.

NWMB (Nunavut Wildlife Management Board). 2024. NWMB Strategic Plan 2024-2029.

NWMB and GN-DOE (Nunavut Wildlife Management Board and Government of Nunavut - Department of Environment). 2019. Non-Inuit Grizzly Bear Sport Hunt Quota. <https://www.nwmb.com/en/list-all-site-files/decision-documents/terrestrial-mammals/grizzly-bear-2>

# Appendix 37C

## Air Quality Monitoring and Management Plan (Draft)

# Grays Bay Road and Port Project Air Quality Monitoring and Management Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



## Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>1</b>
1.1	Scope and Objectives .....	1
1.2	Plan Development and Engagement .....	2
1.2.1	How Inuit, Indigenous, and Community Knowledge Informed This AQMMP .....	2
1.3	Regulations, Approvals, and Guidelines .....	2
1.4	Related Management Plans .....	4
1.5	Roles and Responsibilities .....	4
<b>2</b>	<b>Air Quality Management Program</b> .....	<b>5</b>
2.1	Overview .....	5
2.2	Mitigation Measures .....	5
<b>3</b>	<b>Ambient Air Quality Monitoring Program</b> .....	<b>8</b>
3.1	Monitored Air Contaminants .....	8
3.2	Monitoring Sites .....	10
3.3	Monitoring Methods .....	11
3.4	Monitoring Schedule .....	11
3.5	Quality Assurance and Quality Control .....	12
<b>4</b>	<b>Reporting Framework</b> .....	<b>13</b>
<b>5</b>	<b>Adaptive Management Plan</b> .....	<b>14</b>
5.1	Trigger Action Response Plan .....	14
<b>6</b>	<b>References</b> .....	<b>15</b>

## List of Tables

Table 1.1	Summary of Key Legislation, Policy, and Regulatory Guidance Documents for Air Quality .....	3
Table 2.1	Mitigation Measures for Project Diesel Exhaust and Incinerator Emissions .....	6
Table 2.2	Mitigation Measures for Project Fugitive Dust Emissions .....	7
Table 3.1	Applicable Regulatory Criteria for Monitored Air Contaminants .....	9
Table 3.2	Ambient Air Quality and Meteorological Station Locations .....	10
Table 3.3	Ambient Air Quality Monitoring Methods .....	11

## Abbreviations

AAQO	Ambient Air Quality Objective
AQGs	Air Quality Guidelines
AQMMP	Air Quality Management Plan
BC	British Columbia
BC ENV	British Columbia Ministry of Environment and Parks, formerly Ministry of Environment and Climate Change Strategy
BCFSM	BC Field Sampling Manual
CAAQS	Canadian Ambient Air Quality Standards
CCME	Canadian Council of Ministers of the Environment
IS	Impact Statement
EMLI	Ministry of Energy, Mines and Low Carbon Innovation
EMS	Environmental Management System
EPP	Environmental Protection Plan
GN	Government of Nunavut
GN-DOE	Government of Nunavut Department of Environment
IS	Impact Statement
NAAQS	Nunavut Ambient Air Quality Standards
NIRB	Nunavut Impact Review Board
NO <sub>2</sub>	nitrogen dioxide
NTD	Note to Draft
PCO	Pollution Control Objectives
PM	particulate matter
PM <sub>10</sub>	inhalable particulate matter with an aerodynamic diameter less than 10 micrometres
PM <sub>2.5</sub>	respirable particulate matter with an aerodynamic diameter less than 2.5 micrometres
Project, the	Grays Bay Road and Port Project
QA/QC	quality assurance/quality control
SOGs	standards, objectives and guidelines
TARP	Trigger Action Response Plan
TCWR	Tibbitt to Contwoyto Winter Road

**Grays Bay Road and Port Project  
Air Quality Monitoring and Management Plan (Draft)**

Abbreviations  
April 2026

---

TSP ..... total suspended particulate  
WHO.....World Health Organization  
WKR.....West Kitikmeot Resources Corp.



## Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

This document is a conceptual Air Quality Monitoring and Management Plan (AQMMP) and has been developed in accordance with the requirements of Section 8.1.1 (Air Quality) and Section 11.3 (Monitoring and Mitigation Plans) of the Impact Statement (IS) Guidelines (NIRB File No. 24XN038; NIRB 2026).

The Plan is a “living document.” It will be updated based on management reviews, monitoring results, regulatory changes, or other Project-related changes.

## 1.1 Scope and Objectives

Note to Draft (NTD): Update as design progresses

The conceptual AQMMP outlines the management practices, mitigation measures and ambient air quality monitoring program that are implemented to manage and mitigate the effects of the Project on air quality during the Construction and Operations and Maintenance phases. The potential for air quality effects is primarily associated with fugitive dust generated by ground disturbance and traffic along unpaved roads, and diesel combustion emissions from diesel-fueled power generation facilities and diesel off-road mobile equipment.

The objective of the conceptual AQMMP is to:

- Implement management and mitigation measures to reduce emissions from the Project activities to the extent feasible.
- Implement an ambient air quality monitoring program during Project Construction and Operations and Maintenance to monitor ambient particulate matter (PM) and nitrogen dioxide (NO<sub>2</sub>) concentrations relative to regulatory ambient air quality criteria.
- Use the ambient air quality monitoring results for PM to implement adaptive management for fugitive dust emissions.
- Validate the predictions of the atmospheric dispersion model.
- Verify Project-related air quality compliance as committed to in the Impact Statement (IS).

## 1.2 Plan Development and Engagement

NTD: Development of the AQMMP was informed by the following:

- *Guidelines for the Preparation of an Impact Statement for West Kitikmeot Resources Corp's Grays Bay Road and Port Proposal* (hereafter referred to as "NIRB IS Guidelines") (NIRB File No. 24XN038; NIRB 2026)
- Project Description (Volume 2, Section 2)
- Engagement with Kitikmiut and other Indigenous groups (Volume 3, Sections 4, 5, and 6)
- The Assessment of Potential Effects on Air Quality (Volume 5, Section 11)

### 1.2.1 How Inuit, Indigenous, and Community Knowledge Informed This AQMMP

Through the Project-specific engagement program, Inuit, other Indigenous groups, and other potentially affected communities shared comments, perspectives, concerns, and recommendations related to air quality. Through reviewing the information, Inuit, Indigenous, and Community Knowledge has influenced the development of mitigation measures and monitoring programs provided in this AQMMP.

As such, West Kitikmeot Resource Corp. (WKR), will continue to engage with Inuit, Indigenous groups, and potentially affected communities during development of the monitoring programs in the AQMMP. Shared comments, perspectives, concerns, and recommendations from engagements will be used to support further refinement of the AQMMP.

## 1.3 Regulations, Approvals, and Guidelines

NTD: Update as necessary

The AQMMP is guided by the *Guidelines for the Preparation of an Impact Statement for West Kitikmeot Resources Corp's Grays Bay Road and Port Proposal* (NIRB File No. 24XN038; NIRB 2026), along with applicable legislation and other relevant policies, guidelines, and frameworks summarized in Table 1.1. Together, these documents outline the statutory, regulatory requirements, and guidance relevant to the assessment and management of air quality.

The Government of Nunavut Department of Environment (GN-DOE) is responsible for enforcing the *Environmental Protection Act* (1988), which was established to promote pollution prevention and safeguard both the environment and human health, thereby supporting sustainable development. Ambient air quality standards, objectives and guidelines (SOGs) have been developed by the Canadian federal government and individual provinces and territories to assist or mandate the management of common air contaminants. Project-related air quality compliance will be verified against the Nunavut Ambient Air Quality Standards outlined in the Nunavut Environmental Guideline for Ambient Air Quality (GN 2023a; GN 2011).

**Table 1.1 Summary of Key Legislation, Policy, and Regulatory Guidance Documents for Air Quality**

Regulation or Policy	Description
<b>Federal</b>	
<i>Canadian Environmental Protection Act, S.C. 1999, c. 33</i>	c. 33 allows for the establishment of non-statutory air quality criteria (standards) in the country.
Canadian Ambient Air Quality Standards Handbook (CCME 2025)	The purpose of this document is to compile information about Canadian Ambient Air Quality Standards (CAAQS) and answer the most common questions related to their history, purpose, development and implementation.
Guidance Document on Achievement Determination for Canadian Ambient Air Quality Standards for Nitrogen Dioxide (CCME 2020a)	Provides information on the CAAQS and management levels for NO <sub>2</sub> and information on the procedures, methodologies and criteria for determining whether the CAAQS for NO <sub>2</sub> are achieved or exceeded at monitoring stations and within air zones.
Guidance Document on Achievement Determination for Canadian Ambient Air Quality Standards for Fine Particulate Matter and Ozone (CCME 2012)	Intended as a reference tool for jurisdictions and the public, providing information, methodologies, criteria and procedures for reporting on achievement of the CAAQS for PM and ozone.
<b>Territorial</b>	
<i>Environmental Protection Act (1988)</i>	This Act provides for the protection of the environment in Nunavut.
<i>Nunavut Planning and Project Assessment Act</i>	Part 3 sets out the requirements for screening and review of projects in Nunavut.
Environmental Guideline Ambient Air Quality (GN 2023a)	This Guideline has been prepared by the Environmental Protection Division of GN-DOE to increase awareness and understanding of the risks, hazards, and best management practices associated with common airborne contaminants.
<b>Provincial – British Columbia</b>	
BC Ambient Air Quality Objectives (BC ENV 2021)	Air Quality Objectives are to be used to characterize air quality and potential air quality impacts in areas where people live or where other sensitive receptors are likely to be found.
Dustfall Monitoring and Pollution Control Objectives (BC ENV 2020)	Pollution control objectives are used to evaluate potential impacts to soil, water and vegetation in BC.
BC Air Quality Dispersion Modelling Guideline (BC ENV 2022)	The document provides key guidance on model selection, application of models for regulatory purposes in BC, and best modelling practices.
Developing a Fugitive Dust Management Plan for Mines in BC (EMLI and BC ENV 2023)	The document provides technical guidance for the development of a Fugitive Dust Management Plan for mines in British Columbia.
BC Field Sampling Manual (BCFSM; BC ENV 2013; 2020)	Part A of the BCFSM (BC ENV 2013) provides guidance on the deployment, operation, data processing, and quality assurance and quality control (QA/QC) of air quality monitoring equipment. Part B of the BCFSM (BC ENV 2020) is specific to air quality monitoring and emissions testing with Part B1 specific to ambient air quality monitoring.

## 1.4 Related Management Plans

The AQMMP is intended to act as a stand-alone document but intersects with information from other management plans in the Project Environmental Management System (EMS) framework. The following management plans provide complimentary information including mitigation measures that are referenced in the AQMMP:

- Environmental Protection Plan
- Borrow Pit and Quarry Management Plan
- Explosives Management Plan
- Port Management Plan
- Road Management Plan
- Waste Management Plan

## 1.5 Roles and Responsibilities

NTD: Update as necessary

The roles and responsibilities for implementation of the mitigation measures and the monitoring programs are provided in detailed descriptions within the Environmental Protection Plan (Construction Phase) and in the Port Management Plan and Road Management Plan (Operations and Maintenance Phase).

The individuals identified within this AQMMP for the implementation of specific program monitoring are provided within each monitoring activity described in Section 3.5.

WKR, its contractors, and other authorized personnel working for, or on behalf of WKR will be trained and competent in the purpose and methods for implementation of the mitigation measures and monitoring programs included in this AQMMP.

## 2 Air Quality Management Program

### 2.1 Overview

The AQMMP is being developed and implemented for all phases of the Project. The AQMMP will specify the mitigation measures for the management and reduction of emissions during all project phases, the ambient air quality and meteorology monitoring program, and the reporting requirements of monitoring results to GN-DOE.

Ambient air quality and meteorology monitoring will include:

- Meteorological monitoring (temperature, wind speed, wind direction, relative humidity, solar radiation and rainfall)
- Ambient PM (TSP, PM<sub>10</sub>, PM<sub>2.5</sub>) monitoring
- Ambient NO<sub>2</sub> monitoring
- Dustfall Monitoring

Visual inspection and the results of the ambient PM monitoring will be used to assess the effectiveness of the dust mitigation measures and to evaluate the need for more rigorous dust mitigation.

Monitoring requirements will be reviewed on a case-by-case basis should any complaints related to air quality occur from Inuit, other Indigenous groups, and other potentially affected communities because of project activities.

The implementation of the mitigation measures and other commitments described in this section will be the responsibility of WKR and/or contractors. The mechanisms used to require contractors and subcontractors to comply with these measures are expected to include environmental protection plans and contract documents, in conjunction with the required management plans (Volume 11).

### 2.2 Mitigation Measures

Mitigation measures will be implemented to manage and reduce Project emissions during all Project phases. The Project will generate the following emissions:

- **Gaseous Emissions:** The diesel-fueled power generation facilities and the operation of the diesel off-road equipment and vehicles will generate diesel combustion exhaust emissions. The domestic waste incinerators will generate combustion exhaust and PM emissions.
- **Fugitive Dust Emissions:** Fugitive dust emissions will result from activities such drilling, blasting, quarrying activities (crushing, screening, stacking and material transfer of aggregate material) and off-road mobile equipment and vehicles movement on unpaved roads. These activities result in PM emissions of various size ranges (e.g., TSP, PM<sub>10</sub> and PM<sub>2.5</sub>) that can be deposited outside the PDA onto the ground and water surfaces (i.e., dustfall).

**Grays Bay Road and Port Project  
Air Quality Monitoring and Management Plan (Draft)**

Section 2: Air Quality Management Program  
April 2026

A summary of mitigation measures to manage and reduce diesel exhaust and incinerator emissions during all phases of the Project is provided in Table 2.1. A summary of mitigation measures to manage and reduce fugitive dust emissions during all phases of the Project is provided in Table 2.2. Additional mitigation measures can be implemented on an as-required basis.

**Table 2.1 Mitigation Measures for Project Diesel Exhaust and Incinerator Emissions**

<b>Key Mitigation Measures</b>	<b>Project Phase</b>	<b>Means through which Mitigation is Achieved (Project Design, Management/ Monitoring Plan)</b>	<b>Responsible Party</b>
Manage vehicle and equipment emissions by conducting regular maintenance.	C, OM	AQMMP	Implemented by Contractors; verified by Environmental Monitors
Manage vehicle and equipment emissions by regulating idling times.	C, OM	AQMMP	Implemented by Contractors; verified by Environmental Monitors
Manage vehicle and equipment emissions by regulating cold starts.	C, OM	AQMMP	Implemented by Contractors; verified by Environmental Monitors
Diesel mobile equipment (vehicles and equipment) and diesel power generators will be powered by low-sulphur fuel.	C, OM	AQMMP	Implemented by Contractors; verified by Environmental Monitors
Construction contractors will be encouraged to use newer equipment that meets Tier 4 emission standards and are no older than 13-years (built in or after 2012), where possible	C, OM	AQMMP	Implemented by Contractors; verified by Environmental Monitors
Contractors will be encouraged to use multi-passenger vehicles (e.g., passenger van or bus) to move crews.	C, OM	AQMMP	Implemented by Contractors; verified by Environmental Monitors
Incinerators will be designed and operated in accordance with manufacturer's specifications and applicable guidelines. Details of management and operation of the incinerators will be included in the Waste Management Plan	C, OM	Project Design Waste Management Plan	Vendor Environmental Monitors

Notes:

C = Construction

OM = Operations and Maintenance

**Grays Bay Road and Port Project  
Air Quality Monitoring and Management Plan (Draft)**

Section 2: Air Quality Management Program  
April 2026

**Table 2.2 Mitigation Measures for Project Fugitive Dust Emissions**

<b>Key Mitigation Measures</b>	<b>Project Phase</b>	<b>Means through which Mitigation is Achieved (Project Design, Management/ Monitoring Plan)</b>	<b>Responsible Party</b>
Application of water on unpaved roads and unpaved surfaces to suppress fugitive dust emissions. Dust suppression will follow the Nunavut Environmental Guideline: Dust Suppressants (GN 2023b).	C, OM	AQMMP	Environmental Monitors
Mobile equipment speed will be limited to the posted speed limits on project road surfaces	C, OM	AQMMP	Implemented by Contractors; verified by Environmental Monitors
Storage areas will be kept in a condition that minimizes dust emissions	C, OM	AQMMP	Implemented by Contractors; verified by Environmental Monitors
Quarry crushing and screening operations will incorporate standard emissions control measures (e.g. partial enclosure).	C, OM	Project Design AQMP	Implemented by Contractors; verified by Environmental Monitors

Notes:

C = Construction

OM = Operations and Maintenance

## 3 Ambient Air Quality Monitoring Program

### 3.1 Monitored Air Contaminants

NTD: [INSERT: additional subsections to meet the following requirements]

The air contaminants to be monitored were selected based on the results of the assessment of potential effects on community health and well-being (Volume 9 of the IS) at potential human receptors and the predicted ambient concentrations by the atmospheric dispersion model that are close to or exceed the applicable SOGs. Monitoring during Project Construction and Operations and Maintenance will include continuous ambient monitoring of PM (TSP, PM<sub>10</sub> and PM<sub>2.5</sub>) and NO<sub>2</sub>, passive dustfall monitoring and meteorological monitoring. Table 3.1 presents the SOGs for monitored air contaminants.

The applicable ambient air quality SOGs include the Nunavut Ambient Air Quality Standards (NAAQS) outlined in the Nunavut Environmental Guideline for Ambient Air Quality (GN 2023a; GN 2011). The Nunavut Department of Environment issued an updated Guideline in 2023 that supersedes the 2011 version and contains updated objectives for NO<sub>2</sub> and removed the standards for TSP. The AQMMP uses the updated NO<sub>2</sub> objectives but continues to compare TSP to the standards in the 2011 Guideline for consistency. The GN-DOE has adopted the Canadian Council of Ministers of the Environment (CCME) Canadian Ambient Air Quality Standards (CAAQS; CCME 2025) for NO<sub>2</sub> for use in Nunavut. Nunavut does not have Guidelines or Standards for PM<sub>10</sub> and dustfall; therefore, the Ambient Air Quality Objective (AAQO; BC ENV 2021) for PM<sub>10</sub> and the Pollution Control Objectives (PCO; BC ENV 2020) for dustfall from the Province of British Columbia (BC) has been adopted.

The applicable health-based criteria are the World Health Organization (WHO) air quality guidelines (AQGs; WHO 2021) for NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> that used in the assessment of potential effects on community health and well-being (Volume 9 of the IS). The WHO AQGs for NO<sub>2</sub> are used to assess the potential health effects of Project emissions on off-duty workers at the Port accommodation camp.

**Table 3.1 Applicable Regulatory Criteria for Monitored Air Contaminants**

ACPI	Averaging Period	NAAQS <sup>a</sup> (µg/m <sup>3</sup> )	CAAQS <sup>b</sup> (µg/m <sup>3</sup> )	BC AAQO (µg/m <sup>3</sup> )	WHO AQGs <sup>c</sup> (µg/m <sup>3</sup> )
TSP	24-hour	120	-	-	-
	Annual	60 <sup>d</sup>	-	-	-
PM <sub>10</sub>	24-hour	-	-	50	45 <sup>j</sup>
	Annual	-	-	-	15
PM <sub>2.5</sub>	24-hour	27 <sup>e</sup>	27 <sup>e</sup>	-	15 <sup>j</sup>
	Annual	8.8 <sup>f</sup>	8.8 <sup>f</sup>	-	5
NO <sub>2</sub>	1-hour	79 <sup>g</sup>	79 <sup>g</sup>	-	200 <sup>j</sup>
	24-hour	-	-	-	25 <sup>j</sup>
	Annual	23 <sup>h</sup>	23 <sup>h</sup>	-	10
Dustfall <sup>i</sup>	30-day (residential/ parkland)	-	-	1.75 mg/dm <sup>2</sup> /day	-
	30-day (industrial/other)	-	-	2.90 mg/dm <sup>2</sup> /day	-

Notes:

<sup>a</sup> NAAQS (GN 2023; 2011 version for TSP)

<sup>b</sup> CAAQS (CCME 2025)

<sup>c</sup> WHO AQGs (WHO 2021)

<sup>d</sup> Expressed as the geometric mean

<sup>e</sup> The 24-hour PM<sub>2.5</sub> is based on the annual 98<sup>th</sup> percentile (8<sup>th</sup> highest) of daily average concentrations, averaged over three consecutive years

<sup>f</sup> The annual PM<sub>2.5</sub> is based on the three-year average of the annual average of the daily 24-hour average concentrations

<sup>g</sup> The 1-hour NO<sub>2</sub> is based on the annual 98<sup>th</sup> percentile (8<sup>th</sup> highest) of daily maximum 1-hour average concentrations, averaged over three consecutive years.

<sup>h</sup> The annual NO<sub>2</sub> is based on the average of all 1-hour average concentrations over one year

<sup>i</sup> Dustfall PCOs for the mining, smelting and related industries, corresponding to residential/parkland and industrial/other areas (BC ENV 2020).

<sup>j</sup> Based on the 99<sup>th</sup> percentile (i.e., 4<sup>th</sup> highest daily and 88<sup>th</sup> highest hourly concentration)

µg/m<sup>3</sup> - micrograms per cubic metre

## 3.2 Monitoring Sites

NTD: Updated as necessary

The proposed locations of the ambient air quality monitoring sites are summarized in Table 3.2. The precise monitoring locations will be determined in collaboration with regulators and Inuit, other Indigenous groups, and potentially affected communities and in consideration of land access, security, availability of power, potential human receptors and compliance with air monitoring station siting requirements.

A meteorological station was installed at the Grays Bay Port Site (Grays Bay Meteorology Station; UTM Zone 12W, 505916 m E, 7520765 m N) on August 19, 2024. The meteorological station measures air temperature, relative humidity, wind speed and direction, barometric pressure, solar radiation, precipitation and snow depth data, and will continue to operate during Project Construction and Operations and Maintenance.

**Table 3.2 Ambient Air Quality and Meteorological Station Locations**

Monitoring Station	Parameters Measured	General Location	Upwind (U)/ Downwind (D) of Project Emissions	Rationale for Selected Location
Grays Bay Meteorological Station	Automated Meteorological Station (existing)	Grays Bay Port	U/D	Automated meteorological station at Grays Bay Port that will provide meteorological data to assist in data interpretation of measured PM concentrations at the Grays Bay Port PM monitoring station and to support the adaptive management of dust emissions.
Ambient PM Monitoring Station	TSP, PM <sub>10</sub> and PM <sub>2.5</sub> (continuous)	Grays Bay Port	D	Proposed continuous PM monitoring station at Grays Bay Port. Continuous PM monitoring data will be used to support the adaptive management of dust emissions.
Ambient NO <sub>2</sub> Monitoring Station	NO <sub>2</sub> (continuous)	Grays Bay Port Camp	D	Proposed continuous NO <sub>2</sub> monitoring station at the Grays Bay Port Camp. Continuous NO <sub>2</sub> monitoring data will be used to verify compliance with applicable SOGs for ambient air quality and WHO AQGs for off-duty workers residing at the Port Camp.
Dustfall Monitoring Stations	Dustfall (passive)	Along Road Corridor	D	Proposed dustfall passive monitoring stations at 3–5 key locations along the road corridor including sensitive receptor areas and near water bodies or caribou movement corridors.

### 3.3 Monitoring Methods

NTD: Update / review as necessary

The PM, NO<sub>2</sub> and meteorology monitoring programs are anticipated to be developed based on the following BC Ministry of Environment and Parks (BC ENV) methodology guidance document:

- BC Field Sampling Manual (BCFSM). Part A of the BCFSM (BC ENV 2013) provides guidance on the deployment, operation, data processing, and quality assurance and quality control (QA/QC) of air quality monitoring equipment. Part B of the BCFSM (BC ENV 2020) is specific to air quality monitoring and emissions testing with Part B1 specific to ambient air quality monitoring.

Table 3.3 shows continuous ambient air quality analyzers for PM and NO<sub>2</sub> and operating principles suggested in the BCFSM (BC ENV 2020). WKR will consult with GN-DOE regarding the selected monitoring equipment to confirm that it meets current standards for the monitoring parameters. It should be noted that TSP is not listed in the BCFSM but in most cases similar equipment used for PM<sub>2.5</sub> and PM<sub>10</sub> can be deployed to measure TSP through the use of a size selective inlet.

**Table 3.3 Ambient Air Quality Monitoring Methods**

Monitoring Parameters	Operating Principle	Commercially Available Analyzers/Monitors/Samplers
PM <sub>10</sub> and PM <sub>2.5</sub> Continuous Monitor	Beta Attenuation Monitor (BAM)	Met One BAM-1020 with Smart Heater System Thermo Fisher Scientific 5014i
	Nephelometry and BAM	Thermo Scientific SHARP Model 5030 and 5030i
NO <sub>2</sub> Continuous Monitor	Chemiluminescence	Thermo Fisher Scientific Model 42i Teledyne API T200 Ecotech Serinus 40
Dustfall Passive Sampler	Passive dustfall canister samplers	-

Note:

From Table 3.1.1 in the BC Field Sampling Manual (BC ENV 2020)

### 3.4 Monitoring Schedule

NTD: Update as necessary

Ambient air quality monitoring for PM and NO<sub>2</sub> will be continuous and will be implemented during Project Construction and Operations and Maintenance. Dustfall samples will be collected monthly during the summer season.

WKR may request modifications to the ambient air quality monitoring program from GN-DOE if the monitoring data provides sufficient justification, e.g. measured NO<sub>2</sub> concentrations are below the SOGs and WHO AQGs during Construction, to change or discontinue monitoring. Changes to the monitoring program will be decided based on an annual review of the results of the monitoring program in consultation with GN-DOE.

### **3.5 Quality Assurance and Quality Control**

NTD: Update as necessary

As part of the monitoring program, the Air Quality Qualified Professional will develop a data management plan which will detail how the QA/QC procedures will be applied to data processing. The raw data will be retained, and any outlier events will be investigated to determine the potential cause for the outlier measurement. The QA/QC plan for sampling will be based on the BCFSM (BC ENV, 2013; 2020) and other applicable guidance as described in Section 3.3. The Air Quality Qualified Professional will maintain records of the raw data and QA/QC procedures for auditing purposes for a minimum of five years (BC ENV 2020). All records will be accessible to the WKR Environmental Manager.

## 4 Reporting Framework

NTD: Update as necessary

The AQMMP will address reporting requirements including but not limited to: incident reporting, monitoring and record keeping, reporting to regulatory agencies as well as dust (e.g., TSP, PM<sub>10</sub> and PM<sub>2.5</sub>) and NO<sub>2</sub> incident tracking. Monthly and annual reports will be provided to the GN-DOE, Kitikmiut, other Indigenous groups and potentially affected communities.

## 5 Adaptive Management Plan

NTD: Update as necessary

Adaptive management is a planned process for responding to uncertainty or to an unanticipated or underestimated Project effect. Information learned from monitoring the actual Project effects is recorded and compared to predicted effects. Where a variance between the actual and predicted effects occurs, a determination is made as to whether modifications or other actions are necessary to revise the existing effects management measures. Results from effects management measures inspections and the TSP, PM<sub>10</sub> and PM<sub>2.5</sub> monitoring will be used through an adaptive management process to adjust effects management measures and to modify plans on an ongoing basis, if required.

### 5.1 Trigger Action Response Plan

NTD: Update as necessary

The results of the ambient PM monitoring will be used to assess the effectiveness of the dust mitigation and to evaluate the need for more rigorous dust mitigation. A Trigger Action Response Plan (TARP) will be developed following BC's guidance for Developing a Fugitive Dust Management Plan for Mines in BC (EMLI and BC ENV 2023). The objective of the TARP is to identify specific measurable and reportable triggers that will require implementation of additional dust mitigation measures based on visual inspections and the results of the ambient PM monitoring to reduce and control of fugitive dust. The trigger levels include pre-determined ambient TSP, PM<sub>10</sub> and PM<sub>2.5</sub> concentration levels as a ratio of the SOGs that are associated with increasing level of risk. If the monitoring program indicates that ambient TSP, PM<sub>10</sub> and/or PM<sub>2.5</sub> concentrations have reached the incremental trigger levels, additional mitigation measures to reduce PM emissions will be implemented.

## 6 References

- BC ENV (British Columbia Ministry of Environment and Parks, formerly Ministry of Environment and Climate Change Strategy). 2013. The British Columbia Field Sampling Manual: Part A: Quality Control and Quality Assurance. Available at: [https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/monitoring/emre/manuals/field-sampling-manual/bc\\_field\\_sampling\\_manual\\_part\\_a.pdf](https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/monitoring/emre/manuals/field-sampling-manual/bc_field_sampling_manual_part_a.pdf). Accessed March 2026.
- BC ENV. 2020a. Dustfall Monitoring and Pollution Control Objectives. Technical Guidance. June 2020. Available at: [https://www2.gov.bc.ca/assets/gov/environment/waste-management/waste-discharge-authorization/guides/templates/gui-tec-041\\_dustfall\\_monitoring.pdf](https://www2.gov.bc.ca/assets/gov/environment/waste-management/waste-discharge-authorization/guides/templates/gui-tec-041_dustfall_monitoring.pdf). Accessed March 2026).
- BC ENV. 2020b. The British Columbia Field Sampling Manual: Part B: Air and Air Emissions Testing. Available at: [https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/monitoring/emre/manuals/field-sampling-manual/bc\\_field\\_sampling\\_manual\\_part\\_b.pdf](https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/monitoring/emre/manuals/field-sampling-manual/bc_field_sampling_manual_part_b.pdf). Accessed March 2026.
- BC ENV. 2021. British Columbia Ambient Air Quality Objectives – Updated November 2021. Available at: [https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/prov\\_air\\_qual\\_objectives\\_fact\\_sheet.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/prov_air_qual_objectives_fact_sheet.pdf). Accessed March 2026.
- BC ENV. 2022. British Columbia Air Quality Dispersion Modelling Guideline. August 2022. Available at: [https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/bc\\_dispersion\\_modelling\\_guideline.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/bc_dispersion_modelling_guideline.pdf). Accessed March 2026.
- EMLI and BC ENV (Ministry of Energy, Mines and Low Carbon Innovation and Environment and Climate Change Strategy). 2023. Developing a Fugitive Dust Management Plan for Mines in BC. Available at: [https://www2.gov.bc.ca/assets/gov/environment/waste-management/industrial-waste/industrial-waste/mining-smelt-energy/guidance-documents/dust\\_management\\_plan\\_guidance.pdf](https://www2.gov.bc.ca/assets/gov/environment/waste-management/industrial-waste/industrial-waste/mining-smelt-energy/guidance-documents/dust_management_plan_guidance.pdf). Accessed March 2026.
- CCME (Canadian Council of Minister of the Environment). 2012. Guidance Document on Achievement Determination Canadian Ambient Air Quality Standards for Fine Particulate Matter and Ozone. PN 1483. Available at: [https://publications.gc.ca/collections/collection\\_2013/ccme/En108-4-55-2012-eng.pdf](https://publications.gc.ca/collections/collection_2013/ccme/En108-4-55-2012-eng.pdf). Accessed March 2026.
- CCME. 2020. Guidance Document on Achievement Determination for Canadian Ambient Air Quality Standards for Nitrogen Dioxide. PN 1608. Available at: [https://ccme.ca/en/res/gdadforcaaqsfornitrogendioxide\\_en1.0.pdf](https://ccme.ca/en/res/gdadforcaaqsfornitrogendioxide_en1.0.pdf). Accessed March 2026.
- CCME. 2025. Canadian Ambient Air Quality Standards Handbook. 2025. Available at: <https://ccme.ca/en/res/caaqshandbook.pdf>. Accessed March 2026.

**Grays Bay Road and Port Project  
Air Quality Monitoring and Management Plan (Draft)**

Section 6: References  
April 2026

---

- GN (Government of Nunavut). 2011. Environmental Guideline for Ambient Air Quality. Department of Environment, Government of Nunavut. Available at: [https://www.gov.nu.ca/sites/default/files/publications/2022-01/guideline\\_-\\_ambient\\_air\\_quality\\_2011.pdf](https://www.gov.nu.ca/sites/default/files/publications/2022-01/guideline_-_ambient_air_quality_2011.pdf). Accessed March 2026.
- GN. 2023a. Environmental Guideline for Ambient Air Quality. Department of Environment, Government of Nunavut. Available at: <https://www.gov.nu.ca/sites/default/files/publications/2024-05/Ambient%20Air%20Quality%202023-03.pdf>. Accessed March 2026.
- GN. 2023b. Environmental Guideline: Dust Suppressants. Department of Environment, Government of Nunavut. Available at: <https://www.gov.nu.ca/sites/default/files/publications/2024-05/Dust%20Suppressants%202023-03.pdf>. Accessed March 2026.
- NIRB. 2026. Guidelines for the Preparation of an Impact Statement for West Kitikmeot Resources Corp.'s Grays Bay Road and Port Proposal (NIRB File No. 24XN038). Available at: [https://www.nirb.ca/portal/dms/script/dms\\_download.php?fileid=356338](https://www.nirb.ca/portal/dms/script/dms_download.php?fileid=356338). Accessed March 2026.
- WHO (World Health Organization). 2021. WHO Global Air Quality Guidelines. Particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), ozone, nitrogen dioxide, sulphur dioxide, and carbon monoxide. Available at: <https://iris.who.int/bitstream/handle/10665/345329/9789240034228-eng.pdf?sequence=1>. Accessed March 2026.



WEST  
KITIKMEOT  
RESOURCES  
CORP

# Appendix 37D

## Aquatic Effects Management Plan

### (Draft)

# Grays Bay Road and Port Project Aquatic Effects Management Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Scope and Objectives .....	1
1.2	Plan Development and Engagement .....	1
1.3	Regulations, Approvals, and Guidelines .....	2
1.4	Related Management Plans.....	2
1.5	Roles and Responsibilities.....	3
<b>2</b>	<b>Aquatic Effects Monitoring Programs .....</b>	<b>4</b>
2.1	Overview .....	4
2.1.1	Construction Phase Monitoring Programs.....	4
2.1.2	Operations and Maintenance Phase Monitoring Programs .....	5
2.2	Freshwater .....	5
2.2.1	Study Areas and Sampling Locations .....	6
2.2.2	Study Design .....	6
2.2.3	Monitoring and Reporting Schedule .....	6
2.3	Marine .....	7
2.3.1	Study Areas and Sampling Locations .....	7
2.3.2	Study Design .....	7
2.3.3	Monitoring and Reporting Schedule .....	8
2.4	Climate Change and Adaptation and Infrastructure Protection .....	8
<b>3</b>	<b>Adaptive Management Plan .....</b>	<b>9</b>
3.1	Evaluation of Monitoring Programs.....	9
3.2	Threshold and Action Levels.....	9
<b>4</b>	<b>Quality Assurance and Quality Control .....</b>	<b>11</b>
<b>5</b>	<b>References.....</b>	<b>12</b>

## List of Tables

Table 2.1	Construction Phase Monitoring Programs .....	4
Table 2.2	Operations and Maintenance Phase Monitoring Programs.....	5

## List of Attachments

Attachment D1 Fisheries and Oceans Canada (DFO) Offsetting Plan

## Abbreviations

AEMP .....	Aquatic Effects Management Plan
EMS .....	Environmental Management System
IS .....	Impact Statement
km .....	kilometre
NTD .....	Note to Draft
Project, the .....	Grays Bay Road and Port Project
QA/QC .....	Quality Assurance/Quality Control
QP .....	Qualified Professional
VC .....	valued component
WKR .....	West Kitikmeot Resources Corp

## Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the Port to the northern terminus of the Tibbitt to Contwoyto Winter Road at Jericho Station (the former Jericho Mine site). The Grays Bay Road includes approximately 230 kilometre (km) of all-season road extending from Jericho Station to the Grays Bay Port, as well as an additional 3 km winter road segment from Jericho Station that connects the existing Tibbit to Contwoyto Winter Road.

The draft conceptual Aquatic Effects Management Plan (AEMP) is part of the interconnected Environmental Management System (EMS) framework for the Project that provides an overarching framework for managing potential adverse environmental and socio-economic effects over the life of the Project. This AEMP has been developed in accordance with the requirements of Section 8.1.9 (Freshwater Aquatic Environment), 8.1.13 (Marine Environment), and Section 11.3 (Monitoring and Mitigation Plans) of the Impact Statement (IS) Guidelines (NIRB File No. 24XN038; NIRB 2026). This is a preliminary draft of the AEMP that will be refined and developed as the Project engineering design and regulatory review progresses. The final version will complement the terms and conditions contained in the future *Fisheries Act* Authorization and any additional relevant permits or licenses obtained for the Project.

The Plan is a “living document.” It will be updated based on management reviews, monitoring results, regulatory changes, or other Project-related changes.

## 1.1 Scope and Objectives

NTD: The objective of the AEMP is to evaluate the effectiveness of mitigation measures and adaptively manage any unforeseen effects to aquatic valued components (VCs) arising from the Project through construction, operations and maintenance.

## 1.2 Plan Development and Engagement

NTD: This AEMP is applicable to the following VCs that underwent assessment within individual volumes, and sections within the Impact Statement (IS) of the Project:

- Freshwater Fish and Fish Habitat (Volume 7, Section 20)
- Water Resources (Volume 7, Section 19)
- Marine Water and Sediment Quality (Volume 8, Section 21)
- Marine Fish and Fish Habitat (Volume 8, Section 22)

The evaluation and adaptive management objectives of the AEMP will be achieved through the implementation of monitoring programs based on the predicted effects characterized in the IS for the freshwater and marine VCs (Volumes 7 and 8, Sections 19 to 22); for marine mammals, see the Wildlife Mitigation and Monitoring Plan (WMMP). Each monitoring program will have set thresholds that, if exceeded, will trigger follow-up actions and additional mitigations or management revisions. Monitoring programs will also be developed to identify any unforeseen effects arising from the Project through construction, operations and maintenance phases, which will be addressed through the adaptive management framework. The AEMP will be reviewed on a regular basis during the construction, operations and maintenance phases to implement any revisions identified from monitoring program results, and continued engagement with Kitikmiut and other Indigenous groups, as part of the adaptive management plan.

Through the Project-specific engagement program, Inuit, other Indigenous groups, and other potentially affected communities shared comments, perspectives, concerns, and recommendations related to freshwater fish and fish habitat. Through the review of the information, Inuit, Indigenous, and Community Knowledge has influenced the development of the mitigation measures and monitoring programs provided in this AEMP.

As such, West Kitikmeot Resources Corp. (WKR) will continue to engage with Kitikmiut, other Indigenous groups, and potentially affected communities during development of the monitoring programs in the AEMP. Shared comments, perspectives, concerns, and recommendations from engagements will be used to support further refinement of the AEMP.

### **1.3 Regulations, Approvals, and Guidelines**

NTD: The assessment of potential effects on the freshwater and marine VCs is guided by the EIS Guidelines for the Project (NIRB File No. 24XN038; Section 8.1.5 - 8.1.9), federal legislation, policies, and frameworks, Guidelines for Aquatic Effects Monitoring Programs (MVLWB/GNWT 2019), water quality and sediment guidelines, and applicable groundwater legislation.

[insert table of legislation]

### **1.4 Related Management Plans**

NTD: The AEMP is intended to act as a stand-alone document; however, it aligns with and draws upon information from other management plans in the Project EMS framework. The following management plans provide complimentary information, including mitigation measures referenced in the AEMP:

- Environmental Protection Plan

## **1.5 Roles and Responsibilities**

NTD: The roles and responsibilities for implementation of the mitigation measures and the monitoring programs are provided in detailed descriptions within the Environmental Protection Plan (Construction Phase) and in the Port Management Plan and Road Management Plan (Operations and Maintenance Phase). The roles/individuals identified within this AEMP for implementation of specific monitoring programs, including required training or certifications, will be provided within each monitoring activity described in Section 2.

WKR, its contractors, and other authorized personnel working for, or on behalf of WKR will be trained and competent in the purpose and methods for implementation of the mitigation measures and monitoring programs included in this AEMP.

## 2 Aquatic Effects Monitoring Programs

NTD: This section includes a high-level characterization of the proposed monitoring programs for both freshwater and marine VCs during the construction and operations and maintenance phases and examples of how information would be presented in the final AEMP. Monitoring programs will be developed in detail throughout the pre-construction permitting phase.

### 2.1 Overview

NTD: This section will contain an overview of the monitoring programs that will evaluate the effectiveness of mitigation measures and predicted effects to the freshwater and marine VCs. Monitoring programs may also include research programs conducted in collaboration with other groups or agencies to provide insight into improved or new mitigation measures and/or monitoring techniques. The overview will include tables that summarize the frequency, geographic extent, and responsible party for each monitoring program.

#### 2.1.1 Construction Phase Monitoring Programs

NTD: An example of monitoring programs to be completed during the construction phase of the Project is presented in Table 2.1 below to show the information that will be included. The specific details of construction phase monitoring programs will be refined and are subject to change as the project engineering design and regulatory review process advances.

**Table 2.1 Construction Phase Monitoring Programs**

Monitoring Program	Indicator / Variable	Monitoring Method	Frequency / Timing	Location	Responsible Party
<b>Freshwater Fish and Fish Habitat</b>					
<i>Example</i>					
<i>Fish and Fish Habitat Monitoring Program</i>	<i>Stream isolation measures Water intake screens Erosion and sediment control measures Fugitive dust mitigation measures</i>	<i>Field observations of active crossing construction sites for effectiveness of mitigation measures implemented.</i>	<i>Throughout the construction phase of the Project, parameters would be measured before, during and after construction activities</i>	<i>PDA – Project development area at watercourses where the construction may impact fish habitat or water quality</i>	<i>WKR Environmental Team; Environmental Monitor</i>
<b>Marine Fish and Fish Habitat</b>					
<i>Example</i>					
<i>Hydroacoustic Verification Monitoring</i>	<i>Underwater noise</i>	<i>Deployed hydrophone to monitor underwater noise levels</i>	<i>Continuous during high amplitude noise generating activities (e.g., impact pile driving)</i>	<i>In proximity to noise generating works in accordance with best practices</i>	<i>WKR Environmental Team; Environmental Monitor</i>

## 2.1.2 Operations and Maintenance Phase Monitoring Programs

NTD: An example of monitoring programs to be completed during the operations and maintenance phase of the Project is presented in Table 2.2 below. The specific details of operations and maintenance phase monitoring programs will be refined and are subject to change as the project engineering design and regulatory review process advances.

**Table 2.2 Operations and Maintenance Phase Monitoring Programs**

Monitoring Program	Indicator / Variable	Monitoring Method	Frequency / Timing	Location	Responsible Party
<b>Freshwater Fish and Fish Habitat / Water Resources</b>					
<i>Example</i>					
<i>Water and Sediment Quality Monitoring Program</i>	<i>Water temperature Concentration of total suspended solids In situ water quality (e.g., pH, temperature, turbidity) Chemical parameters</i>	<i>Field collection of water samples for lab analysis. Collection of samples will follow approved methods and standards.</i>	<i>Twice annually: Once during the summer to capture potential effects from fugitive dust from road use, and once after spring melt to monitor chemical parameters.</i>	<i>Exposure sites and reference sites.</i>	<i>WKR Environmental Team; Environmental Monitor</i>
<b>Marine Water and Sediment</b>					
<i>Example</i>					
<i>Effluent Dispersion Monitoring</i>	<i>Discharge location Flow rates Effluent characteristics (e.g., temperature, salinity, chemical makeup) Current velocity Water depth Background contaminant levels</i>	<i>Methods could include deployed water quality devices and/or acoustic doppler current profiler(s)</i>	<i>As necessary based on discharge frequency and regularity and permit conditions</i>	<i>Defined reference, and near field, mid-field, and far field exposure water quality stations</i>	<i>WKR Environmental Team; Environmental Monitor</i>

## 2.2 Freshwater

NTD: The AEMP monitoring programs will be developed to evaluate the effectiveness of mitigations measures and the predicted effects on the VCs identified in Volume 7 Section 19 (Water Resources) and 20 (Freshwater Fish and Fish Habitat). The study area and sampling locations, study design and reporting schedule for each monitoring program will be discussed in this section of the final AEMP.

### **2.2.1 Study Areas and Sampling Locations**

NTD: The study area will outline the spatial boundaries for the freshwater AEMP monitoring programs from which the mitigation measures and predicted effects on the freshwater VCs can be evaluated.

The study area for the freshwater AEMP monitoring programs will be comprised of areas anticipated to be potentially influenced by Project activities (exposure areas), and those areas beyond Project influence (reference areas). For the purpose of the freshwater AEMP monitoring programs, exposure areas will be defined as “all fish habitat and waters frequented by fish that have the potential to be adversely affected by Project activities” and a reference area is defined as “fish habitat and waters frequented by fish, not subject to adverse affects from Project activities, that is most similar in characteristics to the exposure area.” The exposure areas selected for the freshwater AEMP monitoring programs will encompass the Project activities during the construction, and operation and maintenance phases.

### **2.2.2 Study Design**

NTD: The study design for the freshwater AEMP monitoring programs will be developed to allow evaluation of the mitigation measures and predicted effects for each Freshwater VC in Volume 7, Section 19 (Water Resources) and 20 (Freshwater Fish and Fish Habitat). The study design for each monitoring program will implement accepted standards and methods based on federal and/or territorial guidelines for data collection, analysis and interpretation (e.g., before-after/control impact). The study designs will outline how data collected will be compared temporally for the life of the Project to monitor for trends and inform responses in the adaptive management framework. Sampling frequencies and personnel or positions responsible for conducting each component of the monitoring programs will also be included in this section.

### **2.2.3 Monitoring and Reporting Schedule**

NTD: The results from freshwater AEMP monitoring programs will be compiled into annual reports detailing observed trends, evaluation of the effectiveness of mitigation measures and verification of predicted effects. Reports will be prepared for monitoring programs during both the construction, and operation and maintenance phases. The reporting scheme (e.g., annual reports, daily field sampling reports), intervals, and distribution method (e.g., written submission and/or community meetings) for each monitoring program will be outlined in this section. This section will also include a list of the recipients (e.g., Inuit organizations, other indigenous groups, regulators, residents, and other stakeholders) that will receive the monitoring reports.

The annual freshwater AEMP report will include the following:

- A description of Project activities during the monitoring interval;
  - A characterization of observed data trends identified in program results
- All of the raw monitoring data obtained during the most recent reporting period;
- Description of the methods used for sample and data collection;
- A detailed evaluation of the effectiveness of the mitigation measures and predicted effects for each monitoring program component;

- Results from the evaluation of mitigation measures and predicted effects, in text and figures;
- Identification of unforeseen effects and additional mitigation measures (adaptive management plan).

The reports may also include a characterization of the level of confidence (i.e., degree of certainty) in the evaluation of mitigation measures and permit/authorization(s) compliance. Reports will be retained/stored as necessary to be made available upon request.

## **2.3 Marine**

NTD: The marine portion of the AEMP will evaluate the effectiveness/efficiency of mitigation measures presented in Volume 8, Sections 21 (Marine Water and Sediment) and 22 (Marine Fish and Fish Habitat). Examples of marine monitoring programs include those described in the marine VC IS chapters (i.e., turbidity and erosion monitoring, effluent discharge monitoring, underwater noise (hydroacoustic) monitoring, habitat offsetting effectiveness monitoring) but may also include additional programs identified through the regulatory review process.

### **2.3.1 Study Areas and Sampling Locations**

NTD: This section will describe the geographic extent of anticipated monitoring programs and sampling locations included in the marine follow up program(s), including a justification for the spatial extent and site selection. The study area for the marine AEMP monitoring programs may include both reference and exposure sites based on the assessment of residual effects in the applicable IS chapters. Exposure sites will include areas of the marine environment that may be influenced by Project related residual effects. The exposure sites ultimately selected for the marine AEMP monitoring programs will be specific for each monitoring program and will consider the Project activities during both the construction, and operations and maintenance phases. Reference sites will be selected near, but outside of, exposure areas and will include locations with similar environmental conditions to allow for direct comparison.

### **2.3.2 Study Design**

NTD: This section will describe the study design for the marine AEMP programs, including the procedures/mechanisms that will be implemented to evaluate the effectiveness of mitigation measures and anticipated residual effects for the Marine Water and Sediment and Marine Fish and Fish Habitat VCs. This section will also detail procedures/mechanisms intended to assess the effectiveness of monitoring programs and mitigation measures implemented by the Project. The study designs for each monitoring program will utilize accepted standards and methods and follow any applicable federal or territorial guidelines for data collection, data analysis and interpretation (e.g., before-after/control impact).

The study design section will outline how data collected will be compared and documented temporally over the life of the Project to monitor trends, effects of events, potential changes in background data and inform the need for additional mitigations within the adaptive management framework. This section will also provide a description and justification for sampling frequencies and durations and include additional specificity on the personnel or positions responsible for conducting the monitoring, collection, analysis, and interpretation of data.

### **2.3.3 Monitoring and Reporting Schedule**

NTD: The section will detail the content and reporting requirements for the results of marine AEMP programs. This section will also include a list of the recipients (e.g., Inuit organizations, other indigenous groups, regulators, residents, and other stakeholders) that will receive the monitoring reports. The Marine AEMP reporting will include, at a minimum, one annual report that may include the following information as it pertains to the marine environment and Project-related marine works:

- A description of marine AEMP monitoring programs completed within the applicable calendar year
- A characterization of observed data trends identified in program results
- An evaluation of the effectiveness of mitigation measures
- A comparison of predicted effects against realized observations
- An assessment of the compliance of the overall marine portions of the Project with existing relevant Fisheries Act authorization(s) and/or permits
- Recommendations for the integration of monitoring results with other aspects of the Project (including adjustments for operating procedures and the refinement of mitigation measures).

The report may also include a characterization of the level of confidence (i.e., degree of certainty) in the evaluation of mitigation measures and permit/authorization(s) compliance. Summary reports may be completed during both the construction, operations and maintenance phases of the Project using a standardized structure. Reports will be retained/stored as necessary to be made available upon request.

## **2.4 Climate Change and Adaptation and Infrastructure Protection**

NTD: Impacts from climate change may directly and indirectly affect local fish populations (e.g., abundance, distribution, species composition) and result in changes to habitat (e.g., timing of use, area loss, flow levels, water quality, water temperature, timing of ice melt, sea level) which could alter the community composition and diversity of freshwater and marine fish. The mitigation measures developed for the Project are anticipated to continue to be effective under the various climate change prediction scenarios as they include measures to mitigate changes to marine water quality (e.g., silt curtains during dredge works), avoid changes to flow regimes (quantity and quality) and crossing structure design will enable fish passage at various flow levels (both low flow and high flow conditions).

Monitoring programs will include parameters and endpoints related to variables influenced by climate change and if issues arise, adaptive management will be used to develop solutions where possible. Additionally, information obtained from Inuit, Indigenous, and other community sources related to local and regional observed influences of climate change will be evaluated and incorporated where suitable into the monitoring programs and reporting.

## 3 Adaptive Management Plan

NTD: An adaptive management plan will be built into the AEMP annual reporting which will be used to evaluate the effectiveness of mitigation measures and indicate if revisions or additional mitigation measures are necessary based on monitoring results to address potential Project environmental effects. Recommended changes driven by the Adaptive Management Plan may include revisions to other Project plans such as the Environmental Protection Plan or other operational management plans.

The Adaptive Management Plan will review and incorporate information and recommendations from multiple sources including:

- AEMP monitoring program results;
- feedback from AEMP regulatory reviewers (e.g., Fisheries and Oceans Canada or Nunavut Water Board);
- feedback obtained from Inuit, Indigenous, and other community sources;
- changes in industry best practices or environmental conditions;
- new regulatory conditions, permits, or authorizations;
- the emergence of unforeseen environmental or operational issues; and,
- the advice of a Qualified Professional.

### 3.1 Evaluation of Monitoring Programs

NTD: The Adaptive Management Plan will also include review and evaluation of the monitoring programs under the AEMP. This allows for revision or adjustment of monitoring methods, data evaluation and reporting requirements to allow for effective evaluation of the effectiveness of mitigation measures and compliance with Project permit conditions. Revisions may include changes to monitoring program design, addition or removal of specific monitoring components, and changes to threshold and action levels. Any revisions identified as required will be incorporated into a revised AEMP plan with the rationale for revisions documented. These changes are typically identified in a AEMP re-evaluation report which is undertaken approximately every three to five years as required by the water licence.

### 3.2 Threshold and Action Levels

NTD: To support adaptive management, monitoring thresholds and associated action levels will be developed for monitoring components and parameters. If monitoring results indicate that a threshold is exceeded the resulting action will be implemented. Action levels will be developed with thresholds that are triggered before a significant adverse effect could occur during when a management action can be taken effectively to prevent a significant adverse effect. Multiple action levels (e.g., low, moderate, high action levels) will be developed based on level of potential effect to the environment, with the resulting action response based on the significance threshold of the potential effect identified (e.g., for water quality this could be a trigger value when a parameter approaches a water quality guideline such that an action response would occur before the guideline is exceeded and therefore avoid environmental effects).

**Grays Bay Road and Port Project  
Aquatic Effects Management Plan (Draft)**

Section 3: Adaptive Management Plan  
April 2026

---

Action responses may include additional monitoring (e.g., additional locations, parameters, increased frequency), alterations to management activities or additional mitigation measures. Action responses may result in changes to other Project plans such as the Environmental Protection Plan or other operational management plans.

## 4 Quality Assurance and Quality Control

NTD: Quality Assurance/Quality Control (QA/QC) procedures will be developed and included at several points within the AEMP, including during plan development, field data collection, and data management and reporting. An overview of QA/QC for these points is described below:

Plan Development (including field work plan development):

- Develop and understand Project and plan schedule, scope, and study purpose and identify potential quality influences
- Identify potential permit and regulatory requirements which may influence the methods, frequency and type of data collected.
- Identify required Qualified Professionals (QPs) to conduct the program including any specific training requirements for individuals
- Engaging appropriately qualified QPs to review plan components.

Field Data Collection:

- Develop field check lists and equipment lists to minimize the risk of gaps in field data collection.
- Collect data in accordance with standards, permits and AEMP requirements.
- Equipment such as water quality meters are used in accordance with manufacturers' instructions, and calibration logs are maintained to support accurate data collection.
- Laboratory analysis is completed at appropriately certified laboratories (e.g., Canadian Association for Laboratory Accreditation).
- QA/QC samples for laboratory analysis (i.e., replicates and blanks) are collected in accordance with guidelines.

Data Management and Reporting:

- Data are organized and stored in accordance with AEMP requirements to support long-term use of Project collected data, including the use of a secure electronic database.
- Data are reviewed and confirmed valid by an appropriate review process conducted by a Qualified Professional, which includes independent QA/QC to ensure data are complete, accurate and suitable for reporting under the AEMP.

## 5 References

Mackenzie Valley Land and Water Board, and Government of Northwest Territories (MVLWB/GNWT). 2019. Guidelines for Aquatic Effects Monitoring Programs. Available at: <https://www.gov.nt.ca/ecc/en/services/water-management-and-monitoring/guidelines-water>

Nunavut Impact Review Board (NIRB). 2026. Guidelines for the Preparation of an Impact Statement for West Kitikmeot Resources Corp.'s Grays Bay Road and Port Proposal (NIRB File No. 24XN038). Available at: [https://www.nirb.ca/portal/dms/script/dms\\_download.php?fileid=356338](https://www.nirb.ca/portal/dms/script/dms_download.php?fileid=356338).

# **Attachment D1      Fisheries and Oceans Canada (DFO) Offsetting Plan**

# Grays Bay Road and Port Project Fisheries and Oceans Canada (DFO) Offsetting Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Plan Scope and Objectives .....	1
<b>2</b>	<b>Existing Fish and Fish Habitat.....</b>	<b>3</b>
2.1	Fish Species and Focal Species .....	3
2.2	Fish Habitats .....	3
<b>3</b>	<b>Potential Impacts on Fish and Fish Habitat .....</b>	<b>4</b>
<b>4</b>	<b>Mitigation Measures.....</b>	<b>5</b>
<b>5</b>	<b>Residual Effects .....</b>	<b>6</b>
5.1	Residual Effects on Fish Habitat.....	6
5.2	Residual Effects on Fish .....	6
<b>6</b>	<b>Conceptual Plan to Offset the Death of Fish and HADD of Fish Habitat.....</b>	<b>7</b>
6.1	Approach .....	7
6.2	Inuit, Indigenous, Community and Government Engagement.....	8
6.3	Potential Offsets.....	8
6.4	Preliminary Habitat Balance.....	8
6.5	Offset Monitoring Plan.....	8
<b>7</b>	<b>References.....</b>	<b>9</b>

## List of Attachments

- Attachment 1 Construction Design Drawings
- Attachment 2 Fish and Fish Habitat Information
- Attachment 3 Habitat Offset Design Drawings

## Abbreviations

DFO.....	Fisheries and Oceans Canada
EMS.....	Environmental Management System
HADD.....	Harmful alteration, disruption or destruction
IOL.....	Inuit Owned Land
IS.....	Impact Statement
LAA.....	Local Assessment Area
NTD.....	Note to Draft
Project, the.....	Grays Bay Road and Port Project
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

## Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

The draft Fisheries and Oceans Canada (DFO) Offsetting Plan is part of the interconnected Environmental Management System (EMS) for the Project that provides an overarching framework for managing potential adverse environmental and socio-economic effects over the life of the Project. This DFO Offsetting Plan has been developed based on the information requirements from Fisheries and Oceans Canada's (DFO) *Applicant's Guide Supporting the Authorizations Concerning Fish and Fish Habitat Protection Regulations* (2019). The draft DFO Offsetting Plan will be refined and developed as the Project engineering design and regulatory review of the Project Impact Statement (IS) progresses. The final version will be submitted to DFO as part of a *Fisheries Act* Authorization application for the Project.

## 1.1 Plan Scope and Objectives

Note to Draft (NTD): update as the scope and objectives of the Offsetting Plan are developed.

The purpose of the DFO Plan, a required component of the IS, is to summarize the anticipated Project residual effects on fish and fish habitat, describe the options considered for offsetting, and outline the proposed conceptual plan to implement the offset measures.

Under the *Fisheries Act*, projects are required to complete offsetting measures when a project results in a harmful alteration, disruption, or destruction (HADD) of fish habitat and/or the death of fish. To achieve this, a project needs to counterbalance the impacts by developing offsetting measures by restoring, enhancing, or creating fish habitat. The objective is to achieve no net loss, and ideally a net gain of fish habitat productivity. When developing offsetting measures, projects must consider Inuit, Indigenous and potentially affected community priorities, the scale of project impacts, regional habitats, and DFO policy requirements (DFO 2019, DFO 2025) with proposed offsets designed to be appropriate for the region and provide long-term ecological benefits.

Potential for residual effects to freshwater and marine fish and fish habitat after mitigations were identified in Volume 7 Section 20 (Freshwater Fish and Fish Habitat) and Volume 8 Section 22 (Marine Fish and Fish Habitat). A summary of the potential residual effects are as follows:

- Change to fish habitat (freshwater and marine)
- Change to behaviour caused sensory disturbance (marine)
- Change in mortality and/or injury risk (freshwater and marine)

**Grays Bay Road and Port Project  
Fisheries and Oceans Canada (DFO) Offsetting Plan (Draft)**

Section 1: Introduction  
April 2026

---

- Change in surface water quality (freshwater)
- Death of fish (freshwater)

These residual effects will be required to be offset to counterbalance the impacts to fish and fish habitat in accordance with the *Fisheries Act* subsection 35(2).

## 2 Existing Fish and Fish Habitat

NTD: This section will provide a detailed description of the marine and freshwater fish and fish habitat found in the Project Local Assessment Area (LAA) (refer to Figures 20.1 and 20.2 in the Impact Statement for the Freshwater Fish and Fish Habitat LAA, and Figure 22.1 for the Marine Fish and Fish Habitat LAA). The detailed description of fish and fish habitat will include the type of waterbodies present, oceanic conditions (if required based on final impacts), the characteristics of fish habitat, fish species present, and the focal species selected for development of offsetting measures. This section will be informed by Volume 7 Section 20 (Fish and Fish Habitat) and Volume 8 Section 22 (Marine Fish and Fish Habitat) from the Project Impact Statement.

### 2.1 Fish Species and Focal Species

### 2.2 Fish Habitats

### 3 Potential Impacts on Fish and Fish Habitat

NTD: This section will provide a detailed description of the likely effects of the Project on fish and fish habitat. The description will include and type of fish habitat likely to be affected, species and life stages likely to be affected, and the characterization of the likely affects. This section will be informed by Volume 7 Section 20 (Fish and Fish Habitat) and Volume 8 Section 22 (Marine Fish and Fish Habitat) from the Project Impact Statement.

## 4 Mitigation Measures

NTD: This section will include the mitigation measures proposed to avoid and/or mitigate the potential effects to fish and fish habitat identified by the Project. These mitigation measures will include relevant measures listed in Volume 7 Section 20 (Fish and Fish Habitat) and Volume 8 Section 22 (Marine Fish and Fish Habitat) of the Project Impact Statement which were identified based on territorial and federal objectives, regulations, and policies, as well as industry best practices and measures that have been effective for similar activities on other projects in the past.

## 5 Residual Effects

NTD: This section will provide a quantitative and detailed description of the residual effects to fish (i.e., death of fish) and fish habitat (i.e., HADD to fish habitat) after mitigation measures are implemented. Residual effects to fish will be described by the anticipated species and life stages expected. Residual effects to fish habitat will be described by habitat type and habitat quality (e.g., high/medium/low) which will be informed from the respective volumes for freshwater (Volume 7 Section 20) and marine fish habitat (Volume 8 Section 22). The residual effects to fish and fish habitat will be used to establish the framework on which the offsetting plan will be focused.

### 5.1 Residual Effects on Fish Habitat

NTD: This section will summarize the residual effects to fish habitat from the Project to the freshwater and marine environment.

### 5.2 Residual Effects on Fish

NTD: This section will summarize the residual effects to fish from the Project to the freshwater and marine environment.

## 6 Conceptual Plan to Offset the Death of Fish and HADD of Fish Habitat

NTD: The conceptual plan to offset the residual effects to fish and fish habitat will include the approach used in the development of the offsetting measures, engagement with Inuit, Indigenous, potentially affected communities and applicable governments, proposed offsetting measures and justification for counterbalancing the residual effects, and a plan to monitor the effectiveness of the proposed offsetting measures to meet their objectives. The conceptual plan will also include geographic coordinates for the proposed offsetting measures, a small-scaled site plan identifying the general location, and a proposed timeline for implementation of the offsetting measures.

### 6.1 Approach

NTD: The approach to develop the conceptual plan to offset will be based on the guiding principles in DFO's *Policy for Applying Measures to Offset Harmful Impacts to Fish and Fish Habitat* (2025).

A summary of the guiding principles that will inform the approach include:

- Offsetting will be developed to counterbalance harmful impacts which will be calculated through the habitat balance including consideration of value of habitats created and destroyed.
- Offsetting will occur as close to the affected aquatic ecosystems as possible and developed in a manner to increase potential ecological benefits for multiple species or life stages.
- Habitat offsetting measures will be designed to generate self-sustaining benefits for fish species over the long term and will be implemented with a habitat balance approach.
- Habitat offsets will be determined and developed through engagement with Inuit, Indigenous, community, and government stakeholders.

Additionally, the offset approach will focus on prioritizing “in-kind” offsetting measures over “out-of-kind.” “In-kind” offsets replace habitat that is lost because of the Project and provide benefits for the fish populations directly affected by the HADD of fish habitat which will improve or replace existing habitats that are comparable to fish habitat impacted by the Project and provide similar function. “Out-of-kind” offsets (i.e., unlike habitat replacement or habitat offsetting in different watersheds than where the HADD of fish habitat will occur) will be included if “in-kind” offsets are not feasible or there are insufficient “in-kind” options available to counterbalance the unavoidable HADD.

Complimentary measures may also be used to offset the HADD to fish habitat. These may include scientific research studies, public education activities or regional data collection which supports maintaining or enhancing fish and fish habitat. Complimentary measures may only be used for a small portion of the offset a project may require, typically up to 10% of the required offset cost.

The extent (m<sup>2</sup>) of the proposed offsetting measures to counterbalance the HADD of fish habitat will be based on an estimate of the potential areal impact of the project (e.g., areas described on 30% Project engineering designs). As the Project design progresses, the extent of offset required will be refined as

more accurate values of the residual effects (HADD) on fish habitat are provided. The final offset designs will be provided in the *Fisheries Act* Authorization submitted to DFO.

Preliminary construction design drawings will be provided in Attachment 1.

## **6.2 Inuit, Indigenous, Community and Government Engagement**

NTD: Through the Project-specific engagement program, Inuit, Indigenous groups, and potentially affected communities, as well as government agencies, shared comments, perspectives, concerns, and recommendations related to residual effects to fish and fish habitat from the Project. This information will inform the development of offsetting measures in this DFO Offsetting Plan.

WKR will continue to engage with Inuit, Indigenous groups, government agencies and potentially affected communities during development of offsetting measures. Shared comments, perspectives, concerns, and recommendations from engagements will be used to support further refinement of the DFO Offsetting Plan.

## **6.3 Potential Offsets**

NTD: The potential offset measures (e.g., proposed habitat enhancement or creation plans) proposed in the DFO Offsetting Plan will be informed by the residual effects to fish and fish habitat and the engagement meetings with Inuit, Indigenous, potentially affected Communities and government stakeholders. Offset measures provided will be preliminary and intended to demonstrate that technically viable and biologically relevant offset options exist that could be implemented to counterbalance the unavoidable HADD to fish habitat and death of fish.

This section will also include an analysis of how measures and standards will be used to avoid or mitigate any anticipated adverse effects from construction of the offsets.

When complete, Habitat Offset Design Drawings will be provided in Attachment 3.

## **6.4 Preliminary Habitat Balance**

NTD: This section will include a preliminary habitat balance table that will quantitatively compare the residual effects to fish and fish habitat and the proposed offset measures.

## **6.5 Offset Monitoring Plan**

NTD: The offset monitoring plan will outline the monitoring that will be completed to determine the effectiveness of the offsetting measures to counterbalance the residual effects to fish and fish habitat. As part of the monitoring plan, a schedule for each monitoring component and an outline of the timeframe for achieving the objective of the offsetting measure will be provided. In addition, the monitoring plan will outline contingency measures that will be taken if monitoring results indicate the offsetting measures are not meeting their objectives.

## 7 References

Fisheries and Oceans Canada (DFO). 2019. Applicant's Guide Supporting the Authorizations Concerning Fish and Fish Habitat Protection Regulations. Available at: <https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/applicants-guide-candidats-eng.html>

DFO. 2025. Policy for Applying Measures to Offset Harmful Impacts to Fish and Fish Habitat. Available at: <https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/policies-politiques-eng.html>

# Attachment 1 Construction Design Drawings

## **Attachment 2 Fish and Fish Habitat Information**

## **Attachment 3 Habitat Offset Design Drawings**



WEST  
KITIKMEOT  
RESOURCES  
CORP

# Appendix 37E

## Noise and Vibration Abatement Plan

### (Draft)

# Grays Bay Road and Port Project Noise and Vibration Abatement Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Scope and Objectives .....	1
1.2	Plan Development and Engagement .....	1
1.3	Regulations, Approvals, and Guidelines .....	2
1.4	Related Management Plans.....	3
1.5	Roles and Responsibilities.....	4
<b>2</b>	<b>Mitigation, Enhancement, and Management Measures .....</b>	<b>5</b>
2.1	Noise .....	5
2.2	Vibration .....	5
<b>3</b>	<b>Monitoring Program.....</b>	<b>7</b>
3.1	Noise .....	7
3.1.1	Method.....	7
3.1.2	Equipment .....	8
3.1.3	Location .....	9
3.1.4	Site Observation .....	9
3.1.5	Schedule.....	10
3.1.6	Analysis and Evaluation .....	10
3.2	Vibration .....	11
3.2.1	Method.....	11
3.2.2	Equipment .....	11
3.2.3	Location .....	11
3.2.4	Site Observation .....	12
3.2.5	Schedule.....	12
3.2.6	Analysis and Evaluation .....	12
<b>4</b>	<b>Adaptive Management.....</b>	<b>13</b>
4.1	Thresholds .....	13
4.2	Corrective Action.....	14
<b>5</b>	<b>Reporting .....</b>	<b>15</b>
<b>6</b>	<b>Quality Assurance and Quality Control.....</b>	<b>16</b>
<b>7</b>	<b>References.....</b>	<b>17</b>

## List of Tables

Table 1.1	Summary of Key Legislation and Policies for Noise and Vibration.....	2
Table 4.1	Summary of Noise Thresholds.....	13
Table 4.2	Summary of Vibration Thresholds.....	14

## Abbreviations

AER	Alberta Energy Regulator
ANSI	American National Standards Institute
EPP	Environmental Protection Plan
FTA	Federal Transit Administration
%HA	percent highly annoyed
ISO	International Standards Organization
L <sub>d</sub>	daytime equivalent sound level
L <sub>n</sub>	nighttime equivalent sound level
LFN	Low Frequency Noise
L <sub>max</sub>	maximum A-weighted sound level
MECP	Ontario Ministry of the Environment, Conservation and Parks
MNL	Mitigated Noise Level
NTD	Note to Draft
PPV	Peak Particle Velocity
PSL	Permissible Sound Level
Project, the	Grays Bay Road and Port Project
TCWR	Tibbitt to Contwoyto Winter Road
US	United States
WKR	West Kitikmeot Resources Corp.

## Glossary

Term	Definition
daytime	The hours from 07:00 to 22:00.
dB - Decibel	A logarithmic unit associated with sound pressure levels and sound power levels.
dBA - decibel, A-weighted	A logarithmic unit where the recorded sound has been filtered using the A frequency weighting scale. A-weighting somewhat mimics the response of the human ear to sounds at different frequencies. A-weighted sound pressure levels are denoted by the suffix 'A' (i.e., dBA), and the term pressure is normally omitted from the description (i.e., sound level or noise level).
dBC - decibel, C-weighted	The logarithmic units associated with a sound pressure level, where the sound pressure signals have been filtered using the C frequency weighting. The C-weighting approximates the sensitivity of human hearing at industrial noise levels (above about 85 dBA). C-weighted sound pressure levels are denoted by the suffix 'C' (i.e., dBC). C-weighted levels are often used in low frequency noise analysis, as the filtering effect is nearly flat at lower frequencies.
dBL – decibel, linear	A logarithmic unit associated with sound pressure levels and sound power levels. Often used interchangeably with the unit (dB). No weighted filter (e.g., A-weighted or C-weighted) is applied to the sound pressure level.
energy equivalent sound level (L <sub>eq</sub> )	An energy average sound level taken over a specified period of time. It represents the average sound pressure encountered for the period. The time period is often added as a suffix to the label (e.g., L <sub>eq, 24hr</sub> for the 24-hour equivalent sound level). L <sub>eq</sub> is usually A-weighted. A L <sub>eq</sub> value expressed in dBA is a good, single-value descriptor of the annoyance of noise.
frequency	Number of cycles per unit of time. In acoustics, frequency is expressed in hertz (Hz) (i.e., cycles per second).
hertz (Hz)	Unit of measurement of frequency, numerically equal to cycles per second.

**Grays Bay Road and Port Project  
Noise and Vibration Abatement Plan (Draft)**

Glossary  
April 2026

<b>Term</b>	<b>Definition</b>
low frequency noise (LFN)	Noise in the low frequency range (AER noise guideline definition), 20 Hz up to 250 Hz, where a clear tone is present below and including 250 Hz and the difference between the overall C-weighted sound level and the overall A weighted sound level exceeds 20 dB.
nighttime	The hours from 22:00 to 07:00.
noise	Unwanted sound.
noise level	Same as Sound Level, except applied to unwanted sounds.
peak particle velocity (PPV)	The maximum instantaneous positive or negative peak signal value of an oscillating vibration velocity signal. Usually expressed as inches/second or millimeter/sec.
sound	A dynamic (fluctuating) pressure.
sound pressure level (SPL)	The logarithmic ratio of the root-mean-square sound pressure to the sound pressure at the threshold of hearing. The sound pressure level is defined by the equation below, where $P_{RMS}$ is the RMS pressure due to a sound and $P_0$ is the reference pressure. $P_0$ is usually taken as $2.0 \times 10^{-5}$ Pascals. $SPL (dB) = 20 \log(P_{RMS}/P_0)$
sound power level (PWL)	The logarithmic ratio of the instantaneous sound power of a noise source to that of the reference power. The sound power level is defined by the equation below, where $W$ is the sound power of the source in watts, and $W_0$ is the reference power of 10-12 watts. $PWL (dB) = 10 \log(W/W_0)$
spectrum	The description of a sound wave's resolution into its components of frequency and amplitude.

**Grays Bay Road and Port Project  
Noise and Vibration Abatement Plan (Draft)**

Glossary  
April 2026

---

<b>Term</b>	<b>Definition</b>
tonal components	<p>Industrial facilities often exhibit tonal components. Examples of tonal components are transformer hum, sirens, and piping noise. The test for the presence of tonal components consists of two parts (as per tonality prescribed in AER noise guideline). The first part must demonstrate that the sound pressure level of any one of the slow response, A-weighted, 1/3 octave bands between 20 kHz and 16 kHz is 10 dBA or more than the sound pressure level of at least one of the adjacent bands within two 1/3 octave bandwidths. In addition, there must be a minimum of a 5 dBA drop from the band containing the tone within two bandwidths on the opposite side. The second part is that the tonal component must be a pronounced peak clearly obvious within the spectrum.</p>

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

This Noise and Vibration Abatement Plan is conceptual and has been developed in accordance with the requirements of Section 8.1.3 (Noise and Vibration) and Section 11.3 (Monitoring and Mitigation Plans) of the Impact Statement (IS) Guidelines (NIRB File No. 24XN038; NIRB 2026).

The Plan is a “living document.” It will be updated based on management reviews, monitoring results, regulatory changes, or other Project-related changes.

## 1.1 Scope and Objectives

The objective of the conceptual Noise and Vibration Abatement Plan is to outline the framework for noise and vibration monitoring programs to valid effects predictions made in the IS for the Project and identify adaptive management measures to be undertaken should monitoring demonstrate the need for a change in mitigation.

## 1.2 Plan Development and Engagement

NTD: Update as necessary

The Noise and Vibration Abatement Plan was developed at a conceptual level based on the Project Description (Volume 2, Section 2) and Noise and Vibration Environmental Assessment (Volume 5, Section 13) of the IS and informed by Inuit, Indigenous and Community Knowledge as well as established best management practices.

Through the Project-specific engagement program, Inuit, other Indigenous groups, and other potentially affected communities shared comments, perspectives, concerns, and recommendations related to noise and vibration. This information has informed the development of mitigation measures and monitoring programs provided in this Noise and Vibration Abatement Plan.

As such, West Kitikmeot Resources Corp. (WKR), will continue to engage with Inuit, other Indigenous groups, and potentially affected communities during development of the monitoring programs in the Noise and Vibration Abatement Plan. Shared comments, perspectives, concerns, and recommendations from engagement will be used to support further refinement of the Noise and Vibration Abatement Plan.

### 1.3 Regulations, Approvals, and Guidelines

NTD: Update as necessary

This assessment of noise and vibration is guided by the IS Guideline for the Project, in addition to applicable legislation, guidance documents, and international standards relevant to the assessment and management of noise and vibration and is summarized in Table 1.1.

Nunavut has a Workers' Safety and Compensation Commission that oversees workplace safety and health, including occupational noise exposure for workers. The noise assessment focuses on human receptors not associated with the Project and off duty workers only. There is no other community-based noise regulation in Nunavut. As such, in the absence of territorial guidance and regulations, the assessment of noise and vibration adopts relevant guidelines from other jurisdictions, specifically the Alberta Energy Regulator (AER) and the Ontario Ministry of the Environment, Conservation and Parks (MECP).

**Table 1.1 Summary of Key Legislation and Policies for Noise and Vibration**

Regulation or Policy	Description
<b>International</b>	
United States (US) Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (FTA 2018)	<ul style="list-style-type: none"> <li>The US FTA Transit Noise and Vibration Impact Assessment Manual (FTA 2018) provides guidance on different targets due to vibration effects from mobile heavy equipment. The annoyance threshold for equipment related ground-borne vibration is expressed in terms of velocity decibel levels (VdB). The US FTA guidance is used in this assessment in the absence of similar provincial or federal guidance.</li> </ul>
<b>Federal</b>	
Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Noise (Health Canada 2023)	<ul style="list-style-type: none"> <li>Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Noise (Health Canada 2023) provides noise thresholds for annoyance and sleep disturbance. This guidance provides predictions of health risks resulting from noise emissions common to major infrastructure projects.</li> <li>Measurable parameters such as daytime or nighttime equivalent sound levels (<math>L_d</math> and <math>L_n</math>, respectively), day-night equivalent sound levels (<math>L_{dn}</math>), mitigation noise level (MNL), change in percent highly annoyed (%HA), and maximum sound level (<math>L_{max}</math>) are used to quantify noise effects.</li> <li>In addition to the noise threshold, Health Canada also provides a threshold for the air overpressure effect based on the number of blasts per day.</li> </ul>

Regulation or Policy	Description
<b>Provincial / Territorial</b>	
AER Directive 038: Noise Control (AER Directive 038; AER 2024)	<ul style="list-style-type: none"> <li>• The AER Directive 038: Noise Control (AER 2024) specifies best practices for noise control for resource (i.e., mining, oil and gas) activities in Alberta. AER Directive 038 pertains only to normal operation (not emergency situations) and does not provide defined noise level limits for construction and decommissioning activities.</li> <li>• AER Directive 038 indicates that all new AER-regulated facilities, when in operation, must meet a daytime (07:00 AM to 10:00 PM) and nighttime (10:00 PM to 07:00 AM) permissible sound level (PSL) at the nearest residential dwellings or at a distance of 1.5 kilometres (km) (1.5 km criteria boundary) from the facility boundary if there are no closer dwellings. The daytime PSL is set at 10 decibels (dB) above the nighttime value. The determination of daytime and nighttime PSL at a residential noise sensitive receptor is a function of residential density and proximity to transportation.</li> <li>• Low frequency noise (LFN) effects must be considered when the following two conditions are met: <ul style="list-style-type: none"> <li>• A clear tonal component exists at a frequency at or below 250 hertz.</li> <li>• Arithmetic difference between the overall C-weighted sound level (dBC) and the overall A-weighted sound level (dBA) exceeds 20 dB (i.e., dBC minus dBA is greater than 20 dB).</li> </ul> </li> <li>• If either of these conditions are not met, the potential for a low frequency noise effect at a residential noise sensitive receptor is deemed to be low, and no further mitigations are required.</li> </ul>
Ontario MECP NPC-119 Blasting Guideline (MECP 1982)	<ul style="list-style-type: none"> <li>• Ontario Ministry of the Environment, Conservation and Parks</li> <li>• The Ontario MECP NPC-119 Blasting (MECP 1982) guidance recommends standard targets for blast-related ground vibration and overpressure. The cautionary targets are the more conservative blast-related vibration targets.</li> </ul>

## 1.4 Related Management Plans

NTD: Update as necessary

The Noise and Vibration Abatement Plan is intended to act as a stand-alone document; however, it aligns with and draws upon information from other management plans in the Project EMS framework. The following management plans provide complementary information, including mitigation measures referenced in the Noise and Vibration Abatement Plan:

- Environmental Protection Plan

## **1.5 Roles and Responsibilities**

NTD: Update as necessary

The roles and responsibilities for implementation of the mitigation measures and the monitoring programs are provided in detailed descriptions within the Environmental Protection Plan (Construction Phase) and in the Port Management Plan and Road Management Plan (Operations and Maintenance Phase). The individuals identified within this Noise and Vibration Abatement Plan for the implementation of specific program monitoring are provided within each monitoring activity described in Section 3.

WKR, its contractors, and other authorized personnel working for or on behalf of WKR will be trained and competent in the purpose and methods for implementation of the mitigation measures and monitoring programs included in this Noise and Vibration Abatement Plan.

## 2 Mitigation, Enhancement, and Management Measures

NTD: Update as necessary

Site-specific and situational measures for noise and vibration effects are summarized in the following sections.

### 2.1 Noise

These mitigation measures may be considered in specific areas where modelled or measured exceedances occur, particularly near receptors or traditional land use areas. The applicability of these mitigation measures will be affected by the seasonality and time-sensitivity of the land use.

- WKR is committed to ongoing engagement with Kitikmiut, other Indigenous groups, and other potentially affected communities during the advancement of project design and planning.
- WKR will engage with communities to inform them of the activities and the noise sources that will occur prior to construction.
- Temporary earth berms, portable noise barriers, or temporary structures as barriers during road maintenance activities.
- Use broadband backup alarms for mobile equipment.
- Reduce quantity or duration of selected high noise emission equipment operation based on monitoring results or community concerns.

### 2.2 Vibration

The following mitigation measures will be considered in specific areas where modelled or measured exceedances occur, particularly near receptors or TLMRU areas. The applicability of these mitigation measures will be affected by the seasonality and time-sensitivity of the land use.

- Where feasible, quarries will be located at sufficient buffer distances from receptors or sensitive land use areas to reduce the need for intensive blast mitigation. The mobile camp is assumed to be 500 m from quarry blasting.
- In cases where receptors or land use areas are located closer to blasting activities, reductions in blast charge per hole/delay will be considered to manage vibration and overpressure levels within thresholds. Blasting intensity or timing will be adjusted where feasible during periods when traditional land use activities are occurring near the PDA.

**Grays Bay Road and Port Project  
Noise and Vibration Abatement Plan (Draft)**

Section 2: Mitigation, Enhancement, and Management Measures  
April 2026

---

- Continued engagement with Inuit land users will help identify opportunities for avoidance, respite periods, or other culturally appropriate mitigation measures in locations that are seasonally or situationally significant.
- For impact piling, which may exceed perceptibility thresholds under certain conditions, potential mitigation could include maintaining an appropriate buffer distance from sensitive areas or timing work to minimize disturbance during land use activities.

## 3 Monitoring Program

NTD: Update as design progresses.

Monitoring is the continuation of observation, measurement, or assessment of environmental conditions at and surrounding the Project, its components, or activities. Two types of monitoring are typically undertaken for environmental assessments: environmental monitoring to verify the accuracy of predictions and implemented mitigation measures; and compliance monitoring for verification of practices or procedures to meet legislated requirements. Components to be monitored have been determined based on regulatory instrument requirements as per legislation, environmental importance, sensitivity and vulnerability, and license requirements. The specific and measurable end points for concluding the monitoring program will be set to verify the accuracy of the environmental assessment and the effectiveness of mitigation measures. These end points will be achieved either at permanent closure or earlier if it can be demonstrated that there are no further impacts warranting continued monitoring.

The monitoring programs listed below were developed as part of the Noise and Vibration Abatement Plan.

### 3.1 Noise

NTD: Update as design progresses.

Noise monitoring may be implemented to determine the noise effects of the Project, if necessary. As stated in the Impact Statement, noise effect mitigation, management, and enhancement measures will reduce the noise effects at selected locations (e.g., R8, project component PDA boundary) to acceptable levels below the regulatory threshold. Should noise monitoring be deemed necessary, the following sections outline the monitoring program that would be developed. The monitoring results would be used to compare the Project noise effect with the thresholds presented in Section 4.1. The following sections discuss the method, equipment, location, site observation, analysis, schedule, and evaluation for the noise monitoring program.

It is noted that the specified equipment in Section 3.1.2 below has temperature-operating restrictions that may affect its use in winter given the location of the Project (e.g., equipment will not continuously operate at extreme cold temperatures), and monitoring will need to be adjusted accordingly (e.g., the capture of spot measurements only).

#### 3.1.1 Method

Noise monitoring programs will be implemented for the Project. The noise monitoring can be performed using dedicated sound level meters to obtain the noise data at selected locations. A continuous noise monitoring time period up to multiple days may be conducted during Project construction and operation phases.

Variability in seasonal and meteorological conditions and local activities affects the sound level at all the measurement locations. Longer monitoring periods (monthly or annually) with the implementation of a permanent monitoring station provides a larger statistical sample; however, the multiple days program is considered sufficient for an evaluation of the acoustic environment at the monitoring locations.

The following data will be logged during the noise monitoring at all selected locations:

- Continuous equivalent sound levels in A-weighted decibel (dBA), C-weighted decibel (dBC), and linear (unweighted) decibel (dB) in one-third octave bands
- Logging period is recommended to range from one minute to one hour

In addition to continuous noise monitoring, short-term (i.e., few minutes to less than one hour) noise measurements can be conducted to quantify noise emission levels from various operating equipment. These measurements can provide information to validate the estimated equipment sound power levels used in the acoustic modelling; it is assumed that these acoustical specifications are achievable by the suppliers. If the sound power level cannot be achieved, additional field measurements may be required. A trained technician directed by a qualified acoustic practitioner is recommended to conduct noise data gathering. Further diagnostic analysis and studies will be conducted by a qualified acoustic practitioner.

During the winter months, a sound level meter may not operate properly in low temperature (e.g., -20 C or below) during the nighttime period. Accordingly, for the monthly construction phase monitoring during winter months, short-term measurement for a continuous period of one to two hours can be conducted at the selected monitoring locations during construction activities. In addition to the selected monitoring locations, a second sound level meter may be deployed at a location near the construction site to measure noise level where construction activities are loud. This location should be at least 15 m from the noisiest construction activity at the same direction of the selected monitoring location. The 15 m measurement should be conducted during the same type of construction activity for comparison to representative measurements conducted at further locations. This measurement provides construction noise effect correlation between locations at further distance and a closer location (i.e., 15 m) where the signal or noise level is strong and measurable. It is possible that under certain conditions (e.g., upwind, low noise emission level), construction noise effect may not be measurable at further distance away.

### **3.1.2 Equipment**

High precision Type 1 integrating sound level meters capable of recording the sound pressure levels in dBA with different time period settings are recommended to assess the spectra characteristic of noise sources (i.e., tonality, LFN, sound pressure levels at the one-third octave band). In addition, audible recording capability is recommended to identify non-representative events for data analysis. Battery powered units to complete automated (unattended) noise monitoring.

Sound level meters should be capable of recording equivalent sound level (Leq) and statistical sound level (Ln) with different time period settings. Sound level meters must have been calibrated in the last two years by an independent accredited laboratory. A copy of the calibration certificates will be appended to the monitoring report. The sound level meter microphone should be equipped with a windscreen with minimum 70 mm diameter.

Field calibrators meeting American National Standards Institute (ANSI) S1.40-2006 regulations are to be used to calibrate sound level meters immediately before and after each measurement series and after any change in equipment conditions (e.g., cable replacement). Field calibrators with current recertification status is required. The field calibrator must have been lab-calibrated within the last 12 months.

If discrepancy in calibration level exceeds +/- 1 dB during the measurement period, the measurement data should not be used.

Health Canada (2023) indicates that sound is not to be measured in the presence of precipitation and when the wind speed exceeds 14 km/hour (3.9 m/s). Other provincial noise guidelines such as Alberta Energy Regulator (AER) Directive 038: Noise Control (AER 2024) consider wind speeds higher than 15 km/hour (4.17 m/s) and rain precipitation as non-representative weather conditions. Ambient temperatures must also be within the manufacturer's tolerances for instrument operation. In addition, International Standard Organization (ISO) 1996-2 specifies a set of weather conditions for sound measurements; therefore, weather data should be collected near the monitoring locations. A portable weather station or meter is required to record wind speed, wind direction, temperature, and humidity data in the vicinity of the noise monitoring station. In addition, the weather data recorded from other meteorological weather stations can be used as reference (i.e., snow or rain precipitation).

### **3.1.3 Location**

NTD: Update as necessary

The noise monitoring program may be implemented at multiple locations to measure the noise levels during pre-construction, construction, operation, and closure. Specific monitoring locations have not yet been identified in this conceptual plan.

If accessibility to the selected monitoring locations is an issue during early construction phase, the noise level at these further locations can be extrapolated from the measurements at 15 m away from the construction activity by noise modelling. A detailed log and observation of the construction activities will be required to correlate the measurement results with the type of activities.

If the construction activities are more than 3 km from the selected location, monitoring at that location is not necessary because the noise effect is likely to be negligible.

### **3.1.4 Site Observation**

To analyze noise monitoring results, the following information will be recorded during the monitoring periods:

- Field personnel's name
- Monitoring location in Universal Transverse Mercator (UTM) coordinates
- Sound level meter and microphone model and serial number
- Monitoring duration
- Start and end time and date
- On-site calibration results

- Geographic features of the surrounding area
- Meteorological conditions, including cloud cover, temperature, humidity, wind speed and direction
- Description of acoustic environment (i.e., busy road, birds, local activities)
- Photos or videos of the monitoring setup and surrounding area.

### **3.1.5 Schedule**

NTD: The noise monitoring frequency for each location during each phase is still to be determined. As previously noted, the specified equipment in Section 3.1.2 above has temperature-operating restrictions that may affect its use in winter given the location of the Project (e.g., equipment will not continuously operate at extreme cold temperatures) and monitoring will need to be adjusted accordingly (e.g., the capture of spot measurements only).

During construction, regular monitoring is recommended because the activity level will vary during different construction phases. If the initial monthly results indicate noise impact is negligible and the noise emitting equipment is not expected to increase, the frequency can be reduced.

### **3.1.6 Analysis and Evaluation**

For long-term measurement results, measured equivalent sound level data at the monitoring locations will be analyzed to determine daytime equivalent sound level ( $L_d$ ), nighttime equivalent sound level ( $L_n$ ), maximum A-weighted sound level ( $L_{max}$ ), mitigated noise level (MNL), and percent highly annoyed (%HA).

Invalid or abnormal data not typical of an average ambient sound level will be extracted from the measurement. Audio sound recordings collected during the monitoring period will be reviewed to track and identify changes in measured noise levels and filter out unrepresentative events. Data that are not representative of normal site activity (e.g., human and animal interference with the microphone, technician activities) or measured outside acceptable weather conditions (i.e., rain and wind speed exceed 14 km/hour) will be filtered from the data set prior to the calculation of any averages or other statistics.

The monitoring results during pre-construction, construction, operation, and closure phases will be compared to the prediction results in the IS for validation purposes. If the construction and operation phases measurement results are above or at the thresholds at the receptors, adaptive management (see Section 4) will be initiated to manage the noise effect. If the measurement results are below the thresholds, some mitigation requirements may be adapted or relaxed.

## 3.2 Vibration

NTD: Update as design progresses.

Vibration monitoring stations may be implemented to determine the vibration effects from blasting during the construction and operation phase, if necessary. The monitoring results will be used to compare the Project vibration effect with the targets presented in Section 1.3. The following sections discuss the method, equipment, location, schedule, site observation, analysis, and evaluation for the vibration monitoring program, if the program is needed.

### 3.2.1 Method

During construction and operations and maintenance activities, monitoring will occur as required with blasting activity at the port and quarries. Dedicated instrumentation that measures ground vibration and air blast overpressure will be installed at the locations defined in Section 3.2.3. The instruments will be set up with pre-set trigger levels that measure automatically during a blast event. The ground vibration amplitude in three orthogonal directions (i.e., longitudinal, transverse and vertical) and the corresponding frequencies will be recorded. Similarly, the air blast overpressure amplitude and the corresponding frequency will be recorded.

### 3.2.2 Equipment

Four channel seismographs should be used to record ground vibrations and air blast overpressure. Three channels will be used to measure ground vibration in three orthogonal directions (i.e., longitudinal, transverse and vertical). The vibration transducers should log the time histories of the waveforms as peak party velocity (PPV) in mm/s. The fourth channel will measure the air blast overpressure in linear decibel level (dBL). The air blast microphone should have a flat (linear) response from 2 to 200 Hz.

The seismograph units should be kept in protective housings for long-term protection against weather, animals, and sabotage. The units should be calibrated within the last two years by the manufacturer or an independent accredited laboratory. The units are battery powered for automated unattended monitoring. The microphones should have wind shields to reduce false triggers from gusts of wind, nearby vehicle traffic. The ground vibration transducer trigger level (i.e., 3 mm/s) and air blast overpressure trigger levels (i.e., 110 dBL) should be set up such that the settings are not too sensitive and the extraneous events such as vehicle traffic and/or wind gusts do not trigger the measurements. Excessive false triggers will result in recordings that take up memory space available for data storage when the blast event occurs.

Air blast overpressure disturbances travel at approximately 335 m/s. To capture the full air blast overpressure waveform, the recording duration time should be long enough to capture the entire event.

### 3.2.3 Location

NTD: Monitoring locations will be selected based on proximity from blast sites. Specific monitoring locations have not yet been selected.

### 3.2.4 Site Observation

Accurate records with the blast design detail, weather conditions and the vibration results are essential to verify compliance and improve future blast designs. Recommended seismograph setup and weather information to record for each blast include the following:

- Seismograph location, serial number, date seismograph last calibrated, ground vibration trigger level (mm/s), air blast trigger level (dBL), and distance from blast
- Seismograph ground vibration radial, vertical and traverse amplitude (mm/s) and corresponding frequency (Hz)
- Seismograph air overpressure blast level (dBL) and frequency (Hz)
- Weather information including temperature, wind speed (km/hour), wind direction, and sky condition (i.e., clear, cloudy, raining, etc.)

Other information such as blast design information will be collected from the blast log as prescribed in the blast plan. The blast record will be completed by the blaster in charge.

### 3.2.5 Schedule

NTD: The vibration monitoring frequency for each location is to be determined. The monitoring frequency can be reduced if the initial results are below the threshold and the blast parameters are identical.

### 3.2.6 Analysis and Evaluation

Measurement data can be downloaded manually from individual seismograph unit or accessed remotely via wireless modems. The seismograph operators must be thoroughly familiar with programming the seismographs. A comparison of the measurement results and the applicable limits will determine if the thresholds are met. If there is an exceedance issue, the measurement results can be correlated with blast information and other historical information (i.e., previous blast data and measurement results) to determine the root causes.

The monitoring results during test-blast and production blast will be compared to the prediction results in the IS for validation purposes. If the measurement results are above the prediction values and the thresholds at a receptor, adaptive management will be initiated to manage the noise effect.

## 4 Adaptive Management

NTD: Update as design progresses.

Adaptive management is a planned process for responding to uncertainty or to an unanticipated or underestimated project effect. Information learned from monitoring actual Project effects is applied and compared with predicted effects. Where a variance between the actual and predicted effects occurs, a determination is made as to whether modifications or other actions are necessary to revise the existing mitigation measures. As part of this commitment, WKR will implement technically and economically feasible mitigation measures if monitoring indicates that specified levels of environmental change have been reached or exceeded. Feasibility and implementation decisions will be made based on the circumstances and considerations at the time. Results from monitoring will be used through an adaptive management process to adjust mitigation measures and to modify plans on an ongoing basis, if required.

### 4.1 Thresholds

Table 4.1 and Table 4.2 summarizes the application noise and vibration thresholds, respectively.

**Table 4.1 Summary of Noise Thresholds**

Jurisdiction	Agency	Project Phase	Metric	Value	Applicable To
Provincial	AER Directive 038 <sup>1</sup>	Operations and Maintenance	PSL	Daytime: 50 dBA Nighttime: 40 dBA	Non-Project related permanent and seasonal residences
			LFN	dBC – dBA >20 dB and a clear tone at or below 250 Hz	
Federal	Health Canada	Construction of Grays Bay Port and Jericho Station (Activity duration greater than 12 months)	Change in %HA	6.5 percent (%)	All receptors outside the PDA
		Grays Bay Road construction (Activity duration less than 12 months)	MNL	52 to 62 dBA L <sub>dn</sub>	
		Construction and Operations and Maintenance activities	Sleep disturbance	Indoors: 30 dBA L <sub>n</sub> and 45 dBA L <sub>max</sub>	Workers' camp

Note:

<sup>1</sup> Used in the absence of Nunavut noise guidance.

**Table 4.2 Summary of Vibration Thresholds**

<b>Jurisdiction</b>	<b>Agency</b>	<b>Project Phase</b>	<b>Metric</b>	<b>Value</b>	<b>Applicable To</b>
Provincial	Ontario MECP	Blasting	Ground vibration and air overpressure	Ground vibration: 12.5 mm/s Air overpressure: 128 dB	All receptors
Federal	Health Canada		Air overpressure	Air overpressure: 125 dB (one blast/day)	
USA	FTA	Equipment vibration	Ground vibration	Annoyance threshold: 72 VdB	

## 4.2 Corrective Action

NTD: Update as design progresses.

The adaptive management plan includes corrective action when the noise and vibration effects exceed or are below the thresholds listed in Section 4.1. Corrective action will be required to reduce the effects when the thresholds are exceeded. In cases when the effects are consistently below the thresholds, some mitigation measures can be adjusted accordingly (e.g., relaxation of blast charge reduction). Mitigation, enhancement, and management measures presented (Section 2) will be the primary corrective actions that should be considered. In addition, any potential noise or vibration exceedance should be investigated whether it is correlated with any complaint incident. Post corrective action monitoring will be required to validate if the corrective action is effective and further actions or enhancements may be required.

## 5 Reporting

NTD: Update as necessary.

Reports from monitoring programs will be submitted annually to regulatory authorities and shared with Kikimiut, other Indigenous groups and other potentially affected communities, as requested. The report will provide an annual summary of the noise and vibration monitoring program activities.

Records from monitoring program activities are maintained, retained and stored in accordance with the Noise and Vibration Abatement Plan standards. Records associated with noise and vibration related activities include:

- Training and competency records such as training logs, copies of certifications, and education (as required)
- Contractor/supplier communications regarding noise and vibration management
- Annual calibration records for sound level meters, field calibrators, and seismograph units
- Formal communications records (particularly for regulatory communications)
- Monitoring data and records as identified in Sections 3.1.4 and 3.2.4
- Noise or vibration complaints from communities (i.e., complaint investigation forms, telephone records, and community liaison meetings)
- Non-conformities, corrective and preventive actions related to noise and vibration

Records will be stored in either hardcopy and/or electronic formats and maintained in such a way that they are readily retrievable and protected against damage, deterioration, or loss.

## 6 Quality Assurance and Quality Control

QA/QC measures will be undertaken at three key stages in monitoring activities: 1) during data gathering, 2) during data entry and analysis, and 3) through reporting and reassessment of methods.

The process of data gathering in the field will be quality controlled through the use of qualified personnel and a system of pre- and post-field checks to ensure that consistent, repeatable data is being gathered. Methods will be established for all environmental data collection. All personnel will have necessary training and accreditation for their role in implementing and reporting the data. QA/QC of data entry will be conducted via a process of standard data entry templates and checking data through either double-entry data or feedback entry, where entered data is checked back to the field cards. QA/QC of data analysis will be conducted through a process of clear, written instructions for data analysis and pre-and post-analysis checks. Finally, the efficacy of the methods will be evaluated through repeated scrutiny of the data with statistical analysis and thorough review by stakeholders. Methods will be reassessed and updated when necessary, as part of the reiterative QA/QC process. The reiterative QA/QC procedures will continuously improve the effectiveness of the Noise and Vibration Abatement Plan to detect Project-related noise and vibration effects. These QA/QC processes are important in the overall adaptive management of Project noise and vibration effects, and will support the goals of the Project to minimize and/or manage potential adverse effects on receptors.

## 7 References

- AER (Alberta Energy Regulator). 2024. Alberta Energy Regulator Directive 038: Noise Control. April 2, 2024. Available at: <https://static.aer.ca/prd/documents/directives/Directive038.pdf>. Accessed June 2025
- American National Standards Institute (ANSI) S1.40-2006 ANSI 2005. American National Standards Institute (ANSI), Quantities and Procedures for Description and Measurement of Environmental Sound Part 4: Noise Assessment and Prediction of Long-Term Community Response (ANSI S12.9-2005/Part 4) Standards Secretariat Acoustical Society of America, 2005.
- FTA (United States Federal Transit Administration). 2018. Transit Noise and Vibration Impact Assessment (FTA Report No. 0123). Prepared by John A. Volpe National Transportation Systems Center. September 2018.
- Health Canada. 2023. Evaluating Human Health Impacts in Environmental Assessment: Noise, published by Health Canada. January 2023.
- ISO 1996-2 ISO 9613. 1996. International Standards Organization (ISO), 9613-2:1996, Acoustics – Attenuation of sound during propagation outdoors -- Part 2: General method of calculation.
- MECP (Ontario Ministry of Environment, Conservation, and Park). 1982. Publication NPC-119 - Blasting. Available at: <https://www.ontario.ca/page/environmental-noise-guideline-stationary-and-transportation-sources-approval-and-planning>. Accessed May 2025.
- NIRB. 2026. Guidelines for the Preparation of an Impact Statement for West Kitikmeot Resources Corp.'s Grays Bay Road and Port Proposal (NIRB File No. 24XN038). Available at: [https://www.nirb.ca/portal/dms/script/dms\\_download.php?fileid=356338](https://www.nirb.ca/portal/dms/script/dms_download.php?fileid=356338).



WEST  
KITIKMEOT  
RESOURCES  
CORP

# Appendix 37F

## Progressive Reclamation Plan

### (Draft)

# Grays Bay Road and Port Project Progressive Reclamation Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Plan Scope and Objectives .....	1
1.2	Regulations, Approvals, and Guidelines .....	2
1.3	Permits and Approvals .....	2
<b>2</b>	<b>Closure and Reclamation Framework.....</b>	<b>3</b>
2.1	Reclamation Context.....	3
2.2	Reclamation Objectives .....	3
2.3	Engagement and Community Involvement in Closure and Reclamation Planning .....	3
2.4	Considerations in Project Design .....	4
<b>3</b>	<b>Progressive Reclamation .....</b>	<b>5</b>
3.1	Reclamation Approaches .....	5
3.2	Reclamation Monitoring .....	5
3.3	Adaptive Management .....	6
3.4	Non-Compliance Management .....	6
<b>4</b>	<b>Temporary Closure Care and Maintenance.....</b>	<b>7</b>
4.1	Port Facilities.....	7
4.2	Jericho Station Facilities .....	7
4.3	Road.....	7
4.4	Borrow Pits and Quarries .....	7
4.5	Water Management Systems.....	7
4.6	Waste Management Facilities .....	7
4.7	Construction Equipment.....	7
4.8	Monitoring and Reporting During Temporary Closure .....	8
<b>5</b>	<b>Estimated Closure and Reclamation Costs.....</b>	<b>9</b>
<b>6</b>	<b>References .....</b>	<b>10</b>

## Abbreviations

CIRNAC.....	Crown-Indigenous Relations and Northern Affairs Canada
DFO.....	Fisheries and Oceans Canada
ECCC.....	Environment and Climate Change Canada
EPP.....	Environmental Protection Plan
ERC.....	Emergency Response Coordinator
GN.....	Government of Nunavut
HADD.....	harmful alteration, disruption, or destruction
HTA.....	Hunters and Trappers Association
HTO.....	Hunters and Trappers Organizations
IIBA.....	Inuit Impact and Benefit Agreement
IAG.....	Inuit Advisory Group
IOL.....	Inuit Owned Land
KIA.....	Kitikmeot Inuit Association
NIRB.....	Nunavut Impact Review Board
NTD.....	Note to Draft
NWB.....	Nunavut Water Board
Project, the.....	Grays Bay Road and Port Project
PDA.....	Project Development Area
PRP.....	Progressive Reclamation Plan
TCWR.....	Tibbitt to Contwoyto Winter Road
VC.....	Valued Components
WKR.....	West Kitikmeot Resources Corp.

# Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the Port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station (the former Jericho Mine site). The Grays Bay Road includes approximately 230 kilometre (km) of all-season road extending to Jericho Station to the Grays Bay Port, as well as an additional 3 km winter road segment from Jericho Station that connects to the existing TCWR.

## 1.1 Plan Scope and Objectives

Note to Draft (NTD): Update as necessary

This Progressive Reclamation Plan (PRP) has been developed for the Project in accordance with Section 11.4 Closure and Reclamation Plan of the NIRB Guidelines for the Preparation of an Impact Statement (NIRB File No. 24XN038). WKR is committed to conduct construction activities in a manner that minimizes disturbance to the natural environment. The PRP provides the process to reclaim areas that are used for temporary construction staging, storage and management of the activities to build the Project out to operations and maintenance conditions.

In this context, the main goals and objectives of the PRP will consist of:

- Provide for the long term physical, biological, and chemical stability of temporary construction use areas so as to protect the public health and safety and ecosystem integrity
- Allow for productive use of the land where temporary construction activities are undertaken and ensures all disturbed areas are restored to a pre-disturbance state upon completion of use
- Ensure the land is reclaimed in a manner that minimizes or prevents erosion, and negates the requirement for long term maintenance and monitoring

The Project is intended to be a permanent infrastructure and therefore does not include a planned closure or decommissioning phase. As such, this PRP consists of a care and maintenance plan, with focus on:

- Temporary shutdown scenarios, including reduced operations or suspension of activities

This PRP addresses progressive reclamation and care and maintenance considerations at a conceptual level appropriate for the review of the Impact Statement. Additional details will be developed, as required, in support of regulatory approvals, including the Nunavut Water Board Type A Water Licence.

The Plan is a “living document.” It will be updated based on management reviews, monitoring results, regulatory changes, or other Project-related changes.

## 1.2 Regulations, Approvals, and Guidelines

Legislation and guidelines applicable to Project closure and reclamation include:

- Nunavut Land Claims Agreement (NLCA) – Establishes the framework for Inuit rights and project review in Nunavut, including NIRB review processes and Inuit impact and benefit agreements
- Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA) – Governs land use permits and water licences administered by the Nunavut Water Board, including conditions for water use, waste deposits, and reclamation security
- *Nunavut Impact Review Board Act* (NIRA) – Establishes the NIRB and the project certificate process. Project Certificate conditions will impose specific requirements for this PRP
- *Environmental Protection Act* - Provides for the protection of the environment in Nunavut
- *Nunavut Wildlife Act* - Provides general provisions for regulating wildlife and plants declared to be pests, including the import, control, and destruction of these species
- *Fisheries Act* – Prohibits harmful alteration, disruption, or destruction (HADD) of fish habitat and requires offsetting for authorized harm. Watercourse crossings and all instream works must comply with DFO requirements
- Canadian Environmental Assessment Act, 2012 (CEAA) – May require a federal environmental assessment and follow-up monitoring program
- *Species at Risk Act* (SARA) – Requires avoidance of harm to listed species and their critical habitat; consultation with ECCC is required where listed species may be affected
- *Navigable Waters Protection Act* – Applies to watercourse crossings affecting navigable waters and requires Transport Canada approval
- *Migratory Birds Convention Act* – Prohibits disturbance of migratory bird nests and eggs; construction scheduling must account for nesting windows
- Guidelines for Development and Management of Transportation Infrastructure in Permafrost Regions by the Transportation Association of Canada (TAC 2010) - National technical guidance document providing best practices for the planning, design, construction, and maintenance of transportation infrastructure in permafrost regions. Intended to harmonize practice across Canada but not a federal regulation.
- National Guide to Erosion and Sediment Control on Roadways Projects (TAC 2005) - Provides recommended methods and best practices for erosion and sediment control during roadway construction and maintenance. Widely used across jurisdictions but not a federal regulation.

## 1.3 Permits and Approvals

Commitments and obligations relating to this PRP under Project regulatory approvals, including the Nunavut Water Board Type A Water Licence, will be included within this plan once received.

## 2 Closure and Reclamation Framework

### 2.1 Reclamation Context

The Project occurs in the Arctic, and reclamation will take longer to achieve compared to southern temperate regions due to harsh climate conditions, slow growing vegetation, shallow soils and permafrost. Land disturbances in the Arctic can be slow to reclaim, combined with remote access and logistical constraints combine to require careful reclamation planning, with adaptive, site-specific and long-term approaches.

### 2.2 Reclamation Objectives

The overarching objective of this PRP for areas temporarily disturbed during construction is to support achievement of stable, self-sustaining conditions that are compatible with a healthy environment and consistent with Inuit land use and cultural values.

Progressive reclamation will be undertaken and reclamation objectives will focus on:

- Reclamation of landforms to align with surrounding topography;
- Replacement of soil, where present to maintain equivalent land capability;
- the re-establishment of native plant species and equivalent vegetation communities to baseline conditions, using a combination of active and natural revegetation techniques;
- maintenance of natural drainage patterns and hydrological connectivity.

### 2.3 Engagement and Community Involvement in Closure and Reclamation Planning

Through the Project-specific engagement program, Inuit, other Indigenous groups, and other potentially affected communities shared comments, perspectives, concerns, and recommendations related to reclamation. This information has informed the development of mitigation measures and monitoring programs to be implemented during reclamation.

As such, WKR will continue to engage with Kitikmiut, other Indigenous groups, and potentially affected communities during development of the reclamation plan. Shared comments, perspectives, concerns, and recommendations from engagements will be used to further refine this plan. Inuit, Indigenous, and Community Knowledge informed the development of practical, culturally responsive mitigation and monitoring measures.

Through discussions with the Inuit Advisory Group (IAG) members, they emphasized the importance of protecting resources (IAG 2025a, 2025b), and the following monitoring measures are planned:

- Reclamation Monitoring: To evaluate reclamation success (e.g., non-native and invasive plant control);
- Invasive and non-native plant species management, as needed, during Operations and Maintenance;
- Culvert Function Inspections: To occur on a regular schedule and address deficiencies, where needed;
- Monitoring Ponding of Water: Monitoring both the road surface or along the sides of the road for ponding, to be addressed as appropriate (e.g., by grading or additional culvert installation).

## **2.4 Considerations in Project Design**

Progressive reclamation considerations have been incorporated into the design of the Project at an early stage to minimize long-term environmental disturbance and reclamation requirements.

Design measures include:

- Minimizing the project development area and selective siting to reduce habitat loss and avoid sensitive features where possible;
- Using previously disturbed areas for Project activities as much as possible;
- Temporary project infrastructure such as winter roads will be sited to reduce potential effects to natural vegetation communities, to the extent feasible (e.g., avoid wetlands);
- As much as possible, the road alignment as well as roads to quarries and borrow sources will be built over bedrock to lessen terrain and vegetation disturbance;
- Clearing will be limited to areas required for construction and safe operations and maintenance (i.e., to the width of the Road PDA);
- Organic topsoil will be left in place to retain a protective layer during the construction of the road to minimize permafrost degradation and protect the soils from erosion;
- Drainage culverts will be constructed along the road to facilitate water movement and maintain drainage patterns where required. Follow-up investigations and design activities will determine the number of culverts, as well as their respective size and location. Follow-up maintenance of culverts will be conducted as required so that they maintain their drainage capacity.

These measures reduce the extent of land requiring reclamation and support safe, environmentally stable conditions should operations be temporarily or permanently interrupted.

## 3 Progressive Reclamation

### 3.1 Reclamation Approaches

Reclamation of temporary disturbance areas will be conducted concurrently with final construction and commissioning, carried out by the construction workforce. Initial reclamation activities are anticipated to begin during the construction phase, with the majority of temporary area reclamation completed within the final year of construction (anticipated by approximately 2034).

Reclamation methods will be developed that address site-specific conditions, and will include construction methods to assist in reclamation activities, including approaches to:

- Soil salvage and stockpiling, soil replacement;
- Erosion and sedimentation control;
- Revegetation;
- Temporary infrastructure removal.

Considerations for potential acid rock drainage and/or metal leaching potential of rocks will be developed within the Borrow Pit and Quarry Management Plan to address waste rock and waste management strategies.

### 3.2 Reclamation Monitoring

Reclamation success will be evaluated through reclamation monitoring. Monitoring requirements and duration will be determined in consultation with regulators. Post-reclamation monitoring will continue until defined success criteria are met and regulators and Inuit confirm that reclaimed areas have achieved self-sustaining conditions.

A monitoring plan will be developed and implemented, which will include monitoring methodology, reclamation criteria and thresholds. Monitoring will focus on vegetation, soil and landscape parameters, which may include:

- Vegetation community structure and diversity, wetland function, and presence of non-native and invasive plant species;
- Soil and permafrost conditions;
- Landscape conditions, such as meso- and micro-contours, evidence of erosion or instability and alignment with surrounding landscape.

For each monitoring parameter reclamation criteria will be developed to evaluate reclamation conditions compared to reclamation objectives. Reclamation criteria will be drawn from applicable regulatory guidelines, site-specific baseline data, and Inuit, Indigenous, and Community Knowledge where applicable. WKR will review and, where necessary, revise monitoring approaches as baseline data become available, as the project progresses through construction and into operations, and in response to adaptive management triggers.

### **3.3 Adaptive Management**

Adaptive management is a structured process of monitoring, evaluation, decision-making, and action that allows WKR to respond effectively to unanticipated effects, changing conditions, and new information over the life of the Project. In relation to progressive reclamation, adaptive management will be used to evaluate and adjust reclamation activities in response to monitoring results.

An adaptive management framework will be developed using a tiered approach to scale levels of evaluation and response, which may include:

- Tier 1 – Investigation: When monitoring results approach but have not yet exceeded a defined threshold of concern, a Tier 1 trigger initiates an investigation to determine the cause of the trend and assess whether mitigation measures are functioning as intended.
- Tier 2 – Management Action: When monitoring results exceed a defined management action threshold, WKR must implement pre-identified adaptive management actions. These actions may include modifying construction or operational practices, increasing monitoring frequency, implementing additional erosion or spill controls, adjusting road traffic patterns, initiating contingency revegetation programs, or implementing temporary operational modifications.
- Tier 3 – Regulatory and Community Notification: When monitoring results indicate a significant adverse effect that was not predicted, or when Tier 2 actions have not resolved the issue within a defined period, a Tier 3 trigger requires immediate notification to NIRB, NWB, GN, KIA, and affected communities.

### **3.4 Non-Compliance Management**

In the event of non-compliance with regulatory requirements, Water Licence conditions, or Project Certificate conditions, WKR will immediately notify the relevant regulatory authority (NIRB, NWB, ECCC, DFO as applicable), implement corrective actions, and prepare a formal non-compliance report. Non-compliance reports will describe the nature and cause of the non-compliance, immediate corrective actions taken, proposed long-term preventive measures, and a timeline for restoration of compliance. WKR will maintain a non-compliance register and include a summary of any non-compliances and their resolution in Annual Monitoring Reports.

## **4 Temporary Closure Care and Maintenance**

NTD: Update as necessary

This section describes the measures that would be implemented during a temporary or unplanned closure of the Project, including scenarios such as reduced operations, labour disruptions, supply chain interruptions, and public health emergencies (e.g., pandemics).

Temporary closure may involve a partial or complete suspension of construction or operational activities while maintaining environmental protection, infrastructure integrity, and public safety.

The following sections outline the measures and monitoring that would occur based on the type of facilities that would be completed to temporarily cease use.

### **4.1 Port Facilities**

### **4.2 Jericho Station Facilities**

### **4.3 Road**

### **4.4 Borrow Pits and Quarries**

### **4.5 Water Management Systems**

### **4.6 Waste Management Facilities**

### **4.7 Construction Equipment**

## **4.8 Monitoring and Reporting During Temporary Closure**

NTD: Updated based on what facilities would have systems to be monitored and reported on.

## **5 Estimated Closure and Reclamation Costs**

NTD: Costs for progressive reclamation will be included as part of the tender package and calculated by contractors based on areas that will be required for temporary construction. Costs will also be dependent on the detailed engineering design and construction schedule and will be built-out throughout the design and tendering process.

## 6 References

IAG (Inuit Advisory Group). 2025a. Grays Bay Road and Port Project What We Heard Report: Inuit Advisory Group Workshop #1 Summary – Inuit Knowledge Integration Methods and Mitigation Strategies. March 2025. Report on file.

IAG. 2025b. Grays Bay Road and Port Project What We Heard Report: Inuit Advisory Group Workshop #2 Summary – Understanding and Protecting Caribou. September 2025. Report on file.

TAC (Transportation Association of Canada). 2005. National Guide to Erosion and Sediment Control on Roadway Projects. Ottawa, Canada

TAC. 2010. Guidelines for Development and Management of Transportation Infrastructure in Permafrost Regions. Ottawa, Canada.

# Appendix 37G

## Heritage Resources Management Plan (Draft)

# Grays Bay Road and Port Project Heritage Resources Management Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Scope and Objectives .....	1
1.2	Plan Development and Engagement .....	2
1.3	Regulations, Approvals, and Guidelines .....	2
1.4	Related Management Plans.....	2
1.5	Roles and Responsibilities.....	3
<b>2</b>	<b>Protection Plan.....</b>	<b>4</b>
2.1	Project Effects on Heritage Resources .....	4
2.2	Existing Conditions.....	4
2.3	Protection Plan Approach .....	5
	2.3.1 Assessment Data Gaps.....	5
	2.3.2 Potential Impacts to Archaeological Sites .....	5
2.4	Discovery Protocol and Education Programs .....	6
	2.4.1 Discovery Protocol.....	6
	2.4.2 Education Program.....	6
<b>3</b>	<b>Quality Assurance and Quality Control.....</b>	<b>7</b>
<b>4</b>	<b>References.....</b>	<b>8</b>

## Abbreviations

NTD.....	Note to Draft
Project, the .....	Grays Bay Road and Port Project
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

# Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

The Plan is a “living document.” It will be updated based on management reviews, monitoring results, regulatory changes, or other Project-related changes.

## 1.1 Scope and Objectives

NTD: Heritage resources sites represent discrete episodes of past activities; as such they are non-renewable and are therefore susceptible to alteration or removal by development. Precontact and historic archaeological resources are comprised of residues of past cultures. Although the cultural entities responsible for deposition of the archaeological material are unavailable for observation, the preserved context and associations in which the remains functioned can reveal many clues about past human behaviour, adaptations and relationships to the natural world. The key to the interpretation of these resources, however, is in their pattern of cultural deposition, which is extremely fragile, ephemeral and the product of unique processes and conditions of preservation. Consequently, once they are disturbed, they cannot be replaced, recreated or restored. Due to the nature of their origin and preservation, archaeological resources are finite in quantity. As a result, archaeological resources are increasingly susceptible to destruction and depletion through natural and cultural disturbances.

In the Arctic, archaeological sites are typically located on the ground surface or in very shallow context given the nature of the terrain (limited soil development, and archaeological sites often placed on elevated landforms such as eskers or bedrock outcrops). As such, archaeological sites in the Arctic are susceptible to disturbance through even low-impact activities such as vehicle access.

The intent of the Heritage Resources Management Plan is to provide a framework for ongoing protection and management of heritage resources relative to Project development activities. The plan outlines the nature of and need for protection of heritage resources, summarizes previous studies and known archaeological sites, and provides guidance for ongoing avoidance and/or supplemental studies/mitigative investigations to continue to manage heritage resources as project development progresses. Comments on discovery protocol and education programs are also included.

## 1.2 Plan Development and Engagement

NTD: This Heritage Resources Management Plan is conceptual and has been developed in accordance with the requirements of Section 8.2.8 (Heritage Resources) and Section 11.3 (Monitoring and Mitigation Plans) of the Impact Statement (IS) Guidelines (NIRB File No. 24XN038; NIRB 2026).

Through the Project-specific engagement program, Inuit, other Indigenous groups, and other potentially affected communities shared comments, perspectives, concerns, and recommendations related to heritage resources. Through reviewing the information, Inuit, Indigenous, and Community Knowledge has influenced the development of mitigation measures and monitoring programs provided in this Heritage Resources Management Plan.

As such, West Kitikmeot Resource Corp. (WKR), will continue to engage with Kitikmiut, other Indigenous groups, and potentially affected communities during development of the approach to the Heritage Resources Management Plan. Shared comments, perspectives, concerns, and recommendations from engagements will be used to support further refinement of the Heritage Resources Management Plan.

## 1.3 Regulations, Approvals, and Guidelines

NTD: Heritage resources are identified by the Nunavut Archaeological and Palaeontological Sites Regulations (GN 2001). Other relevant documents include the *Nunavut Act* (1993), and the Guidelines for Applications and Holders of Nunavut Territory Archaeology and Palaeontology Permits (GN 2003). In Nunavut, the Department of Culture and Heritage of the Government of Nunavut (GN) is responsible for the protection of heritage resources. Community review of heritage resources investigations is undertaken prior to archaeological field studies (at the archaeological permit application stage) through the Inuit Heritage Trust to identify concerns regarding archaeological studies. In addition, technical Archaeological Impact Assessment (AIA) reports are provided to the Inuit Heritage Trust for review upon completion of archaeological investigations.

## 1.4 Related Management Plans

NTD: The Heritage Resources Management Plan is intended to act as a stand-alone document; however, it aligns with and draws upon information from other management plans in the Project EMS framework. The following management plans provide complementary information, including mitigation measures referenced in the Heritage Resources Management Plan:

- Environmental Protection Plan
- Borrow Pit and Quarry Management Plan

## **1.5 Roles and Responsibilities**

NTD: The roles and responsibilities for implementation of the mitigation measures and the monitoring programs are provided in detailed descriptions within the Environmental Protection Plan (Construction Phase) and in the Port Management Plan and Road Management Plan (Operations and Maintenance Phase). The individuals identified within this Heritage Resources Management Plan for implementation of specific program activities, including chance discoveries of archaeological features or artifacts, historic objects, or palaeontological resources (fossils), is described in Section 2.

WKR, its contractors, and other authorized personnel working for or on behalf of WKR will be trained and competent in the purpose and methods for implementation of the mitigation measures included in this Heritage Resources Management Plan.

## 2 Protection Plan

### 2.1 Project Effects on Heritage Resources

NTD: Heritage Resources are non-renewable resources that are immovable and spatially defined. Activities that result in surface and/or subsurface disturbance have the potential to affect known and/or potential heritage resources through the loss of site contents and/or site contexts. These effects will occur primarily during the construction phase. Primary effects on heritage resources are mitigated before or during construction, so additional effects are not expected to occur during operations and maintenance.

### 2.2 Existing Conditions

NTD: A number of previous archaeological studies have been conducted within the general region, including studies relative to the Izok Mine Project, the Izok Corridor Project, the High Lake Project, the Bathurst Inlet Port and Road Project, and the Ulu Mine Project, amongst others. A comprehensive data set for the current PDA is not available, but will be requested from the Department of Culture and Heritage, GN, as part of data gap analysis upon determination of a final project footprint.

The studies most relevant to the current PDA are the High Lake Project studies, and the Izok Corridor Project. The most recent report noted approximately 150 archaeological sites in proximity to the Project; additional sites recorded during subsequent studies, such as the Ulu Mine Project have likely increased the number of sites within proximity of the current PDA to approximately 200. Additional unrecorded archaeological sites are undoubtedly present in portions of the PDA that have not been subject to Archaeological Impact Assessment (AIA) studies. Site types currently on record are primarily stone feature sites representing precontact and/or historic campsite activities, hunting sites, inuksuit associated with various functions, and grave sites. Archaeological sites also include precontact sites with lithic (stone tool) debitage, as well as sites that are historic in nature.

Although some of the studies listed above may include locations that correspond with the current PDA, it is understood that parts of the PDA have not likely been assessed with field studies specific to the PDA. As such, once the PDA has been established, a data gap analysis will be undertaken to determine where archaeological studies have been completed within the PDA and where study gaps may occur. Archaeological field programs will be designed to undertake an assessment of gap areas relative to archaeological sites. Previously recorded archaeological sites will also be revisited relative to the PDA, and appropriate mitigation measures (such as avoidance where possible, detailed mapping and systematic collection, archaeological excavation, and community engagement) will be designed in consultation with the regulators (Department of Culture and Heritage, GN) and engagement with Inuit.

To date, it is not believed that palaeontological resources have been addressed relative to this Project. Palaeontological study requirements, if any, will be addressed with the regulators as part of the data gap analysis upon confirmation of a PDA.

## **2.3 Protection Plan Approach**

NTD: The objective of mitigation is to limit the loss of heritage resources materials and sites or site context caused by Project activities. There are two components to consider in mitigating project impacts on heritage resources: data gaps relative to archaeological assessment of the PDA, and potential impacts to archaeological sites.

### **2.3.1 Assessment Data Gaps**

NTD: Areas of the PDA that have not been subject to adequate archaeological assessment are considered data gaps. These areas need to be identified upon finalization of a Project footprint and subject to AIA investigations to identify sites. Identification of data gaps will be conducted through desktop review of available data for previous studies (AIA reports, digital data if available) relative to the finalized Project footprint.

Where data gaps are identified, AIA field studies will be conducted under archaeological permits issued by the GN Department of Culture and Heritage. During the field studies, archaeological sites within the PDA will be identified and documented, and recommendations formulated as to the need for avoidance and/or further mitigative investigations.

Information and concerns provided during engagement that are relevant to heritage resources, including locations of gathering sites and graves and the importance of eskers, will be considered during data gap analysis and determination of the nature and scope of archaeological field programs.

### **2.3.2 Potential Impacts to Archaeological Sites**

NTD: Archaeological sites with interpretive potential require ongoing avoidance or additional investigation before they can be impacted by disturbance activities. The exact nature of additional archaeological investigations will need to be determined in consultation with the Department of Culture and Heritage, GN, on a site-specific basis, but may include detailed site/feature mapping, systematic collection of artifacts and/or archaeological excavation. Community engagement will also be implemented.

Note that avoidance is always the preferred mitigation measure at archaeological sites as it allows the site context and contents to remain undisturbed. Avoidance of archaeological sites by a minimum of 30 m between the site boundary and development activities is required by GN Department of Culture and Heritage, but larger buffers are preferred if possible. Temporary fencing of archaeological site boundaries during construction activities in proximity to sites may be considered to facilitate avoidance.

## 2.4 Discovery Protocol and Education Programs

NTD: If previously unknown heritage resources sites of value are identified during construction, operations and maintenance activities, discovery protocols will be implemented, and appropriate mitigation measures will be applied in consultation with GN and through engagement with Kitikmiut.

### 2.4.1 Discovery Protocol

NTD: Archaeological Impact Assessment field studies are intended to represent comprehensive ground coverage to identify archaeological sites; however, complete investigation of an entire development footprint relative to archaeological resources is not typically feasible. This is due to the size of development footprints, the small size and nature of archaeological sites, which are often difficult to identify until the field archaeologist is in immediate proximity to the site, and due to challenges in predicting locations of archaeological sites that were created during unique sets of circumstances in the past. As such, unknown archaeological sites can be present within areas that were subject to AIA investigations, and archaeological sites could be identified or exposed during ongoing planning and design and during the construction phase of activity. Chance discoveries of archaeological features or artifacts, historic objects, or palaeontological resources (fossils) must be reported.

As a general practice, if archaeological, historic, or palaeontological resources are encountered during pre-construction, construction or post-construction activities, field workers will:

- Stop work in the immediate area
- Notify the construction manager or on-site environment personnel as appropriate
- Photograph the site or item of concern
- Record a location of the site or find with GPS if possible
- Construction manager or on-site environment personnel will report the find to the Project archaeologist or to the GN Department of Culture and Heritage

### 2.4.2 Education Program

NTD: WKR will implement Education Programs for field workers relative to heritage resources. Education programs may consist of in-person presentations by archaeologists, online training, or posters and educational material at worksites/camp accommodation. The education programs will outline the need for avoidance of impacts to heritage resources site, including reference to legislation, as well as providing guidance on the nature of heritage resources sites so that sites and artifacts/fossils can be identified and reported if encountered.

### 3 Quality Assurance and Quality Control

NTD: The process of data gathering in the field will be quality controlled through the use of qualified personnel and a system of pre- and post-field checks to facilitate the collection of appropriate, quality data. Final deliverables, including archaeological site forms and maps, AIA technical reports, digital data and artifact catalogues, will be subject to quality review by appropriate and qualified personnel.

## 4 References

GN (Government of Nunavut). 2001. *Nunavut Archaeological and Palaeontological Sites Regulations*. Nunavut Act, SOR/2001-220.

GN. 2003. *Guidelines for Applications and Holders of Nunavut Territory Archaeology and Palaeontology Permits*. Department of Culture and Heritage, Iqaluit, NU.

NIRB. 2026. Guidelines for the Preparation of an Impact Statement for West Kitikmeot Resources Corp.'s Grays Bay Road and Port Proposal (NIRB File No. 24XN038). Available at: [https://www.nirb.ca/portal/dms/script/dms\\_download.php?fileid=356338](https://www.nirb.ca/portal/dms/script/dms_download.php?fileid=356338)

*Nunavut Act*. S.C. 1993, C. 28.



WEST  
KITIKMEOT  
RESOURCES  
CORP

# Appendix 37H

## Environmental Protection Plan

### (Draft)

# Grays Bay Road and Port Project Environmental Protection Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>1</b>
1.1	Project Overview .....	1
1.2	Project Schedule .....	1
1.3	Objectives and Scope .....	1
1.4	Regulatory Requirements .....	4
<b>2</b>	<b>Roles and Responsibilities</b> .....	<b>5</b>
<b>3</b>	<b>General Mitigation Measures</b> .....	<b>6</b>
3.1	Project Planning .....	8
3.2	Site Access and Transportation .....	8
3.3	Site Preparation and Earthworks .....	10
3.4	Material and Equipment Staging .....	10
3.5	Fuel Handling and Storage .....	11
3.6	Power Generation and Utilities .....	12
3.7	Blasting .....	12
3.8	Erosion and Sediment Control .....	13
3.9	Spill Prevention and Response .....	14
3.10	Waste Management .....	15
3.11	Water Withdrawal and Use .....	16
3.12	Watercourse Crossings .....	17
<b>4</b>	<b>Grays Bay Port</b> .....	<b>18</b>
<b>5</b>	<b>Grays Bay Road</b> .....	<b>19</b>
<b>6</b>	<b>Jericho Station</b> .....	<b>20</b>

## List of Tables

Table 2.1	Roles and Responsibilities of Key Team Members .....	5
Table 3.1	General Mitigation Measures for the Project .....	6
Table 3.2	Mitigation Measures for Project Planning .....	8
Table 3.3	Mitigation Measures for Site Access and Transportation .....	9
Table 3.4	Mitigation Measures for Site Preparation and Earthworks .....	10
Table 3.5	Mitigation Measures for Material and Equipment Staging .....	11
Table 3.6	Mitigation Measures for Fuel Handling and Storage .....	12
Table 3.7	Mitigation Measures for Power Generation and Utilities .....	12
Table 3.8	Mitigation Measures for Blasting .....	13

**Grays Bay Road and Port Project  
Environmental Protection Plan (Draft)**

Table of Contents  
April 2026

---

Table 3.9	Mitigation Measures for Erosion and Sediment Control .....	13
Table 3.10	Mitigation Measures for Spill Prevention and Response .....	15
Table 3.11	Mitigation Measures for Waste Management .....	15
Table 3.12	Mitigation Measures for Water Management.....	16
Table 3.13	Mitigation Measures for Watercourse Crossings .....	17
Table 4.1	Mitigation Measures for Construction of Marine-based Infrastructure.....	18
Table 4.2	Mitigation Measures for Construction of Land-based Infrastructure.....	18
Table 5.1	Mitigation Measures Specific to Grays Bay Road.....	19
Table 6.1	Mitigation Measures Specific to Jericho Station .....	20

## List of Figures

Figure 1.1	Project Overview .....	3
------------	------------------------	---

## List of Attachments

Attachment 1	Management Plans.....	21
Attachment H1	Borrow Pit and Quarry Management Plan.....	1
Attachment H2	Erosion and Sediment Control Plan .....	2
Attachment H3	Explosives Management Plan .....	3
Attachment H4	Risk Management and Emergency Response Plan.....	4
Attachment H5	Spill Contingency Plan.....	5
Attachment H6	Water Management Plan.....	6
Attachment H7	Waste Management Plan .....	7
Attachment 2	Contingency Measures.....	1

## Abbreviations

BMP.....	Best Management Practices
CIRNAC.....	Crown-Indigenous Relations and Northern Affairs Canada
DFO.....	Fisheries and Oceans Canada
EPP.....	Environmental Protection Plan
ERC.....	Emergency Response Coordinator
GN.....	Government of Nunavut
HTA.....	Hunters and Trappers Association
IOL.....	Inuit Owned Land
NWB.....	Nunavut Water Board
Project, the.....	Grays Bay Road and Port Project
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

## Glossary

Term	Definition
XXX	XXX

# 1 Introduction

## 1.1 Project Overview

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station (the former Jericho Mine site). The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR (Figure 1.1).

## 1.2 Project Schedule

The timing and duration of the Project are contingent on regulatory approvals and may be influenced by seasonal constraints, including the short open-water season and limitations associated with winter road access. While the schedule outlines the anticipated timeline, select construction activities may commence earlier than proposed based on logistical considerations. In addition, construction of Project components is dependent on the timing of the NIRB process, permitting timelines, public and private funding availability, contractor availability, and user needs and commitments. Construction of the port may also proceed separately from the road and may be advanced initially and independently of the road.

Onsite works for the Project are scheduled to begin in 2029, with major construction commencing in 2030. Major construction activities are anticipated to span approximately five years, with Operations and Maintenance anticipated to commence in 2035 and continue indefinitely.

## 1.3 Objectives and Scope

This Environmental Protection Plan (EPP) has been developed to address applicable regional, territorial, and federal requirements and conditions. Management plans include appropriate actions designed to reduce potential adverse effects of the Project on the ecosystemic (biophysical) and socio-economic (human) environments and include specific requirements for monitoring. Management plans consider changes that may be required to accommodate the construction and use of the road, port, and other associated infrastructure.

WKR is committed to ongoing monitoring and evaluation of the predicted effects and the efficacy of the mitigation and management plans developed for the Project and presented within the Impact Statement for the Project. This EPP supports compliance with applicable regulatory requirements, approvals, commitments, and conditions by providing operational guidance to Project personnel and contractors. This EPP references related management plans and approvals and establishes a framework for consistent implementation, monitoring, reporting, and adaptive management of mitigation measures. Additionally, the EPP also describes how Inuit, Indigenous, and communities are, and will continue to be, engaged in the ongoing development and implementation of environmental protection measures.

**Grays Bay Road and Port Project  
Environmental Protection Plan (Draft)**

Section 1: Introduction  
April 2026

---

Mitigation measures identified in each Valued Component (VC) assessment of the Impact Statement are organized into ecosystemic and socio-economic mitigation and monitoring plans. These measures may be implemented through Project design, VC-specific plans, or this EPP. As such, the purpose of this plan is to outline activity-specific environmental protection measures to be implemented throughout all phases of the Project (Construction, Operations and Maintenance). The Project components are considered permanent infrastructure. Therefore, there are no plans for closure and reclamation of these components. Areas required for construction only will be reclaimed according to permit conditions and as described in the Site Restoration Plan developed for the Project.

**Figure 1.1      Project Overview**

## 1.4 Regulatory Requirements

WKR has prepared an Impact Statement to identify and assess potential environmental and socio-economic effects resulting from the Project in accordance with the NIRB's guidelines for the *Preparation of an Impact Statement for West Kitikmeot Resources Corp's Grays Bay Road and Port Proposal* (NIRB File No.: 24XN038; NIRB 2026; the IS Guidelines). The Project is subject to applicable legislation and regulatory approvals, central to which is the Nunavut Land Claims Agreement. The Project involves activities on both IOL and Crown land, requiring land use permits and leases from two distinct authorities: the Kitikmeot Inuit Association for IOL, and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) for Crown land.

NTD: This section will be updated as required.

## 2 Roles and Responsibilities

NTD: Roles and responsibilities will be further defined and outlined in this section as the project planning progresses.

WKR, as the Proponent, is responsible for the implementation of environmental protection measures described in this EPP and its attachments during all phases of Project. Implementation will be undertaken by qualified personnel and contractors under the supervision of the WKR. WKR will establish the necessary human, material, and financial resources to implement the management plans. Compliance will be confirmed by management, occupational health and safety, and environmental staff, as well as government departments and agencies tasked with regulatory compliance monitoring.

Roles and responsibilities of key team members for the Project include, but are not limited to, those listed in Table 2.1.

**Table 2.1 Roles and Responsibilities of Key Team Members**

<b>Role</b>	<b>Responsibility</b>
The Proponent or designate	<ul style="list-style-type: none"><li>• Overall Project delivery</li></ul>
Construction Manager or designate	<ul style="list-style-type: none"><li>• Directs construction activities in compliance with...</li></ul>
Environmental Advisor or designate	
Senior Environmental Monitor or designate	
Environmental Monitor	
Qualified Professional (QP)	
Contractor	

The general mitigation and enhancement measures applicable to the Project are summarized in Section 3. These measures are in alignment with the IS and are applicable through all phases of the Project.

### 3 General Mitigation Measures

NTD: all tables within the following sections include examples and not exhaustive lists of mitigation measures to be included in this plan. The EPP will be updated as the project progresses.

The general mitigation measures applicable to all components of the Project are included in Table 3.1, which will be applicable through all phases of the Project.

**Table 3.1 General Mitigation Measures for the Project**

Activity/Concern	Mitigation Measures
Emergency Response & Spill Contingency	<ul style="list-style-type: none"> <li>• Designated refuge and rest areas/temporary emergency shelters will be established on the road. Details of locations of refuge areas will be provided to all road users.</li> <li>• Spill containment materials will be available at all physical work locations to support containment and recovery of spills.</li> <li>• Emergency spill response kits will be kept in vehicles and at fuel storage locations.</li> <li>• The port will have Transport Canada-approved Oil Pollution Emergency Plans as required under the Oil Handling Facilities Regulations of the Canada Shipping Act, and Transport Canada-approved Shipboard Oil Pollution Emergency Plan for vessels.</li> <li>• A landfarm may be constructed if required, at the Grays Bay Port for onsite treatment of contaminated soil or snow that occurs as a result of accidents and malfunctions of mobile equipment. The facility would be constructed with an oil-water separator system. In the absence of the landfarm contaminated soils (small quantities) would be shipped offsite for treatment at a licensed treatment facility.</li> <li>• WKR will keep the Project website, dedicated toll-free phone line and email address up to date with educational messages and emergency response guidance to support community awareness.</li> </ul>
Fire Safety & Emergency Facilities	<ul style="list-style-type: none"> <li>• The Project will implement engineered controls and safe design of holding and storage tanks containing flammable and pressurized substances.</li> <li>• Fire extinguishers will be located indoors in tactical locations (buildings, vehicles, equipment), with sprinklers used in buildings. Fire detection and fire protection systems will be installed in various facility areas.</li> <li>• Emergency exits will have appropriately illuminated exit signs.</li> </ul>
Fuel & Hazardous Materials Management	<ul style="list-style-type: none"> <li>• Project personnel will be trained in fuel handling procedures and equipment maintenance, as required.</li> <li>• Fuel management for safe transport, storage, handling, and refueling, and will be in accordance with operating procedures included in the Spill Contingency Plan and will be outlined in both the Port Management Plan and the Road Management Plan.</li> <li>• All refuelling and fuel transfer activities will be monitored.</li> <li>• Dedicated maintenance areas will have a liner or concrete installed under areas of vehicle storage and maintenance.</li> <li>• Equipment such as generators and pumps will have secondary containment installed capable of containing fuel drips or leaks during operations and refueling.</li> <li>• No fuel, oil, or other hazardous material will be stored within 31 m of the ordinary highwater mark of a marine waterbody.</li> <li>• All hazardous materials will be stored using adequate secondary containment.</li> <li>• Material Safety Data Sheets for hazardous substances are to be stored on site.</li> </ul>

**Grays Bay Road and Port Project  
Environmental Protection Plan (Draft)**

Section 3: General Mitigation Measures  
April 2026

Activity/Concern	Mitigation Measures
Health, Safety & Training	<ul style="list-style-type: none"> <li>• All onsite contractors will have industry-compliant and satisfactory Health, Safety and Environmental policies, programs, and manuals to be implemented throughout the Project.</li> <li>• WKR will implement workplace policies that support inclusive hiring, retention, and advancement of Inuit employees. These policies will be detailed in the Human Resources Plan</li> <li>• Work shift protocols will be implemented to support personnel being fit for duty.</li> <li>• Project personnel will be trained in vehicle and mobile equipment safe operations, defensive driving, weather-related hazards, and wildlife migration periods, as required.</li> <li>• WKR will monitor observed effects of the environment on the Project, and will act as required to maintain, repair, and upgrade infrastructure/equipment as required.</li> <li>• All equipment will arrive at the Project free of leaks and in good working condition.</li> <li>• Project vehicles and equipment will undergo inspection prior to use by an operator.</li> <li>• Machinery found to be leaking will be withdrawn from service until repaired. Impacts to the environment resulting from the leaking equipment will be reported (if required) and remediate in accordance with the SPC.</li> <li>• Snowblowers will be considered for snow clearance where appropriate.</li> <li>• Inspection frequency will increase during the following periods:</li> <li>• Regular maintenance and safety inspections will be conducted on project infrastructure and equipment.</li> </ul>
Infrastructure & Equipment Maintenance	<ul style="list-style-type: none"> <li>• WKR will monitor observed effects of the environment on the Project, and will act as required to maintain, repair, and upgrade infrastructure/equipment as required.</li> <li>• All equipment will arrive at the Project free of leaks and in good working condition.</li> <li>• Project vehicles and equipment will undergo inspection prior to use by an operator.</li> <li>• Machinery found to be leaking will be withdrawn from service until repaired. Impacts to the environment resulting from the leaking equipment will be reported (if required) and remediate in accordance with the SPC.</li> <li>• Snowblowers will be considered for snow clearance where appropriate.</li> <li>• Inspection frequency will increase during the following periods:</li> <li>• Regular maintenance and safety inspections will be conducted on project infrastructure and equipment.</li> </ul>
Management Plans	<ul style="list-style-type: none"> <li>• An Explosives Management Plan will include procedures for the safe handling, transportation, storage, and use of explosives.</li> <li>• The management of explosives will be in accordance with environmental protection measures, territorial and federal legislation, and guidelines. All blasting activities will be performed by qualified contractors with strong safety track records.</li> <li>• Hazardous materials management will be included in the Waste Management Plan to outline the collection, segregation, handling, and disposal of hazardous materials.</li> <li>• A Heritage Resources Management Plan will be developed and implemented.</li> <li>• Any required mitigation of archaeological sites will be determined through consultation with Government of Nunavut's Department of Culture and Heritage and the Inuit Heritage Trust; Inuit Knowledge may be used to help determine mitigation requirements on a site-by-site basis.</li> </ul>

Activity/Concern	Mitigation Measures
Regulatory Compliance & Engagement	<ul style="list-style-type: none"> <li>• WKR will continue to engage with rights holders and regulatory authorities to ensure compliance and timely acquisition of all necessary authorizations.</li> <li>• Project-related aircraft will comply with all applicable aviation laws, regulations, permits, licenses, and policies.</li> <li>• During construction, operations, and maintenance activities, in-stream work at stream crossings will comply with the requirements and regulations of DFO and the Fisheries Act.</li> <li>• West Kitikmeot Resources Corp. (WKR) is committed to ongoing engagement with Kitikmeot Inuit (hereafter referred to as Kitikmiut), other Indigenous groups, and other potentially affected communities during the advancement of Project design, planning, and monitoring throughout the life of the Project.</li> </ul>

### 3.1 Project Planning

Prior to the start of construction, the Contractor will be responsible for preparing and providing the following documents to WKR for review and approval:

- [NTD: List of required plans, documents, and approvals for the Contractor will be updated]

The general mitigation measures applicable to project planning are included in Table 3.2

**Table 3.2 Mitigation Measures for Project Planning**

Activity/Concern	Mitigation Measures
Authorizations	
Notifications	
Information Sharing	

### 3.2 Site Access and Transportation

NTD: To be updated as plans progress.

Access routes to the Project include air, overland, and sea. Construction personnel will travel for the Project by air and ground, depending on the location of the various construction activities they are participating in. The general mitigation measures applicable to site access and transportation of resources and equipment are included in Table 3.3.

**Table 3.3 Mitigation Measures for Site Access and Transportation**

Activity/Concern	Mitigation Measures
Transportation Safety (Marine/Air)	<ul style="list-style-type: none"> <li>• Project-related vessels will be equipped with spill containment and cleanup materials.</li> <li>• Controlled marine access to the port will be facilitated by communications and marine navigation aids to be located at on the headland at the port site and offshore islands, as needed. The placement and type of navigational infrastructure and navigational aids will meet Transport Canada and Canadian Coast Guard requirements for marine safety and navigation.</li> <li>• Project-related vessels will comply with all applicable maritime laws, Notices to Mariners (NOTMAR), Navigational Warnings (NAVWARNs), regulations, and policies.</li> <li>• Project-related vessels will undergo inspection, including prior to use.</li> <li>• Project-related vessels will be equipped with radio communication controls</li> <li>• Project-related aircraft will be equipped with radio communication controls and a safety kit.</li> </ul>
Transportation Safety (Land)	<ul style="list-style-type: none"> <li>• All personnel must remain within their vehicle while waiting for wildlife to pass.</li> <li>• Project-related vehicle operators will exercise caution in areas frequented by wildlife.</li> <li>• Vehicle and equipment operators will follow established radio communication protocols.</li> <li>• Project vehicles will adhere to posted speed limits and weight restrictions.</li> <li>• Security and other public government users will have access to the road through agreements established between WKR and the relevant government department or agency.</li> <li>• Project-related vehicles and mobile equipment will be equipped with radio communication controls and a safety kit inclusive of supplies pertaining to extreme weather conditions.</li> </ul>
Transportation Safety (Marine/Air)	<ul style="list-style-type: none"> <li>• Project-related vessels will be equipped with spill containment and cleanup materials.</li> <li>• Controlled marine access to the port will be facilitated by communications and marine navigation aids to be located at on the headland at the port site and offshore islands, as needed. The placement and type of navigational infrastructure and navigational aids will meet Transport Canada and Canadian Coast Guard requirements for marine safety and navigation.</li> <li>• Project-related vessels will comply with all applicable maritime laws, Notices to Mariners (NOTMAR), Navigational Warnings (NAVWARNs), regulations, and policies.</li> <li>• Project-related vessels will undergo inspection, including prior to use.</li> <li>• Project-related vessels will be equipped with radio communication controls</li> <li>• Project-related aircraft will be equipped with radio communication controls and a safety kit.</li> </ul>

### 3.3 Site Preparation and Earthworks

NTD: To be updated as plans progress.

Clearing of vegetation will be limited to areas where direct disturbance is necessary for construction activities and components. The general mitigation measures applicable to site preparation and earthworks are included in Table 3.4.

**Table 3.4 Mitigation Measures for Site Preparation and Earthworks**

Activity/Concern	Mitigation Measures
Clearing, grading, stripping	• Delineate and visually identify the boundaries of work areas and limit the amount of clearing of freshwater and marine riparian vegetation.
	• Limit the grading of stream banks and riparian areas at watercourse crossing approaches where feasible.
	• Clearing will not be conducted during high rainfall or runoff events.

### 3.4 Material and Equipment Staging

NTD: To be updated as plans progress.

The initial focus of construction will be to establish the basic infrastructure such as camps, temporary gravel or ice airstrips, temporary barge landing, fuel storage facilities, and laydown areas to allow the workforce to expand and begin construction of permanent Project infrastructure. Materials necessary for construction, including equipment, fuel, explosives, parts, supplies, and prefabricated structures (e.g., mobile camps, culverts, bridge components), will be advanced to Grays Bay/Kogloktokyoak by sealift during the open water season of the second year of construction and annually thereafter. The initial staging of equipment and materials at the port will require barges to initially be beached on shore with ramps extended to offload mobile equipment, mobile camp, and fuel.

The general mitigation measures applicable to material and equipment staging are included in Table 3.5.

**Table 3.5 Mitigation Measures for Material and Equipment Staging**

Activity/Concern	Mitigation Measures
Camps, Accommodations, and Support Facilities	<ul style="list-style-type: none"> <li>• Signage pertaining to speed limits, active construction areas, and emergency shelters will be posted on the Project roads, including the Grays Bay Road.</li> </ul>
	<ul style="list-style-type: none"> <li>• These standard operating practices will be considered to reduce predicted construction noise levels. It includes the following:                             <ul style="list-style-type: none"> <li>– Reduce equipment idling when not in operation.</li> <li>– Reduce aircraft and helicopter idling.</li> <li>– Ensuring equipment is well maintained.</li> <li>– Use structure (e.g., storage containers) or landscape (e.g., earth berm, hills) as barriers</li> <li>– Orient permanent accommodations, such as sleeping quarters with windows, in a direction away from construction noise sources</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• Designated refuge and rest areas/temporary emergency shelters will be established on the road. Details of locations of refuge areas will be provided to all road users.</li> </ul>
	<ul style="list-style-type: none"> <li>• WKR will provide emergency services and shelters along the road. Permanent and Temporary Camps will also serve as emergency shelters.</li> </ul>
	<ul style="list-style-type: none"> <li>• Raised, heated buildings will be skirted to prevent wildlife access under the buildings for use as shelters, dens or building entry points; skirting should use wire mesh, sheet metal sheathing, or other chew-resistant material.</li> </ul>

### 3.5 Fuel Handling and Storage

NTD: To be updated as plans progress.

At the beginning of major construction, a temporary fuel storage area will be established with fuel dispensing equipment for the refueling of vehicles, heavy equipment, and aircraft.

Types of fuels required during construction will include:

- Diesel for power generation, heating, heavy equipment, and light vehicle operation
- Gasoline for light vehicles, utility vehicles, snowmobiles, and boats
- Jet-A and Jet-B fuel for helicopter and aircraft support operations
- Propane for camp operations and heaters

The general mitigation measures applicable to fuel handling and storage are included in Table 3.6.

**Table 3.6 Mitigation Measures for Fuel Handling and Storage**

Activity/Concern	Mitigation Measures
Fuel Handling, Fuel Storage, and Refuelling	<ul style="list-style-type: none"> <li>• Optimal sizing of Project equipment to reduce inefficient fuel use.</li> </ul>
	<ul style="list-style-type: none"> <li>• Monitor fuel usage and efficiency to proactively identify when equipment is not functioning optimally.</li> </ul>
	<ul style="list-style-type: none"> <li>• Project personnel will be trained in fuel handling procedures and equipment maintenance, as required.</li> </ul>
	<ul style="list-style-type: none"> <li>• Designated refuelling and maintenance areas will be used to lessen the risk of soil contamination.</li> </ul>
	<ul style="list-style-type: none"> <li>• All refuelling and fuel transfer activities will be monitored.</li> </ul>

### 3.6 Power Generation and Utilities

NTD: To be updated as plans progress.

The general mitigation measures applicable to power generation and utilities are included in Table 3.7.

**Table 3.7 Mitigation Measures for Power Generation and Utilities**

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"> <li>• The Project will include backup emergency generators in case there is an interruption to power.</li> </ul>
	<ul style="list-style-type: none"> <li>• During operations and maintenance both the port and Jericho Station will have a fire suppression system compliant with applicable building codes. Water system infrastructure will include insulated, freeze protection, as well as thaw recovery systems.</li> </ul>

### 3.7 Blasting

NTD: To be updated as plans progress.

Drilling and blasting of rock will be required at quarries and at locations of rock cut. Explosives to be used will be primarily ammonium nitrate and diesel fuel. Prilled ammonium nitrate will be stored at designated rock quarries and at the port site in a designated, secured location and in accordance with the appropriate legislation and permits.

While embankment construction and blasting will take place year-round, blasting size and timing will take into consideration applicable sensitive periods for wildlife, fish and migratory birds.

Specific to these Project activities, an Explosives Management Plan (see Attachment H3) will be developed to outline the management practices that aim to reduce the environmental and safety risks of manufacturing, transporting, storing, handling, and using explosives.

The general mitigation measures applicable to blasting are included in Table 3.8.

**Table 3.8 Mitigation Measures for Blasting**

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"> <li>Blasting intensity or timing may be adjusted during periods when non-TLMRU activities are occurring near the PDA.</li> </ul>
	<ul style="list-style-type: none"> <li>Blasting will be scheduled during less sensitive time periods (e.g., shift change, period with no TLMRU activities, no sensitive wildlife presence)</li> </ul>
	<ul style="list-style-type: none"> <li>A wildlife sweep will be completed of the blast site and surrounding area prior to any blasting activities occurring.</li> </ul>
	<ul style="list-style-type: none"> <li>Blasting at quarries will be temporarily suspended if wildlife are identified within 0.5 km of the blast site, or if a group of caribou (i.e., ≥25 individuals) are identified within the line of sight (i.e., &gt;500 m) from the blast area. Blasting may continue once all wildlife move outside of the 0.5 km exclusion zone, and no caribou groups (i.e., ≥25 individuals) occur within the line of sight from the blast area.</li> </ul>

### 3.8 Erosion and Sediment Control

NTD: To be updated as plans progress.

Erosion and sedimentation are natural processes in which sand, silt, and clay particles are loosened and transported by wind, water, and ice, and deposited downwind or downstream. These processes usually occur slowly over a long period; however, anthropogenic activities, such as construction, can lead to accelerated levels of erosion through disturbance of soil and vegetation. The Erosion and Sediment Control (ESC) Plan describes the ESC measures, maintenance, monitoring, and reporting during the design and construction of the Project (see Attachment H2).

Table 3.9 includes the general mitigation measures applicable to the Project related to erosion and sediment control.

**Table 3.9 Mitigation Measures for Erosion and Sediment Control**

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"> <li>Erosion and sedimentation control measures will be implemented per the Erosion and Sediment Control Plan and will be in place prior to construction activities and before the spring melt/freshet where required.</li> </ul>
	<ul style="list-style-type: none"> <li>Erosion and sediment controls will be regularly inspected, documented, and maintained per the Erosion and Sedimentation Control Plan. Erosion and drainage patterns will be monitored, and corrective measures will be implemented where required until disturbed areas are revegetated or until such areas have been permanently stabilized by other effective measures.</li> </ul>
	<ul style="list-style-type: none"> <li>Workers will be informed of the areas exposed to erosion, and they will be informed of the associated risks.</li> </ul>
	<ul style="list-style-type: none"> <li>Silt fencing will be used downgradient of the works where required.</li> </ul>

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"> <li>• Material stockpiles will be kept a minimum of 31 m from a watercourse or waterbody with the appropriate erosion control mitigation in place to prevent sediment from entering a watercourse or waterbody.</li> </ul>
	<ul style="list-style-type: none"> <li>• Drainage culverts, road cuts or embankments will be placed in accordance with a good understanding of surface and subsurface flow paths.</li> </ul>
	<ul style="list-style-type: none"> <li>• Runoff control measures will be implemented to protect soils, permafrost, and nearby waterbodies, including: diverting flows away from exposed soils; modifying slope surfaces and gradients as required; controlling flow velocity; installing drainage per specifications; redirecting water away from watercourses; placing riprap in that is free of silt and other debris, as required; directing cleared snow away from watercourses or waterbodies; maintaining positive drainage within quarry floors; and conduct quarry dewatering in a manner that discharge will not directly enter waterbodies, watercourses, or lead to soil erosion.</li> </ul>
	<ul style="list-style-type: none"> <li>• Vegetation and construction activities, where possible, will be postponed during wet weather or high winds to lessen the risk of erosion, compaction/rutting, and possible damage to the soil structure.</li> </ul>
	<ul style="list-style-type: none"> <li>• Construction on cleared ground will be conducted during dry or frozen conditions, or use rig matting to reduce soil compaction, rutting and erosion.</li> </ul>
	<ul style="list-style-type: none"> <li>• In-water work areas will be isolated and dewatered prior to in-water construction activities, and maintain downstream flow in watercourses.</li> </ul>
	<ul style="list-style-type: none"> <li>• Drainage culverts will be constructed along the road to facilitate water movement and maintain drainage patterns. Follow-up investigations and design activities will determine the number of culverts, as well as their respective size and location. Follow-up maintenance of culverts will be conducted as required so that they maintain their drainage capacity.</li> </ul>
	<ul style="list-style-type: none"> <li>• Routine inspection of watercourse crossings will be conducted to determine if they are functioning as per design (e.g., allow fish passage) and identify potential evidence of erosion and sedimentation. If a barrier to fish passage or erosion and sedimentation issues are observed, corrective actions will be implemented.</li> </ul>

### 3.9 Spill Prevention and Response

NTD: To be updated as plans progress.

Safe work procedures and training provided to all employees promote best practices and sound environmental management; however, the potential exists for unanticipated discharges or spills to occur during the course of operations. WKR recognizes that prompt, effective and organized responses to an unanticipated discharge or spill will enhance the health and safety of all employees, reduce the potential adverse environmental impacts resulting from such an event, and ensure effective communication with the appropriate regulatory agencies and the public. The Spill Contingency Plan describes the spill response actions for the Project (see Attachment H5).

Table 3.10 includes the general mitigation measures applicable to the Project related to spill prevention and response.

**Table 3.10 Mitigation Measures for Spill Prevention and Response**

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"> <li>The Port Management Plan and Road Management Plan will include measures for safe transport, storage, handling, and refueling, and will be in accordance with operating procedures included in the SCP.</li> </ul>
	<ul style="list-style-type: none"> <li>Spill containment materials will be available at all physical work locations to support containment and recovery of spills.</li> </ul>
	<ul style="list-style-type: none"> <li>Emergency spill response kits will be kept in vehicles and at fuel storage locations.</li> </ul>
	<ul style="list-style-type: none"> <li>The operations and response structure at the port will be designed for rapid response to a spill. All equipment and resources will be strategically placed directly at the port operation site.</li> </ul>
	<ul style="list-style-type: none"> <li>Project-related vessels will be equipped with spill containment and cleanup materials.</li> </ul>

### 3.10 Waste Management

NTD: To be updated as plans progress.

Waste will be produced and managed throughout construction, including identification, storage, transportation, and proper disposal. A Waste Management Plan will be developed to inform the collection, segregation, handling, treatment, storage, transport, and disposal waste that minimizes wildlife attraction to the Project by implementing waste segregation, secure food waste storage, and routine monitoring of waste management facilities. The Waste Management Plan provides operational guidelines to reduce the generation of waste and facilitate the collection, storage, transportation, and disposal of wastes, while reducing the potential for adverse effects on the environment (see Attachment H7). Waste storage areas will be constructed at the Grays Bay Port and Jericho Station for the storage of non-hazardous waste and hazardous waste.

Table 3.11 includes the general mitigation measures applicable to the Project related to waste management.

**Table 3.11 Mitigation Measures for Waste Management**

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"> <li>BMPs will be implemented to manage the reduction of emissions and associated ACPI from incinerator processes during all phases of the Project. These measures include:               <ul style="list-style-type: none"> <li>Operating incinerators in accordance with manufacturer specifications and applicable Nunavut standards, and emissions will meet <i>MECP Guideline A-7: Air Pollution Control, Design and Operation Guidelines for Municipal Waste Thermal Treatment Facilities</i> (MECP 2016).</li> <li>Detailed procedures for the management and operation of incinerators will be included in the Waste Management Plan.</li> </ul> </li> </ul>

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"> <li>• Food waste will be stored in wildlife-proof bins and incinerated daily to avoid attracting wildlife.</li> </ul>
	<ul style="list-style-type: none"> <li>• Personnel will dispose of garbage and food waste in appropriate dumpsters and trash bins.</li> </ul>
	<ul style="list-style-type: none"> <li>• Treated sewage and greywater are to be stored in approved holding tanks prior to removal from site, or disposed of in accordance with the land use permit.</li> </ul>

### 3.11 Water Withdrawal and Use

Both potable and non-potable water will be required for several uses during construction of the Project, necessitating a wide variety of water sources and locations throughout the PDA. An estimation of water that will be required during construction for both potable and industrial uses (e.g., winter road construction, dust control, material compaction) will be confirmed prior to application from the Nunavut Water Board for the Water Licence in consultation with the various construction contractors, water will be withdrawn from approved water sources. The water will be stored in tanks and transported by waterline or truck, as required. The Water Management Plan provides information to manage the fresh water supply and wastewater for the construction and operations and maintenance phases of the Project (see Attachment H6).

Table 3.12 includes the general mitigation measures applicable to the Project related to waste management.

**Table 3.12 Mitigation Measures for Water Management**

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"> <li>• Special considerations for surface water management will be addressed for borrow pits and quarries in the Borrow Pit and Quarry Management Plan.</li> </ul>
	<ul style="list-style-type: none"> <li>• Non-contact water will be diverted around infrastructure and directed to natural downstream drainage networks, to the extent practical. Contact water resulting from direct precipitation or snowmelt within borrow pits and quarries will be intercepted, contained, and released downstream after water quality objectives have been met.</li> </ul>
	<ul style="list-style-type: none"> <li>• Water withdrawals will be within water license limits and in accordance with Measures to Protect Fish and Fish Habitat (DFO 2025).</li> </ul>
	<ul style="list-style-type: none"> <li>• Under-ice withdrawals will follow the DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut (DFO 2010).</li> </ul>
	<ul style="list-style-type: none"> <li>• Water intakes will be designed to reduce the disturbance of lake or stream beds and fit all intakes with screens that comply with the end-of-pipe fish protection screens requirements (DFO 2020).</li> </ul>

### 3.12 Watercourse Crossings

Watercourse crossings along the road will include bridges, open bottom culverts, and closed culvert crossing structures depending on the span, watercourse high-water mark, surrounding land/terrain conditions, and watercourse navigability. Crossing structures will be designed based on hydrotechnical, fisheries, environmental, navigational, and geotechnical considerations at each location.

Table 3.13 includes the general mitigation measures applicable to watercourse crossings.

**Table 3.13 Mitigation Measures for Watercourse Crossings**

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"><li>• Machinery not intended for in-water works will not be left in any waterbody when not in use.</li></ul>
	<ul style="list-style-type: none"><li>• Watercourse crossings will be designed and constructed with consideration of climate change to facilitate streamflow conveyance and fish passage.</li></ul>
	<ul style="list-style-type: none"><li>• Instream work, including work within the active stream channel, will be reduced to the extent practical.</li></ul>
	<ul style="list-style-type: none"><li>• Temporary crossings will follow DFO's CoPs for temporary fords (DFO 2023b) and ice bridges and snow fills (DFO 2023c).</li></ul>
	<ul style="list-style-type: none"><li>• Watercourse crossing structures (i.e., culverts and bridges) will be constructed in the winter, to the extent practicable, when many of the watercourses are anticipated to be frozen to the bottom, which avoids instream work.</li></ul>

## 4 Grays Bay Port

Construction of marine-based infrastructure is expected to begin during the open water season in the second year of construction. Construction within the marine environment is planned to be primarily during the open water season, including for the Wharf Area, Barge Landing Area, and Small Craft Harbour, as necessary and as weather / ice conditions permit. These works would occur once a laydown area at the port has been established, there is sufficient room on land to progress the various associated construction activities, and infill material has been established through the cut process at the port.

The general mitigation measures applicable to the construction of marine-based infrastructure are included in Table 4.1.

**Table 4.1 Mitigation Measures for Construction of Marine-based Infrastructure**

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"> <li>A Qualified Environmental Professional (QEP) with written authority to modify or stop work will be present during construction activities with the potential to affect marine habitat.</li> </ul>
	<ul style="list-style-type: none"> <li>Where possible, the Project will avoid encroaching on marine fish habitat by adhering to a 31 m setback of infrastructure from the highest high water mark.</li> </ul>
	<ul style="list-style-type: none"> <li>Develop an Offsetting Plan that includes “No Net Loss” to counterbalance all unavoidable losses of fish habitat in the Project Development Area.</li> </ul>
	<ul style="list-style-type: none"> <li>Marine intakes will be designed, installed, and operated to reduce potential impingement and entrainment of fish. Where possible, intake design will follow DFO guidelines for marine intakes DFO (1991).</li> </ul>

The general mitigation measures applicable to the construction of land-based infrastructure are included in Table 4.2.

**Table 4.2 Mitigation Measures for Construction of Land-based Infrastructure**

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"> <li>The following measures will be considered in specific areas where modeled or measured exceedances occur, particularly near receptors or TLMRU areas. The applicability of these measures will be affected by the seasonality and time-sensitivity of the land use.                             <ul style="list-style-type: none"> <li>For impact piling, which may exceed perceptibility thresholds under certain conditions, potential mitigation could include maintaining an appropriate buffer distance from sensitive areas or timing work to minimize disturbance during land use activities.</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>A ramp-up or soft start technique will be used for pile driving. Where equipment allows, power will be built up slowly from a low-energy start-up to give adequate time for marine wildlife to leave the vicinity before exposure to the maximum sound pressure level. There will be a soft start every time pile driving is resumed following a set time interval.</li> </ul>
	<ul style="list-style-type: none"> <li>All permanent outdoor light fixtures at the port will be pointed downwards where practicable to reduce light disorientating flying birds, except where required for safety reasons.</li> </ul>

## 5 Grays Bay Road

NTD: To be updated as plans progress.

An all-season controlled access gravel road, the Grays Bay Road will have a top width of approximately 10 m, which will accommodate bi-directional traffic. Vehicles authorized to use the road are expected to include semi-truck trailers, dual-powered road trains (DPRT) and light vehicles. Traffic volume is expected to vary depending on third party use. The road will be gated at both ends on IOL, with approved vehicle access managed by staff. Movement along the road will be managed through the use of a Road Management Plan.

Mitigation measures specific to the construction of project components of the Grays Bay Road are included in Table 5.1.

**Table 5.1 Mitigation Measures Specific to Grays Bay Road**

Activity/Concern	Mitigation Measures
	<ul style="list-style-type: none"><li>• Construction activities will be scheduled to reduce disruption to public and commercial vehicle access on winter roads where possible.</li></ul>
	<ul style="list-style-type: none"><li>• Efficient project planning will be used to reduce haul distances and the number of trips required to move road construction materials.</li></ul>
	<ul style="list-style-type: none"><li>• Reduce fugitive dust emissions by optimizing movement of construction equipment.</li></ul>

## 6 Jericho Station

NTD: To be updated as plans progress.

Jericho Station, at the southern terminus of the road and principal interconnection with the TCWR, will be located at or near the former Jericho Mine site, that was declared abandoned in 2014. Existing infrastructure at the former mine site includes a gravel airstrip and apron, the condition of which will be assessed, but is anticipated to be retained in operable condition with minimal maintenance improvements. Mitigation measures specific to the construction of project components at Jericho Station are included in Table 6.1.

**Table 6.1 Mitigation Measures Specific to Jericho Station**

Activity/Concern	Mitigation Measures
NTD: update	

# **Attachment 1      Management Plans**

**Grays Bay Road and Port Project  
Environmental Protection Plan (Draft)**

Attachment 1: Management Plans  
April 2026

The management and contingency plans summarized in Table 1 and attached to this EPP have been developed to reduce the risk of adverse effects of the Project.

**Table 1 Management Plans included in EPP**

<b>Attachment</b>	<b>Management Plan</b>	<b>Description</b>
H1	Borrow Pit and Quarry Management Plan	<ul style="list-style-type: none"> <li>The plan provides the management measures that guide the development, use, and closure of borrow pits and quarries.</li> </ul>
H2	Erosion and Sediment Control Plan	<ul style="list-style-type: none"> <li>The plan includes the erosion and sedimentation measures to be employed during construction and operations and maintenance activities and promotes compliance with applicable regulations.</li> </ul>
H3	Explosives Management Plan	<ul style="list-style-type: none"> <li>The plan outlines management practices that aim to reduce the environmental and safety risks of manufacturing, transporting, storing, handling and usage of explosives.</li> </ul>
H4	Risk Management and Emergency Response Plan	<ul style="list-style-type: none"> <li>The plan includes details pertaining to incident response, investigation, review, and corrective measures in accordance with the findings of the investigations. The measures in the RMERP will be combined with a spill contingency plan for events that require a reaction to emergency spills.</li> </ul>
H5	Spill Contingency Plan	<ul style="list-style-type: none"> <li>The plan includes the management measures to employ should an unauthorized discharge occur during construction, operations and maintenance. This will include hazardous material measures.</li> </ul>
H6	Water Management Plan	<ul style="list-style-type: none"> <li>The plan describes the responsible management of water, including the collection, management and/or treatment of water for the protection of aquatic resources.</li> </ul>
H7	Waste Management Plan	<ul style="list-style-type: none"> <li>The plan provides management measures for the generation of waste, including solid waste and wastewater. Measures will be described to ensure that waste is procured, handled, stored, treated, and disposed of in an environmentally responsible manner. The Waste Management Plan will include specific measures related to incinerator management.</li> </ul>

## **Attachment H1      Borrow Pit and Quarry Management Plan**

# Grays Bay Road and Port Project Borrow Pit and Quarry Management Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Plan Scope and Objectives .....	1
1.2	Roles and Responsibilities .....	2
1.3	Regulations, Approvals and Guidelines .....	2
<b>2</b>	<b>Borrow Pit and Quarry Management.....</b>	<b>3</b>
2.1	Pre-Development Quarry Identification and Characterization .....	3
2.2	Geotechnical Investigations .....	3
2.3	Acid Rock Drainage and Metal Leaching Potential.....	3
2.3.1	Acid Generation Potential.....	3
2.3.2	Metal Leaching Potential .....	3
2.3.3	Mitigation and Monitoring for ARD/ML .....	3
2.4	Borrow Pit and Quarry Operations .....	4
2.5	Access (Haul) Road .....	4
2.6	Salvage of Organics and Overburden.....	4
2.7	Development Sequence.....	4
2.8	Borrow Pit or Quarry Activities .....	4
2.9	Safety .....	4
<b>3</b>	<b>Mitigation Measures and Monitoring .....</b>	<b>5</b>
3.1	Acid Rock Drainage and Metal Leaching.....	5
3.2	Erosion and Sediment Control .....	5
3.3	Archaeological Resources .....	5
3.4	Air Quality and Noise .....	5
3.5	Permafrost.....	6
3.6	Wildlife.....	6
<b>4</b>	<b>Closure and Reclamation .....</b>	<b>7</b>
4.1	Desired Future Condition of Site.....	7
4.2	Environmental Protection.....	7
<b>5</b>	<b>Reporting .....</b>	<b>8</b>
<b>6</b>	<b>References.....</b>	<b>9</b>

## List of Tables

Table 1.1	Regulatory Approvals.....	2
Table 3.1	Summary of [Borrow Pit / Quarry] Equipment.....	4

## Abbreviations

CIRNAC.....	Crown-Indigenous Relations and Northern Affairs Canada
DFO.....	Fisheries and Oceans Canada
EPP.....	Environmental Protection Plan
ERC.....	Emergency Response Coordinator
GN.....	Government of Nunavut
HTA.....	Hunters and Trappers Association
IOL.....	Inuit Owned Land
NWB.....	Nunavut Water Board
NTD.....	Note to Draft
Project, the.....	Grays Bay Road and Port Project
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

## Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

The Borrow Pit and Quarry Management Plan (BPQMP) provides a conceptual framework the overarching management and process of borrow pits and quarries required for the Project. It outlines the general principles and management approaches that will guide activities throughout use and closure of each pit or quarry that is required for construction or operations and maintenance of the Project. The BPQMP has been developed based on guidance provided in the Northern Land Use Guidelines - Pits and Quarries (INAC 2009) and the Northern Land Use Guidelines – Access: Roads and Trails (INAC 2010).

As the Project design advances, the BPQMP will be updated or site-specific plans will be prepared as pits or quarries are identified. This plan will also be revised to adapt and incorporate changes related to environmental factors, project-specific changes, ongoing community engagement and regulatory agency input.

The Plan is a “living document.” It will be updated based on management reviews, monitoring results, regulatory changes, or other Project-related changes.

## 1.1 Plan Scope and Objectives

The purpose of this Plan is to outline and address the requirements related to the development and operation of quarries and borrow pits for the Project. This includes the identification of suitable material for construction or operations and maintenance use, management of surface materials, and process for closure and reclamation of quarries or pits as they are no longer required for the Project. It is noted that quarry/pit seepage and runoff management will be addressed in WKR’s Water Management Plan, management of monitoring for environmental effects related to the atmospheric, terrestrial or marine environment will be completed under separate monitoring plans.

The main environmental concerns related to quarry operations are the potential for metal leaching and acid rock drainage (ML/ARD), release of nutrients from explosives use, and/or total suspended solids on downstream water quality, deposition of dust emissions from the borrow / quarry sites, and protection of the permafrost. Quarry operations can also impact archeological sites, and this is mitigated both through the procedures outlined in this Plan as well as those outlined in the Heritage Resources Protection Plan.

## 1.2 Roles and Responsibilities

NTD: Contacts for pit or quarry operations, incidents, and this plan, will be listed below:

<b>Primary Contact:</b>
[Insert Name]
[Insert Role Title]
[Insert Organization]
[mailing address]
[Phone]
[Fax]
[Email]
<b>Secondary Contact:</b>
TBD as necessary

## 1.3 Regulations, Approvals and Guidelines

This plan has been developed in consideration of the applicable legislation and guidelines, including:

- Northern Land Use Guidelines - Pits and Quarries (INAC 2009)
- *Nunavut Wildlife Act* and Wildlife Regulations
- *Nunavut Environmental Protection Act* and Regulations
- Territorial Land Use Regulations under the *Territorial Lands Act*
- Territorial Quarrying Regulations under the *Territorial Lands Act*
- *Species at Risk Act*
- *Migratory Birds Convention Act, 1994*, and Migratory Birds Regulations

Regulatory approvals [will be listed in Table 1.1].

**Table 1.1 Regulatory Approvals**

Authority	Permit	Permit Number	Permit Approval Date	Permit Expiry
Nunavut Impact Review Board (NIRB)	NIRB Certificate	TBD		N/A
Crown Indigenous Relations and Northern Affairs Canada (CIRNAC)	CIRNAC Land Use Permit	TBD		
CIRNAC	CIRNAC Quarrying Permit	TBD		

This BPQMP will be updated as permits are obtained and renewed, as required.

## 2 Borrow Pit and Quarry Management

### 2.1 Pre-Development Quarry Identification and Characterization

Borrow pits and quarries are selected based on their material, geotechnical and geochemical characteristics, logistical requirements, and consideration of environmental and archaeological impacts. Pre-Development characterization programs will be conducted on each borrow pit or quarry prior to use to identify and characterize these features. If a quarry is deemed suitable for construction purposes quarry information and any quarry-specific management, mitigation or monitoring requirements will be included in the site-specific borrow pit or quarry management plan. Details for each plan will/may include:

- quarry maps indicating minimum setbacks and any relevant features
- estimates of the resources to be extracted
- geochemical characterization information and additional sampling plans (where required)
- identification of any archaeological or fish habitat buffer zones
- quarry-specific waste management facilities (where applicable)
- quarry-specific water management facilities and any erosion control measures (if required)

### 2.2 Geotechnical Investigations

NTD: Update this section on geotechnical investigations to refine plans for borrow pits and quarries.

### 2.3 Acid Rock Drainage and Metal Leaching Potential

#### 2.3.1 Acid Generation Potential

NTD: Update this section on acid generation testing and potential based on analysis to refine plans for borrow pits and quarries.

#### 2.3.2 Metal Leaching Potential

NTD: Update this section on metal leaching testing and potential based on analysis to refine plans for borrow pits and quarries.

#### 2.3.3 Mitigation and Monitoring for ARD/ML

NTD: Update this section on mitigation and monitoring if necessary, after confirmation testing is complete to refine plans for borrow pits and quarries.

## 2.4 Borrow Pit and Quarry Operations

Borrow pits and quarries will be developed, operated, inspected, and maintained by WKP or contractors charged with this responsibility under the direction of WKR.

NTD: Update this section on how borrow pits and quarries will be operated overall and will include details for each of the subsections below.

## 2.5 Access (Haul) Road

NTD: Update this section on how borrow pits and quarries will be operated overall and will include details for any access or haul roads.

## 2.6 Salvage of Organics and Overburden

NTD: Update this section on how borrow pits and quarries will be operated overall and will include details on salvage of organics and overburden.

## 2.7 Development Sequence

NTD: Update this section on how borrow pits and quarries will be operated overall and will include details for of development sequencing.

## 2.8 Borrow Pit or Quarry Activities

A summary of the equipment used for the [borrow / quarry] operation is provided in Table 2.1 below.

**Table 2.1 Summary of [Borrow Pit / Quarry] Equipment**

Equipment	Quantity	Proposed Use

## 2.9 Safety

NTD: Insert borrow pit or quarry safety measures specific to methodology of operations. All other safety procedures will be included in the Project Occupational, Health and Safety Plan and the Risk Management and Emergency Response Plan.

## 3 Mitigation Measures and Monitoring

Borrow Pit and quarry operations will occur using best management practices, including the following general mitigation measures: [insert list when finalized]

### 3.1 Acid Rock Drainage and Metal Leaching

NTD: ARD/ML specific mitigation measures

### 3.2 Erosion and Sediment Control

Quarries will be operated in a manner consistent with the Northern Land Use Guidelines: Pits and Quarries (INAC 2010), including:

- Organic material and overburden stockpiles will be located at least 31 m from waterbodies, and will be sloped and rounded to reduce wind erosion.
- Snowmelt and runoff from rainfall events will be controlled to prevent excessive rilling and gullyng.
- A buffer of at least 31 m of undisturbed land will be maintained between quarry and waterbodies, where practical.
- If necessary, silt curtains and/or straw logs will be used to control suspended sediments or reduce water runoff seepage from the quarry.
- Constructing a berm or swale at the top of the slopes to direct water away from or around the pit.
- No vegetation will be stripped outside of the approved areas.
- Directing runoff to the bottom of the slope through a drainpipe or ditch.
- Progressive restoration and revegetation will also take place as the quarry is depleted to stabilize soils.
- Pit slopes and stockpiles will be kept at less than 2:1 slope during times of the year when the quarry is not in operation.

### 3.3 Archaeological Resources

NTD: confirm each borrow pit and quarry archaeological assessment findings and refer to the Heritage Resources Management Plan.

### 3.4 Air Quality and Noise

NTD: reference the Air Quality Monitoring and Management Plan and the Noise and Vibration Management Plan.

### **3.5 Permafrost**

Permafrost exposed during excavation activities may be subject to thaw, releasing water and causing subsidence. To be updated based on site-specific geotechnical investigations.

### **3.6 Wildlife**

NTD: pull specific wildlife management procedures from the Wildlife Monitoring and Mitigation Plan.

## **4 Closure and Reclamation**

### **4.1 Desired Future Condition of Site**

The objective of the closure and reclamation of all borrow pits or quarries is to return the disturbed area to a stable, usable condition that does not pose a risk to human or wildlife safety. The quarry will undergo progressive reclamation as the borrow materials are depleted, and stockpiled overburden will be replaced to promote revegetation.

Process for closure and reclamation will be developed based on site-specific conditions and updated to reflect the planned process prior to the start of any borrow pit or quarry operations. This will include how the management of waste (hazardous and non-hazardous), equipment and excess material. A project specific Spill Contingency Plan will be developed for the Project and will outline the management of unauthorized discharges during construction and operations and maintenance phases of the Project, including during borrow pit and quarry operations.

### **4.2 Environmental Protection**

The site recontouring during closure and reclamation will be designed and completed to limit erosion and sedimentation. Procedures will be developed to leave the site in a stable condition, as per permit conditions.

## **5 Reporting**

A summary of borrow pit and quarrying activities will be reported to the NWB, NIRB and the KIA as part of the annual reports in accordance with requirements of the Project Certificate, Licence, and Leases. Reporting will include a summary of results of the geochemical inventory and monitoring programs, including the amount of rock used from each quarry.

## 6 References

INAC (Indigenous and Northern Affairs Canada). 2009. Northern Land Use Guidelines: Pits and Quarries. GNWT. Ottawa, ON. Available at: [https://publications.gc.ca/collections/collection\\_2010/aic-inac/R2-226-8-2009-eng.pdf](https://publications.gc.ca/collections/collection_2010/aic-inac/R2-226-8-2009-eng.pdf).

INAC (Indigenous and Northern Affairs Canada). 2010 Northern Land Use Guidelines: Road GNWT. Ottawa, ON. Available at: <https://publications.gc.ca/pub?id=9.693034&sl=0>.

## **Attachment H2      Erosion and Sediment Control Plan**

# Grays Bay Road and Port Project Erosion and Sediment Control Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Objectives and Scope .....	1
<b>2</b>	<b>Erosion and Sediment Control .....</b>	<b>2</b>
2.1	Forms of Erosion.....	2
2.2	Regulatory Summary .....	2
<b>3</b>	<b>Site Location and General Site Characteristics .....</b>	<b>3</b>
3.1	Site Information .....	3
3.1.1	Project Location and Size.....	3
3.1.2	Sensitive Areas.....	3
<b>4</b>	<b>Erosion and Sediment Control Measures.....</b>	<b>4</b>
4.1	General Procedural Requirements .....	4
4.2	Temporary ESC Measures .....	4
4.3	Permanent ESC Measures .....	5
4.4	Shut Down Considerations .....	5
4.5	General Winterization ESC Measures .....	5
4.6	General Spring/Summer ESC Measures .....	6
<b>5</b>	<b>Plan Accountability and Administration.....</b>	<b>7</b>
5.1	Roles and Responsibilities.....	7
5.2	Monitoring .....	7
5.2.1	Daily.....	7
5.2.2	Rainfall and Snowmelt Events.....	7
5.2.3	Weekly.....	7
5.2.4	Post-Construction .....	8
5.2.5	Operations and Maintenance .....	8
5.3	Emergency Response.....	8
5.4	Nonconformities, Corrective Action, and Opportunities for Improvement.....	9
<b>6</b>	<b>Records.....</b>	<b>10</b>
<b>7</b>	<b>Review and Improvement.....</b>	<b>11</b>
<b>8</b>	<b>References.....</b>	<b>12</b>

## List of Tables

Table 5.1	TBD .....	7
Table 5.2	TBD .....	7
Table 5.3	TBD .....	8

## List of Attachments

Attachment 1	TBD
Attachment 2	TBD
Attachment 3	TBD

## Abbreviations

CIRNAC.....	Crown-Indigenous Relations and Northern Affairs Canada
EPP .....	Environmental Protection Plan
ERC.....	Emergency Response Coordinator
GN.....	Government of Nunavut
HTA.....	Hunters and Trappers Association
IOL.....	Inuit Owned Land
NTD.....	Note to Draft
NWB.....	Nunavut Water Board
Project, the.....	Grays Bay Road and Port Project
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

## Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station (the former Jericho Mine site). The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

Note to Draft (NTD):

Insert information on design, construction and operations and maintenance plans at a high level.

## 1.1 Objectives and Scope

The objective of the Erosion and Sediment Control (ESC) Plan is to describe the ESC measures, maintenance, monitoring, and reporting during the design and construction of the Project. The ESC Plan is part of the Environmental Management System (EMS) and in accordance with the *[insert Project Agreement or Approval conditions]*.

This ESC Plan is an overall guidance plan for the Project, outlining general temporary requirements. Site-specific ESC Plans (including drawings) will be developed for work areas as design and construction progresses *[insert Attachment 1 for a list of approved site-specific ESC plans (as developed)]*. The site-specific ESC Plan(s) will meet the requirements of all regulatory agreements, which includes the site assessment, environmental sensitivities, site erosion potential and evaluation, a description of erosion and sediment control measures, and a selection process of BMPs for erosion and sediment control measures. The plans will be developed by a Certified Professional in Erosion and Sediment Control (CPESC), be specific to each Project area, will include (but not be limited to) drawings that identify environmental sensitivities / sensitive receptors, site access, stockpiling locations, slope conditions, and site shut down protocols.

As construction progresses the site-specific ESC plan(s) will be modified, as necessary, under the direction of a CPESC, based on changing site conditions. Temporary ESC measures described in this plan are for construction purposes for the period between initial ground disturbance and establishment of permanent ESC (e.g., seed has established, and ground cover is in place). Site-specific ESC Plans will be developed and submitted to [TBD] for approval. Site-specific ESC Plans will be maintained on the Project SharePoint.

## 2 Erosion and Sediment Control

Erosion and sedimentation are natural processes in which sand, silt, and clay particles are loosened and transported by wind, water, and ice, and deposited downwind or downstream. These processes usually occur slowly over a long period; however, anthropogenic activities, such as construction, can lead to accelerated levels of erosion through disturbance of soil and vegetation.

### 2.1 Forms of Erosion

NTD: Update as necessary

Once soil has been loosened, there are several forms of erosion that are possible:

- Sheet Flow: Uniform removal and movement of sediment by runoff water flowing over the ground surface
- Rills: Long, narrow, shallow “incisions” (usually <75 mm) due to a concentrated flow of water and higher runoff velocities
- Gullies: Deep and wide depressions (usually >75 mm) due to large, concentrated flows of water
- Channel or Streambank: Erosion due to natural patterns of water flow over a landscape

Due to relatively steep slopes in places on the site, ESC measures will be chosen to protect against rill and gully erosion.

### 2.2 Regulatory Summary

NTD: Update as necessary

The ESC Plan has been developed in accordance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the Nunavut Waters Regulations and is intended to support compliance with all applicable terms and conditions of the Project’s Type A Water Licence once issued by the Nunavut Water Board (NWB).

## **3 Site Location and General Site Characteristics**

### **3.1 Site Information**

NTD: Update as necessary

The following details in the subsections below will be split into areas that will be determined for different construction contractors, unique construction areas.

#### **3.1.1 Project Location and Size**

NTD: Update as necessary

Include separate areas as split / defined for construction (e.g., Port, Aerodrome, road, different major waterbody crossings, Jericho Station).

#### **3.1.2 Sensitive Areas**

NTD: Update as necessary

## 4 Erosion and Sediment Control Measures

NTD: Update as necessary.

Proper planning and site management are important factors to protecting against erosion and sedimentation. The following measures are best management practices (BMPs) (see Attachment 2) to be utilized as temporary ESC measures during construction and will help to protect against a release of sediment to the environment.

### 4.1 General Procedural Requirements

The priority on any construction project should be to isolate the site, and direct all runoff away from the active construction area or convey runoff through the site in a controlled manner:

- Construction works will be carried out (clearing, stripping, and grading) in a sequential, phased approach to limit exposed soils and erosion potential in areas required for construction
- In cases where vegetation clearing on slopes occurs more than two days in advance of earthworks or other activity, grubbing (removal of root networks) shall not occur until earthworks begin and erosion and sediment control measures are in place
- During construction, disturbed areas need to be isolated as much as possible to prevent offsite water from entering the construction zone, and to prevent sediment laden water on the active construction zone from reaching off site areas
- Active construction on bare soil will be avoided during wet weather (i.e., rainfall events) unless mitigation is in place and there are no adverse impacts occurring; rutting/compaction needs to be avoided
- Temporary pumping or dewatering activities during construction will be coordinated and managed in a way consistent with the NWB Water Licence conditions and the Aquatic Effects Management Plan (AEMP)
- The water quality monitoring plan will be completed as per the requirements outlined in the AEMP, or as per the conditions of the NWB Water Licence

### 4.2 Temporary ESC Measures

NTD: Update and confirm based on construction plans

This section should include information on silt fencing, sediment traps and catchment areas, berms/ditching, sediment retention fibre roll use, mulch or seeding, slope stabilization, slope texturizing, permeable barriers, other temporary ESC measures that may be employed.

### 4.3 Permanent ESC Measures

NTD: Update and confirm based on construction plans

Permanent ESC measures and BMP's will be described in the Construction Work Plans/Progressive Reclamation Plans. However, specific locations for installation of such ESC measures will be determined in the field as directed by the CPESC. The CPESC will regularly monitor the installation and effectiveness of ESC measures onsite and that adjustments and maintenance will be completed as needed as determined by the CPESC.

### 4.4 Shut Down Considerations

NTD: Update as necessary

When the construction schedule will be interrupted by a shutdown (i.e., extended period of not actively working onsite), ESC measures must still be inspected and maintained. Additional ESC measures may also be required; recommendations on measures to be used for these cases will be on a case-by-case basis, depending on site conditions. Site-specific shutdown measures will be included with the site-specific ESC Plan(s) (Attachment 1) and will include measures to stabilize the areas to prevent erosion potential prior to scheduled interruptions, phase breaks and shutdown periods. Reasons for shutdown periods include (but are not limited to):

- Project safety protocols/spills
- Seasonal shutdowns (i.e., winter shutdown)
- Windy conditions
- Extended wet weather conditions (where construction is not possible due to ground saturation conditions)

### 4.5 General Winterization ESC Measures

NTD: Update as necessary

The following winterization measures must be implemented on the Project:

- Stockpiles on the Road Right of Way must be winterized
- Snow dumps must not be placed near sensitive vegetation
- Dormant seeding is acceptable only if the seed type is amendable to such treatment and the timing (prior to snowfall) is appropriate
- Seed cannot be placed on frozen ground or snow
- Wattles, logs, and/or barriers must only be installed during winter in areas where snow has been cleared and if the anchoring method is still possible. Pneumatic methods may be required to penetrate the soil during frozen ground conditions. Before winter, remove built-up soil from behind wattles, logs, and/or other barriers so that there is 100% capacity prior to run-off/snow melt events. Replace filtering products (filled with sediment) before winter

- Before winter, clean out sediment containment systems so that they have 100% capacity. This includes the cleaning of any sumps associated with designed ponds
- Sediment containment systems may be installed during the winter only in ground that is not frozen. Larger equipment and/or frost rippers may be used to dig sediment ponds during frozen conditions. The installation of sediment containment systems (requiring compacted cross-check structures (e.g., storage ditches)) may not be possible when the ground is frozen
- Before winter, clean silt fences so that they have 100% capacity.
- During winter, silt fences may be installed if the active layer / ground is not frozen. When the ground is frozen, silt fences may be installed by following these steps:
  - Install posts into frozen ground (metal posts are required)
  - Attach silt fence material to the posts with wire ties, leaving a 400mm flap on the upstream side of the installation
  - Cover the flap with a seal. The seal must be able to hold the flap down for its entirety to support direct contact between the silt fence flap and the ground, so that there is no undermining of the silt fence (e.g., 50mm of 20mm+ crushed stone or gravel; sand bags).
- Before winter, install surface texturing in all required areas. Areas that have been damaged or flattened (e.g., by natural and mechanical forces) must be repaired. Surface texturing may be conducted in the winter on non-frozen ground, otherwise larger equipment and/or frost rippers may be used to texture surfaces
- Before winter (October 1), remove all inlet protection. Inlet controls must be removed during periods of time when icing could occur (October 1 to June 30)

Additional winterization measures are contained within the site-specific ESC Plans.

## **4.6 General Spring/Summer ESC Measures**

NTD: Update as necessary

The following spring/summer measures must be implemented on the Project:

- Monitor/review areas where wattles, logs, and/or barriers were installed during or just prior to winter to confirm proper installation of those measures
- Remove built up soil from behind wattles, logs, and/or other barriers so that there is 100% capacity prior to spring run-off/spring snow melt events. Replace filtering products (filled with sediment)
- Clean out sediment containment systems so that they have 100% capacity.
- Clean silt fences so that they have 100% capacity.
- Repair surface texturing in all required areas. Areas that have been damaged or flattened (e.g., by natural and mechanical forces over winter) must be repaired
- Replace all inlet protection (as required) after June 30

Additional spring/summer measures are contained within the site-specific ESC Plans.

## 5 Plan Accountability and Administration

### 5.1 Roles and Responsibilities

NTD: Update as necessary

This section outlines the roles and responsibilities of key environment team members involved in the development and implementation of this ESC Plan and the site-specific ESC Plans (Attachment 1).

[Insert table of roles and responsibilities related to the Project and ESC Plan]

### 5.2 Monitoring

#### 5.2.1 Daily

Daily monitoring (observations of installed ESC measures by the contractor) will be conducted for construction activities and carried out as summarized in Table 5.1. The inspections will monitor site conditions for environmental issues and for compliance with requirements identified in the ESC Plan.

**Table 5.1** TBD

#### 5.2.2 Rainfall and Snowmelt Events

The [Environmental Monitor] is responsible for monitoring daily weather forecasts. If significant rainfall (12.0 millimetres (mm) or greater within 24 hours) or snowmelt events are expected, the [Environmental Monitor] will notify the [Construction Manager] and provide recommendations for additional actions. The [Environmental Monitor and Construction Manager] will be responsible for collaborating to determine the best course of action regarding additional ESC recommendations.

At minimum, monitoring will be completed within 24 hours after significant rainfall or snowmelt events.

Additional actions may include:

- Staging of pumps
- Implementation of additional ESC measures
- Implementation of additional inspections

#### 5.2.3 Weekly

Formal inspections will be conducted weekly by the [Environmental Monitor(s)] and a monitoring report/checklist will be completed for each inspection, as outlined in Table 5.2, will be retained by WKR using the [EMS / or Quality Management System (QMS)] procedures.

**Table 5.2** TBD

A sample ESC monitoring report/checklist template has been provided in Attachment 3.

NTD: Insert which regulator and frequency of submission of monitoring reports / checklist

#### 5.2.4 Post-Construction

After construction is complete, monitoring will be conducted monthly (at a minimum) and after heavy rainfall events until the ESC measures are no longer required or the construction sites are no longer active after Final Acceptance by WKR. Once vegetation has established, and there are no further deficiencies or maintenance requirements noted, all temporary ESC structures will be removed from the site under direction of a CPESC.

Any changes to monitoring frequency must be approved by WKR / [regulator] prior to implementation of the changes.

#### 5.2.5 Operations and Maintenance

NTD: provide details on the plan for permanent ESC measures that will be moved into Operations and Maintenance procedures for operating the Project.

### 5.3 Emergency Response

NTD: Update as necessary

Emergency response procedures and reporting requirements are outlined in the Risk Management and Emergency Response Plan and Spill Contingency Plan. Releases of sediment and/or sediment laden water into waterbodies or stormwater systems are considered releases. Water released to a waterbody, as defined by the *Fisheries Act*, and *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, shall be of equal or greater quality than the water in the receiving waterbody and all water released from the Project Limits must have a nephelometric turbidity unit (NTU) of xxx NTU or less. Waters released from the Project that do not meet the above criteria will be considered a non-compliance. Table 5.3 summarizes the emergency response for sediment release events. Materials that will be on hand to respond to emergency ESC events include:

- Sediment retention fiber logs
- Silt fence
- Sandbags
- Tarp/plastic sheets for cover
- Gravel/mulch for temporary cover

NTD: insert table for emergency response specific for sediment release

**Table 5.3**      **TBD**

## 5.4 Nonconformities, Corrective Action, and Opportunities for Improvement

NTD: Update with additional reporting requirements / including timelines of reporting / issue resolution

Nonconformities will be identified and opportunities for improvement will be determined through monitoring and measurement activities. Should any deficiencies or breaches to environmental obligations set by this ESC Plan be noted during the monitoring event, they will be recorded in the ESC monitoring report/checklist (Attachment 3). Where possible, deficiencies will be corrected during the monitoring event. A Non-Conformance Report (NCR) will be raised for non-conformities related to environmental obligations not corrected in a timely manner.

The process for addressing nonconformities includes identifying, responding to, recording, investigation, and follow-up. The root cause(s) of nonconformities/deficiencies will be investigated, and a plan of corrective action will be developed and implemented.

## 6 Records

NTD: Update as necessary

Records generated under the ESC Plan may include:

- Weekly environmental monitoring reports/checklists
- Monthly environmental monitoring reports
- Incident reports

Records generated under the ESC Plan will be compiled and maintained in WKR's electronic data management system following the [insert EMS details] procedure.

## 7 Review and Improvement

As described in Section X Environmental Plans of the EMS, WKR/Contractor will review, update, and implement changes, under the direction of a CPESC, to this Plan bi-annually (i.e., prior to September 1st annually (i.e., prior to freeze-up) and prior to May 15th annually (i.e., prior to spring melt)).

WKR/Contractor will ensure that the Plan reflects current site conditions, anticipated changing environmental conditions and construction plans throughout the construction term.

As described in Sections X Performance Evaluation and X Improvement of the EMS, monitoring and measurement activities (including the evaluation of compliance), the EMS audit process (internal and external audits) and the management review process will be utilized to assess opportunities for improvement within the ESC Plan. Corrective actions and essential actions required to achieve the intended outcomes of the EMS will be enacted to improve the performance of the EMS and its associated Plans.

After an environmental incident has been mitigated and investigated, amendments to the ESC Plan will be made based on the results of the investigation, if applicable.

## 8 References

NTD: Update as necessary

# Attachment 1    TBD

# **Attachment 2    TBD**

# **Attachment 3    TBD**

## **Attachment H3      Explosives Management Plan**

# Grays Bay Road and Port Project Explosives Management Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>1</b>
1.1	Plan Scope and Objectives .....	1
1.2	Regulations, Approvals, and Guidelines .....	1
1.3	Related Management Plans.....	1
1.4	Roles and Responsibilities .....	2
<b>2</b>	<b>Manufacture of Explosives</b> .....	<b>3</b>
2.1	Products .....	3
2.2	Storage Locations and Quantities .....	3
2.3	Design Criteria .....	3
<b>3</b>	<b>Handling of Explosives</b> .....	<b>4</b>
3.1	Transport.....	4
3.2	Storage.....	4
3.3	Blasting .....	4
3.4	Disposal of Wastes .....	4
<b>4</b>	<b>Spills</b> .....	<b>5</b>
4.1	Spill Prevention .....	5
4.2	Spill Response .....	5
<b>5</b>	<b>Training Program</b> .....	<b>6</b>
<b>6</b>	<b>Blasting Safety Measures</b> .....	<b>7</b>
<b>7</b>	<b>Emergency Response Plan</b> .....	<b>8</b>
<b>8</b>	<b>Record Keeping</b> .....	<b>9</b>
8.1	Explosive Use Tracking.....	9
8.2	Inspections and Audits .....	9
8.3	Explosive Incidents .....	9
<b>9</b>	<b>References</b> .....	<b>10</b>

## List of Tables

Table 1.1	TBD .....	1
-----------	-----------	---

## Abbreviations

AN	ammonium nitrate
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
DFO	Fisheries and Oceans Canada / Department of Fisheries and Oceans
EMP	Explosives Management Plan
EPP	Environmental Protection Plan
GN	Government of Nunavut
HTA	Hunters and Trappers Association
IAG	Inuit Advisory Group (or equivalent – to be confirmed)
IOL	Inuit Owned Land
kPa	kilopascal
mg/L	milligrams per litre
MMU	mobile manufacturing unit (explosives delivery truck)
NEQ	net explosive quantity
NIRB	Nunavut Impact Review Board
NLCA	Nunavut Land Claims Agreement
NRCan	Natural Resources Canada
NTD	Note to Draft
NWB	Nunavut Water Board
O&M	operations and maintenance
PAL	Firearms Possession and Acquisition Licence
Project, the	Grays Bay Road and Port Project
TCWR	Tibbitt to Contwoyto Winter Road
WKR	West Kitikmeot Resources Corp.

# Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

## 1.1 Plan Scope and Objectives

The Explosives Management Plan (ExMP) provides information on practices for explosives manufacture, transport, storage, handling, and use for the Project.

The Plan is a “living document.” It will be updated based on management reviews, monitoring results, regulatory changes, or other Project-related changes.

## 1.2 Regulations, Approvals, and Guidelines

The manufacturing, transport, storage and use of explosives within Canada and Nunavut are regulated primarily by the *Explosives Act* (Natural Resources Canada), Explosives Regulations, and *Transportation of Dangerous Goods Act* (Transport Canada). This plan was developed to comply with these federal legislations, along with territorial regulations and guidelines, and the Fisheries and Oceans Canada guidelines.

Note to Draft (NTD): [insert table of acts/regulations]

**Table 1.1** TBD

## 1.3 Related Management Plans

The ExMP is intended to act as a stand-alone document; however, it aligns with and draws upon information from other management plans in the Project EMS framework. The following management plans provide complimentary information, including mitigation measures referenced in the ExMP:

- Environmental Protection Plan
- Spill Contingency Plan
- Risk Management and Emergency Response Plan

## **1.4 Roles and Responsibilities**

NTD: Update as roles / responsibilities are identified

Confirm roles and responsibilities for the ExMP; coordinate with the EMS and identified roles for the construction and operations and maintenance phases of the Project.

## **2 Manufacture of Explosives**

### **2.1 Products**

NTD: Update as products for the manufacture of explosives are determined for the Project.

### **2.2 Storage Locations and Quantities**

NTD: Update as storage locations and quantities are identified for use.

### **2.3 Design Criteria**

NTD: Update as design requirements for manufacture of explosives are identified for the Project.

## **3 Handling of Explosives**

### **3.1 Transport**

NTD: Update as developed

### **3.2 Storage**

NTD: Update as developed

### **3.3 Blasting**

NTD: Update as developed

### **3.4 Disposal of Wastes**

NTD: Update as developed

## 4 Spills

### 4.1 Spill Prevention

NTD: Update as developed specific to the storage / manufacturing of explosives.

Details regarding spill prevention methods are provided in the Spill Contingency Plan. The following is a summary of the main aspects with respect to the ExMP:

- All storage tanks containing products that enter the composition of explosives will be in accordance with the provisions of regulations (e.g., National Fire Code, *Environmental Protection Act*)
- In case of a spill, the Spill Contingency Plan will be put into action and appropriate equipment will be used to contain the liquids or solids spilled
- All preventative and breakdown maintenance will be carried out and recorded in accordance with standard operating procedures

### 4.2 Spill Response

NTD: Update as developed, specific to the types of materials used as part of the ExMP.

## 5 Training Program

Only trained and certified persons will work with explosives or have access to unsupervised explosives. The explosives personnel will undertake formal training and on-the-job training to ensure compliance with legislation. Training requirements will include (but will not be limited to) the following:

- Approval Letter issued by Natural Resource Canada allowing access to a high-hazard explosive (types E, I, and D) or equivalent (Permis Général (Québec residents), FAST card, NEXUS card, or a Firearms Possession and Acquisition Licence (PAL))
- Specific fire procedures as per the Federal Explosives Act;
- First aid;
- Transportation of Dangerous Goods;
- Blasting certificate; and
- Workplace Hazardous Materials Information System (WHMIS).

## 6 Blasting Safety Measures

NTD: Update as developed specific to the procedures for blasting

## **7      Emergency Response Plan**

NTD: the Emergency Response Plan is expected to be updated based on directions developed by the explosives supplier, which addresses potential incidents involving the manufacturing, transport, handling, and storage of explosives and related products. It will prescribe the actions that the supplier and WKR employees must take to ensure employee and public safety in the event of an emergency.

Emergency response procedures will be provided in the Risk Management and Emergency Response Plan for the Project.

## **8 Record Keeping**

NTD: Update as the Environmental Management System is developed and all record keeping procedures and reporting is developed. The following subtasks are anticipated to be included as part of the ExMP.

### **8.1 Explosive Use Tracking**

### **8.2 Inspections and Audits**

### **8.3 Explosive Incidents**

## **9      References**

NTD: Update as necessary

## **Attachment H4      Risk Management and Emergency Response Plan**

# Grays Bay Road and Port Project Risk Management and Emergency Response Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>1</b>
1.1	Plan Scope and Objectives .....	1
1.2	Regulations, Approvals, and Guidelines .....	1
1.3	Related Management Plans.....	2
1.4	Roles and Responsibilities .....	2
<b>2</b>	<b>Risk Management Approach</b> .....	<b>3</b>
2.1	Identification of Emergency Scenarios.....	3
2.2	Risk Assessment and Methodology .....	3
2.3	Risk Prevention and Mitigation Measures.....	3
2.4	Seasonal, Environmental, and Remote-Site Considerations.....	3
<b>3</b>	<b>Emergency Preparedness and Response</b> .....	<b>4</b>
3.1	Emergency Response Organization .....	4
3.2	Emergency Communications and Notifications .....	4
3.3	Training, Equipment, and Readiness .....	4
<b>4</b>	<b>Emergency Response Overview</b> .....	<b>5</b>
4.1	Emergency Response Principles .....	5
4.2	Categories of Potential Emergency Events .....	5
4.2.1	Vehicle or Transportation Incidents .....	5
4.2.2	Fires and Explosions .....	5
4.2.3	Medical Emergencies .....	6
4.2.4	Spill of Fuel or Hazardous Materials .....	6
4.2.5	Security-Related Incidents.....	7
4.2.6	Extreme Weather Events.....	7
4.3	Evacuation and Medical Response.....	7
<b>5</b>	<b>Emergency Communication Protocol</b> .....	<b>8</b>
5.1	When Is Emergency Communication Necessary? .....	8
5.2	How to Report a Site Emergency.....	8
<b>6</b>	<b>Incident Management</b> .....	<b>9</b>
6.1	Incident Reporting and Documentation.....	9
6.2	Follow-Up and Corrective Actions.....	9
<b>7</b>	<b>Record Keeping</b> .....	<b>10</b>
<b>8</b>	<b>References</b> .....	<b>11</b>

## List of Tables

Table 1.1	TBD .....	1
-----------	-----------	---

## Abbreviations

EMS.....	Environmental Management System
NTD .....	Note to Draft
Project, the .....	Grays Bay Road and Port Project
RMERP .....	Risk Management and Emergency Response Plan
SOPEP .....	Shipboard Oil Pollution Emergency Plan
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

## Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station (the former Jericho Mine site). The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

NTD:

This section will expand on a brief overview of the Project’s key components to provide context for risk assessment and emergency planning. This section will also outline how the RMERP has been informed by Project design, environmental assessment findings (including the accidents and malfunctions assessment [see Volume 10, Section 34]), and experience from comparable northern infrastructure projects.

## 1.1 Plan Scope and Objectives

Note to Draft (NTD):

This section will introduce the Risk Management and Emergency Response Plan (RMERP) and describes its purpose as a high-level framework for identifying, managing, and responding to emergency events that may occur during construction and operations and maintenance of the Project. The scope of activities and Project components addressed by the Plan will be outlined.

The RMERP is a “living document.” It will be updated based on management reviews, monitoring results, regulatory changes, or other Project-related changes.

## 1.2 Regulations, Approvals, and Guidelines

NTD:

This section will identify the general regulatory framework, approvals, and guidelines relevant to emergency response and risk management.

The RMERP will be developed in accordance with federal and territorial laws and regulations, as well as Government of Nunavut (GN) policies and procedures designed to protect human health and the environment. This plan will be developed in consideration of relevant legislation, regulations, and guidelines, including the following:

[insert table of acts/regulations]

**Table 1.1**      **TBD**

## **1.3 Related Management Plans**

NTD:

The RMERP is intended to act as a stand-alone document; however, it aligns with and draws upon information from other management plans in the Project EMS framework. This section will describe how the RMERP aligns with and is supported by other management plans, such as spill contingency, port management, road management, and health and safety plans.

## **1.4 Roles and Responsibilities**

NTD:

Update as roles / responsibilities are identified

This section will describe the general roles and responsibilities related to risk management and emergency response, including those of the Proponent, contractors, emergency response personnel, and external emergency responders, if applicable.

## **2 Risk Management Approach**

### **2.1 Identification of Emergency Scenarios**

NTD:

This section will summarize the types of emergency scenarios considered relevant to the Project, informed by the accidents and malfunctions assessment (see Volume 10, Section 34). Scenarios are described at a conceptual level and may include transportation incidents, fires, medical emergencies, hazardous material releases, marine incidents, and severe weather-related events.

### **2.2 Risk Assessment and Methodology**

NTD:

This section will describe, at a high level, the general approach used to assess and prioritize risks based on likelihood and consequence, consistent with standard risk management practices and the Project Effects Assessment. Detailed quantitative risk matrices are not provided in this Plan (see Volume 10, Section 34).

### **2.3 Risk Prevention and Mitigation Measures**

NTD:

This section will describe the general types of risk prevention and mitigation measures that reduce the likelihood or severity of emergency events, including design considerations, operational controls, and training. Detailed mitigation measures are addressed in the other management plans, as appropriate.

### **2.4 Seasonal, Environmental, and Remote-Site Considerations**

NTD:

This section will describe how seasonal conditions, weather, the remote arctic operating environment, other environmental sensitivities, and access constraints are considered in emergency preparedness and response planning.

## **3 Emergency Preparedness and Response**

### **3.1 Emergency Response Organization**

NTD:

This section will outline the general structure of the emergency response organization, including internal coordination roles and interfaces with external responders and agencies.

### **3.2 Emergency Communications and Notifications**

NTD:

This section will describe high-level approaches to emergency communications, including internal notification procedures and external notifications to regulators, communities, and emergency services, where required.

### **3.3 Training, Equipment, and Readiness**

NTD:

This section will outline general training, equipment availability, and readiness measures intended to support effective response to emergency events.

## **4 Emergency Response Overview**

### **4.1 Emergency Response Principles**

NTD:

This section describes general principles guiding emergency response, including protection of human life, environmental protection, incident stabilization, and coordination with authorities.

### **4.2 Categories of Potential Emergency Events**

NTD:

This section will provide a high-level overview of emergency event categories relevant to the Project, informed by accidents and malfunctions assessment (see Volume 10, Section 34). Categories may include transportation incidents (road, marine, aviation), fires and explosions, medical emergencies, spills, severe weather events, and security-related incidents. Detailed response procedures are not included at this stage.

#### **4.2.1 Vehicle or Transportation Incidents**

NTD:

This section will describe potential vehicle-related emergency scenarios associated with Project activities, including incidents involving light-duty vehicles, heavy equipment, and off-site transportation. Scenarios may include collisions, rollovers, mechanical failures, and vehicle–wildlife interactions. The section will outline the immediate response actions, communication and notification requirements, traffic control measures, and coordination with emergency services, as applicable.

#### **4.2.2 Fires and Explosions**

NTD:

This section will address potential fire and explosion emergencies associated with Project activities, including the use, manufacture, transport, handling, and storage of explosives and flammable materials. The RMERP will incorporate and align with emergency procedures developed by the explosives supplier and will identify roles and responsibilities of the supplier and WKR employees. Response actions will focus on employee and public safety, securing the affected area, emergency notification, and coordination with responders.

### **4.2.3 Medical Emergencies**

NTD:

This section will describe medical emergency scenarios that may arise during Project activities, including occupational injuries, acute illness, and exposure to environmental conditions. The section will outline response procedures such as first aid and on-site medical care, emergency communications, transportation or evacuation of injured personnel, and coordination with local or regional medical services. Consideration will be given to site remoteness and access constraints.

### **4.2.4 Spill of Fuel or Hazardous Materials**

NTD:

This section will describe spill emergencies involving fuels, oils, chemicals, or other hazardous materials associated with Project activities. The section will identify spill response procedures, including source control, containment, recovery, protection of sensitive receptors, waste management, and reporting and notification requirements. Spill response actions will be scaled based on spill size, material type, and potential environmental receptors. This section will align with the measures and procedures presented within the Environmental Protection Plan and Spill Contingency Plan.

#### **4.2.4.1 *Spills on Land***

NTD:

This section will describe spill emergencies involving fuels, oils, chemicals, or other hazardous materials associated with Project activities. The section will identify spill response procedures, including source control, containment, recovery, protection of sensitive receptors, waste management, and reporting and notification requirements. Spill response actions will be scaled based on spill size, material type, and potential environmental receptors. Update with Procedures for Emergency principles for spills on Land – cross reference with Environmental Protection Plan and Spill Contingency Plan.

#### **4.2.4.2 *Spills on Water***

NTD:

This section will describe spill emergencies involving fuels, oils, chemicals, or other hazardous materials associated with Project activities. The section will identify spill response procedures, including source control, containment, recovery, protection of sensitive receptors, waste management, and reporting and notification requirements. Spill response actions will be scaled based on spill size, material type, and potential environmental receptors. Update with Procedures for Emergency principles for spills on Water (fresh) – cross reference with Environmental Protection Plan, Spill Contingency Plan, and Water Management Plan.

#### **4.2.4.3 Marine Spills**

NTD:

This section will address marine spill response related [identify all potential Marine spill potentials] operations. The operation of all marine vessels are regulated under the *Canada Shipping Act*. Vessels will have their own Shipboard Oil Pollution Emergency Plan (SOPEP).

This section will describe how the SOPEP interfaces with the RMERP, including notification protocols, roles and responsibilities, and coordination during marine spill events. The response considerations will reflect these conditions.

This section will also include response to spills from land-based operations to the marine environment.

#### **4.2.5 Security-Related Incidents**

NTD:

This section will describe emergency response procedures for security-related incidents that could affect Project personnel, assets, or operations. Potential scenarios include unauthorized access, threats or violence, theft, vandalism, or protest activity. The section will outline actions for incident reporting, site control, personnel safety, communication, and coordination with security personnel and law enforcement, as appropriate.

#### **4.2.6 Extreme Weather Events**

NTD:

This section will address emergency response procedures for special or extreme weather events relevant to the Project, such as severe storms, extreme cold, high winds, reduced visibility, flooding, or ice-related hazards. The section will describe preparedness and response measures, including monitoring, work suspension criteria, sheltering or evacuation procedures, and communication requirements to ensure worker safety.

### **4.3 Evacuation and Medical Response**

NTD:

This section will describe general considerations relevant to evacuation, first aid, and medical response in a remote Arctic operating environment.

## 5 Emergency Communication Protocol

NTD:

This section will outline the general approach for coordinating emergency response with external agencies, emergency services, and affected communities, as appropriate.

Delivering effective communication is an essential part of emergency response. The following section provides a framework for a standard emergency communication approach. Standardized communication is recommended for clear message transmission and formality during a serious situation when bystanders or the Emergency Response Team may be called upon.

### 5.1 When Is Emergency Communication Necessary?

NTD: build out protocols.

### 5.2 How to Report a Site Emergency

NTD: build out protocols.

## **6 Incident Management**

### **6.1 Incident Reporting and Documentation**

NTD:

This section will describe the general approach to reporting, documenting, and tracking emergency events and near-misses.

### **6.2 Follow-Up and Corrective Actions**

NTD:

This section will outline general approaches for recovery, cleanup, and corrective actions following an emergency event.

## 7 Record Keeping

NTD:

This section will describe the general types of records associated with emergency preparedness and response, consistent with the Project EMS. This section will be updated as the EMS is developed and all record keeping procedures and reporting are developed.

## **8      References**

NTD: Update as necessary

## **Attachment H5      Spill Contingency Plan**

# Grays Bay Road and Port Project Spill Contingency Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



## **Key Government Contacts**

[Insert table of contacts for reporting of spills]

## External Emergency Phone Numbers

[Insert table of contacts for emergency services / onsite companies / logistics / project support]

## Immediately Reportable Spills

Spill quantities that must be reported to the NT-NU 24-Hour Spill Report Line  
Per GN Environmental Guideline: Spill Contingency Planning and Reporting Regulations

Any spill to Navigable Waters (any size) must be reported to the Canadian Coast Guard at:  
1-867-979-5269 or (insert website / emails).

[Insert table of Spill / Amount]

Containment	Quantity
Explosives	Any amount
Compressed gas (flammable)	Any amount of gas from containers with a capacity greater than 100 L
Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L
Compressed gas (toxic)	Any amount
Compressed gas (corrosive)	Any amount
Flammable Liquid	100 L
Flammable Solid	25 kg
Spontaneously combustible solids	25 kg
Water reactant solids	25 kg
Oxidizing substances	50 L or 50 kg
Organic peroxides	1 L or 1 kg
Poisonous substances	5 L or 5 kg
Infectious substances	Any amount
Radioactive substances	Any amount
Corrosive substances	5 L or 5 kg
Miscellaneous products or substances, excluding PCB mixtures	50 L or 50 kg
Environmentally hazardous substances	1 L or 1 kg
Dangerous wastes	5 L or 5 kg
PCB mixtures of 5 or more parts per million	0.5 L or 0.5 kg
Other contaminants	100 L or 100 kg

## First Responder Process

When someone on site sees an unanticipated discharge or spill, they are immediately designated as the First Responder and shall complete the following actions:

[Insert graphic of First Responder Actions]

## **Spill Response Activation Process**

When a Supervisor receives a report of an unanticipated discharge or spill, they shall immediately complete the following actions:

[Insert graphic of spill response organizational structure]

# **Spill Emergency – Incident Command System (ICS) (sample)**

[insert graphic of the ICS organizational structure in the event of a spill emergency]

# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Plan Scope and Objectives .....	1
1.2	Plan Management .....	1
1.3	Regulations, Approvals and Guidelines .....	2
<b>2</b>	<b>Spill Response and Management.....</b>	<b>4</b>
2.1	Environmental Incident and Level of Confinement Definition .....	4
2.2	Spill Incident Alerts.....	4
2.3	Spill Response Organizational Structure .....	4
2.4	Spill Response Actions .....	4
2.4.1	Spills on Land and Water .....	4
2.4.2	Spills in a Marine Environment.....	4
2.4.3	Spills on Snow .....	4
2.4.4	Spills on Ice .....	5
2.4.5	Spills under Ice of Substances that Float.....	5
2.4.6	Spills under Ice of Substances that Sink .....	5
2.4.7	Spills on under Ice of Substances that Dissolve .....	5
2.4.8	Spills of Compressed Gas .....	5
2.4.9	Burning Spills.....	5
2.4.10	Spills Affecting Environmentally Sensitive Species or Archaeological Sites.....	5
2.5	Disposal of Contaminated Materials .....	5
2.6	Spill Response Resources .....	5
2.6.1	On-site Resources .....	5
2.6.2	Off-site Resources .....	6
<b>3</b>	<b>Spill Investigation, Documentation and Reporting .....</b>	<b>7</b>
3.1	Spill Investigation .....	7
3.2	WKR / Contractor Internal Reporting .....	7
3.3	External Reporting Requirements.....	7
3.4	Monitoring and Restoration.....	7
3.5	Incident Review and Root Cause Analysis .....	7
<b>4</b>	<b>Spill Management and Mitigation .....</b>	<b>8</b>
4.1	Issue: Spill from a Chemical Storage Tank or Other Containment.....	8
4.1.1	Management Response .....	8
4.2	Issue: Spill during Transport .....	9
4.2.1	Management Response .....	9
4.3	Issue: Spill during Transfer .....	9
4.3.1	Management Response .....	9
4.4	Issue: Spill from Equipment .....	9
4.4.1	Management Response .....	9

**Grays Bay Road and Port Project  
Spill Contingency Plan (Draft)**

Table of Contents  
April 2026

---

4.5	Issue: Health and Safety of Spill Responders .....	9
4.5.1	Management Response .....	9
4.6	Issue: Spills to Water .....	9
4.6.1	Management Response .....	10
4.7	Issue: Operational Consideration for Spill Response .....	10
4.7.1	Management Response .....	10
4.8	Risk Identification Matrix .....	10
4.8.1	Worst-case Scenario .....	10
<b>5</b>	<b>Training .....</b>	<b>11</b>
5.1	Spill Response Simulation Exercises.....	11
<b>6</b>	<b>References.....</b>	<b>12</b>

**List of Tables**

Table 1.1	Regulatory Approvals.....	3
-----------	---------------------------	---

**List of Figures**

Figure 2.1	TBD .....	4
------------	-----------	---

**List of Attachments**

Attachment 1	Hazardous Material and Product Specific Emergency Response Plans
Attachment 2	Spill Response Resources



## Abbreviations

CIRNAC.....	Crown-Indigenous Relations and Northern Affairs Canada
DFO.....	Fisheries and Oceans Canada
EPP.....	Environmental Protection Plan
ERC.....	Emergency Response Coordinator
GN.....	Government of Nunavut
HTA.....	Hunters and Trappers Association
IOL.....	Inuit Owned Land
NWB.....	Nunavut Water Board
NTD.....	Note to Draft
Project, the.....	Grays Bay Road and Port Project
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

# Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

## 1.1 Plan Scope and Objectives

WKR is committed to the health and safety of workers and the public during the construction, operations and maintenance of the Project. Safe work procedures and training provided to all employees promote best practices and sound environmental management; however, the potential exists for unanticipated discharges or spills to occur during the course of operations. WKR recognizes that prompt, effective and organized responses to an unanticipated discharge or spill will enhance the health and safety of all employees, minimize the potential adverse environmental impacts resulting from such an event, and ensure effective communication with the appropriate regulatory agencies and the public. Consistent with WKR's intent to be a responsible operator, these objectives are described as follows:

- Provide general procedures for every employee should he/she identify an unanticipated discharge or spill
- Define roles, responsibilities and procedures for spill response actions, documentation, reporting, incident investigation and review following an event
- Outline a process to be followed when conducting spill clean-up activities to promote safe and effective recovery of spilled materials and minimize impacts to the environment
- Provide information on available resources and potential operational hazards/risks that may be encountered during spill response activities
- Define methods to provide spill response training for all employees
- Implement a process to evaluate and continuously improve site spill response procedures.

## 1.2 Plan Management

NTD: Update as necessary

This Plan has been prepared in accordance with various licences held by WKR. The plan is reviewed annually and updated as required and submitted for review as per the Nunavut Water Board (NWB) process. Input from Inuit, Indigenous and Community members and other stakeholders relevant to spill response and management have been incorporated into the development of this Plan.

Below are the listed roles and responsibility of each for actioning this Plan.

[Insert table of Role / Responsibility]

In accordance with the requirements of the [insert section of NIRB and NWB licences], and the Environmental Emergency Regulations (SOR/2019-51), this plan will be immediately implemented following its submission, subject to any modifications proposed by the NWB or applicable regulatory agencies as a result of the review and approval process.

This plan is reviewed annually and updated as necessary to capture changes to site operational structure/contacts, response technologies or applicable legislation and regulations. When updated, the plan is submitted to the NWB and interested branches of the federal government (e.g., ECCC, CIRNAC, DFO) to provide recommendations at that time.

### **1.3 Regulations, Approvals and Guidelines**

This plan has been developed in consideration of the applicable legislation and guidelines, including:

- *Arctic Waters Pollution Prevention Act*
- *Canadian Environmental Protection Act*
- *Fisheries Act*
- *Explosives Act*
- *Nunavut Waters and Nunavut Surface Rights Tribunal Act*
- National Fire Code of Canada
- *Transportation of Dangerous Goods Act*
- *Nunavut Environmental Protection Act* and Regulations
- *Territorial Lands Act*
- *Hazardous Products Act*
- *Workers' Compensation Act*
- *Explosives Use Act*
- *Fire Protection Act*
- *Motor Vehicles Act*
- *Public Health Act*
- *Safety Act*

**Grays Bay Road and Port Project  
Spill Contingency Plan (Draft)**

Section 1: Introduction  
April 2026

---

Regulatory approvals [will be listed in Table 1.1].

**Table 1.1 Regulatory Approvals**

<b>Authority</b>	<b>Permit</b>	<b>Permit Number</b>	<b>Permit Approval Date</b>	<b>Permit Expiry</b>
Nunavut Impact Review Board (NIRB)	NIRB Certificate	TBD		N/A
Crown Indigenous Relations and Northern Affairs Canada (CIRNAC)	CIRNAC Land Use Permit	TBD		
CIRNAC	CIRNAC Quarrying Permit	TBD		

This SCP will be updated as permits are obtained and renewed, as required.

## **2 Spill Response and Management**

### **2.1 Environmental Incident and Level of Confinement Definition**

NTD: Level of leak or spill to be an Environmental Incident. Where and what would be included in the Level of Confinement.

### **2.2 Spill Incident Alerts**

NTD: Develop the alert process(s).

### **2.3 Spill Response Organizational Structure**

Once a spill has been identified, a spill response organizational structure will be implemented. The responsibilities of the individuals involved in spill response actions are summarized in the sections below. A flow-chart summarizing the activation structure is provided in [develop figure] as a quick reference at the beginning of this plan. A response management structure may be developed.

[insert sections that provide roles / responsibility of the various levels of people on-site / off-site and how they will communication / identify and proceed with a spill.]

### **2.4 Spill Response Actions**

NTD:

Update based on volume of chemicals to be stored and where – include list of all chemicals / products to be used onsite. There should be Product Specific Emergency Response Plans developed that details the procedure on how to manage those products. These should be attached to this plan in an attachment.

[Insert Figure of General Spill Response Actions.]

#### **Figure 2.1 TBD**

Develop the process / management of spills split below.

#### **2.4.1 Spills on Land and Water**

#### **2.4.2 Spills in a Marine Environment**

#### **2.4.3 Spills on Snow**

#### **2.4.4 Spills on Ice**

#### **2.4.5 Spills under Ice of Substances that Float**

#### **2.4.6 Spills under Ice of Substances that Sink**

#### **2.4.7 Spills on under Ice of Substances that Dissolve**

#### **2.4.8 Spills of Compressed Gas**

#### **2.4.9 Burning Spills**

#### **2.4.10 Spills Affecting Environmentally Sensitive Species or Archaeological Sites**

### **2.5 Disposal of Contaminated Materials**

Contaminated materials generated during a spill event will be contained and disposed of as per the product-specific SDS and as outlined in the Hazardous Waste Management Procedures and Non-hazardous Waste Management Procedures in the Waste Management Plan. Empty drums, barrels, mega-bags and storage tanks are available to store contaminated materials for disposal.

### **2.6 Spill Response Resources**

#### **2.6.1 On-site Resources**

NTD: Update section with where and what kinds of spill response kits will be located on-site and for what type of spill management.

## **2.6.2 Off-site Resources**

The Grays Bay Road and Port are in a remote location that is only accessible by plane for the majority of the year, with a short open-water ship access season. The Spill Contingency Plan does not rely on off-site resources to successfully respond to anticipated upset conditions. The Plan has been developed such that the resources required to respond to spills have been positioned on site. It is anticipated that the Project will have sufficient resources and trained personnel to respond to most types/sizes of spills that could potentially occur on site.

Additional off-site resources would be procured and flown to the site as needed in the event that on-site resources were exhausted.

## **3 Spill Investigation, Documentation and Reporting**

### **3.1 Spill Investigation**

A spill investigation will be completed for all significant spill events that occur at the Grays Bay Road or Port project locations. Investigations will determine the direct and root causes of a spill and will identify corrective actions that may reduce the risk of a repeated incident.

For spills that exceed the volume thresholds outlined in the Immediately Reportable Spills table [insert table reference] at the beginning of this plan, an Investigation will be completed. The investigation will be completed by the [identified role/persons] within 7 days of the spill occurrence. The [identified persons] may participate in the investigation and assist in developing corrective actions. For spills that do not exceed the volume thresholds outlined in the Immediately Reportable Spills table, an Investigation will be completed. The investigation will be completed by the [identified role/person] within 48 hours of the event and forwarded to the [role / Environmental Supervisor/Coordinator].

Records of all spill events and investigations will be maintained by the Environment Department and documented in the EMS. Any corrective actions that are identified will be entered into the Environmental Incident Register and implemented by the departmental [identified role/ person].

### **3.2 WKR / Contractor Internal Reporting**

NTD: Internal reporting process to be developed.

### **3.3 External Reporting Requirements**

NTD: External reporting process to be developed. Will be based on the amount specified in the Immediately Reportable Spills Table [insert table reference] and procedures required by regulators.

### **3.4 Monitoring and Restoration**

NTD: include general and specific monitoring requirements for spills, dependent on the nature of the spill.

### **3.5 Incident Review and Root Cause Analysis**

NTD: update as necessary

A review of incidents and causal analysis will be conducted by the [role/person] quarterly. The purpose of this review will be to identify trends in direct and root causes. Lessons learned from this exercise will be used to develop additional corrective actions including awareness campaigns for site personnel, improvements to operational equipment and spill response resources.

## 4 Spill Management and Mitigation

NTD: update the following subsections with specific mitigation and management responses for the breakdown of spill types / locations. An example has been included for Section 4.1.

[Site supervisors and managers] are responsible for ensuring work area inspections and risk assessments are conducted for their respective work areas. Risk assessments include evaluation of hazardous materials available and in use in the work area, and the likelihood and potential consequences of various spills. Where appropriate, based on likelihood and potential severity, mitigation, management and/or substance-specific spill response plans will be developed.

The following section outlines currently identified potential spill risks with potential for high severity and/or probability of occurrence, and the management and mitigation measures employed to reduce the likelihood and/or the potential severity of these occurrences. Additional scenarios, along with appropriate management and mitigation actions, may be added to this section over time as they are identified.

### 4.1 Issue: Spill from a Chemical Storage Tank or Other Containment

A fuel storage tank, containment area, sump, emergency catch basin or other product container may release its contents for a number of reasons, such as damage due to puncture, openings developed over time due to degradation (such as rusting), or overfilling.

Equipment malfunction or facility failure may cause a spill to occur, particularly during extreme winter temperature conditions experienced at the Project region.

Fuel or water releases may occur from waste management facilities or transfer pipelines.

#### 4.1.1 Management Response

This risk is minimized through the use of secondary containment and spill containment. All bulk fuel facilities are located in secondary containment (i.e., tank farms which have containment designed to contain volumes equivalent or greater than 110% of the aggregate or total volume of the largest container in the containment – whichever is greater). Smaller chemical storage tanks are either double walled (have built-in secondary containment), or are located in spill trays such that leakage from hoses or lines are further contained or are located in secondary containment berms.

Spill trays designed to contain volumes equivalent or greater than 110% of the aggregate or total volume of the largest container in the containment are used under fuel drums and other smaller chemical containers that are in use around the camp/accommodation.

Inspections of all containment structures will be conducted weekly to ensure concerns are noted and are addressed promptly.

In the event that a spill exceeded the capacity of a containment berm (for example, if more than one container in a berm was breached) or a containment berm became compromised, the spill response actions outlined in Section 2 would be implemented. Containment measures would be deployed to prevent the spread of the chemical into the natural environment. This would include deploying absorbent materials or booms and constructing diversion trenches or sumps to intercept the spilled product. The vacuum truck and all available pumps would be deployed to transfer spilled product into empty storage tanks or alternative containment berms if necessary.

## **4.2 Issue: Spill during Transport**

NTD: update as necessary

### **4.2.1 Management Response**

NTD: update as necessary

## **4.3 Issue: Spill during Transfer**

NTD: update as necessary

### **4.3.1 Management Response**

NTD: update as necessary

## **4.4 Issue: Spill from Equipment**

NTD: update as necessary

### **4.4.1 Management Response**

NTD: update as necessary

## **4.5 Issue: Health and Safety of Spill Responders**

NTD: update as necessary

### **4.5.1 Management Response**

NTD: update as necessary

## **4.6 Issue: Spills to Water**

NTD: update as necessary

#### **4.6.1 Management Response**

NTD: update as necessary

### **4.7 Issue: Operational Consideration for Spill Response**

NTD: update as necessary

#### **4.7.1 Management Response**

NTD: update as necessary

### **4.8 Risk Identification Matrix**

NTD: update as necessary

#### **4.8.1 Worst-case Scenario**

NTD: update as necessary

## 5 Training

NTD: Update based on training plans and procedures by WKR and all contractors that may be onsite.

### 5.1 Spill Response Simulation Exercises

NTD: Level and timing of simulation exercises will be developed based on construction and operations and maintenance procedures for the Project.

## 6 References

NTD: Update as necessary

# **Attachment 1      Hazardous Material and Product Specific Emergency Response Plans**

# **Attachment 2      Spill Response Resources**

## **Attachment H6      Water Management Plan**

# Grays Bay Road and Port Project Water Management Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Plan Scope and Objectives .....	1
1.2	Regulations, Approvals, and Guidelines .....	1
1.3	Related Management Plans.....	1
1.4	Roles and Responsibilities .....	2
<b>2</b>	<b>Water Management .....</b>	<b>3</b>
2.1	Management Approach.....	3
2.1.1	Non-contact Water.....	3
2.1.2	Contact Water.....	3
2.1.3	Freshwater and Desalinized Water .....	3
2.1.4	Treated Sewage Water.....	3
2.2	Facilities .....	3
2.2.1	Water Treatment Plant .....	3
2.2.2	Quarry Water Management .....	4
2.2.3	Sewage Treatment .....	4
2.2.4	Freshwater Intake.....	4
2.2.5	Saline Water Intake .....	4
2.2.6	Various Use Containment Sumps .....	4
<b>3</b>	<b>Monitoring Plan .....</b>	<b>5</b>
3.1	Monitoring Objectives.....	5
3.2	Erosion Management and Mitigation Measures .....	5
3.3	Monitoring Plan .....	5
3.4	Discharge Criteria .....	5
3.5	Inspections .....	5
3.6	Documentation and Reporting .....	6
3.6.1	Record Keeping.....	6
3.6.2	Monitoring.....	6
<b>4</b>	<b>Care and Maintenance .....</b>	<b>8</b>
<b>5</b>	<b>References .....</b>	<b>9</b>

## List of Tables

Table 1.1	TBD .....	1
Table 3.1	TBD .....	5

## Abbreviations

CIRNAC.....	Crown-Indigenous Relations and Northern Affairs Canada
EPP .....	Environmental Protection Plan
ERC.....	Emergency Response Coordinator
GN.....	Government of Nunavut
HTA .....	Hunters and Trappers Association
IOL.....	Inuit Owned Land
NTD.....	Note to Draft
NWB.....	Nunavut Water Board
Project, the.....	Grays Bay Road and Port Project
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

# Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

## 1.1 Plan Scope and Objectives

The Water Management Plan provides information to manage the fresh water supply and wastewater for the construction, operations and maintenance phases of the Project. Objectives of the water management plan include:

- Minimize the total volume of water that comes into contact with project infrastructure by diverting non-contact runoff away from Project works
- Capture and contain water which is deemed unsuitable for immediate discharge
- Treat and dispose of water that cannot be discharged to meet water licence requirements

The Plan is a “living document.” It will be updated based on management reviews, monitoring results, regulatory changes, or other Project-related changes.

## 1.2 Regulations, Approvals, and Guidelines

Water use, transport, storage, handling, and disposal in Nunavut are regulated primarily by the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (Nunavut Water Board), *Nunavut Waters Act*, and *Fisheries Act*. This plan was developed to comply with these legislations, along with territorial regulations and guidelines, and the Fisheries and Oceans Canada guidelines.

Note to Draft (NTD): [insert table of acts/regulations]

**Table 1.1**      **TBD**

## 1.3 Related Management Plans

The Water Management Plan is intended to act as a stand-alone document; however, it aligns with and draws upon information from other management plans in the Project EMS framework. The following management plans provide complimentary information:

- Environmental Protection Plan
- Erosion and Sediment Control Plan
- Spill Contingency Plan

- Waste Management Plan
- Aquatic Effects Management Plan
- Risk Management and Emergency Response Plan

## **1.4 Roles and Responsibilities**

NTD: Update as roles / responsibilities are identified

## **2 Water Management**

### **2.1 Management Approach**

NTD: Provide a flow diagram of the water management approach for the Project (by area / phase).

#### **2.1.1 Non-contact Water**

NTD: Update with all management practices to divert water around development areas.

Best Management Practices (BMPs) will be put in place during construction of the Project to ensure that sediment loading after initial material placement is controlled. This may include silt fences or matting around construction activities during rainfall and snowmelt periods.

#### **2.1.2 Contact Water**

NTD: Contact water includes runoff that is collected from stockpile areas or from any padded areas, quarry areas or others.

Update how this runoff will be treated before release.

#### **2.1.3 Freshwater and Desalinized Water**

NTD: Update as necessary

Freshwater for potable and domestic use will be sourced from water sources near the port, along the road and near Jericho Station. Marine water will be desalinated and used during construction, operations and maintenance at the port. Update as design and infrastructure is further planned.

#### **2.1.4 Treated Sewage Water**

NTD: Domestic sewage will be treated on-site in the sewage treatment plant and discharged at an approved location.

### **2.2 Facilities**

NTD: Provide a list of all facilities and areas related to this Water Management Plan. Update the subsections below with details on how each facility will be operated, monitored and inspected. Additional facilities / areas may be added as the design progresses.

#### **2.2.1 Water Treatment Plant**

**2.2.2 Quarry Water Management**

**2.2.3 Sewage Treatment**

**2.2.4 Freshwater Intake**

**2.2.5 Saline Water Intake**

**2.2.6 Various Use Containment Sumps**

## 3 Monitoring Plan

### 3.1 Monitoring Objectives

NTD: The objective of the monitoring undertaken under this Plan is to:

- Comply with monitoring requirements provided in applicable water licences, project certificates, and any additional approvals
- Confirm water being discharged to the environment meets the appropriate discharge limits
- Confirm points of discharge are not being adversely affected by pooling water or erosion
- Confirm discharge to the marine environment are not negatively causing effects to the water quality or aquatic life
- Track water movement and volumes

### 3.2 Erosion Management and Mitigation Measures

NTD: Effective erosion and sediment control measures will be installed prior to construction work commencing to minimize the potential for the introduction of sediment into watercourse or waterbodies. Slopes from containment berms that contain loose or erodible materials, will be fortified under the direction of a Qualified Environmental Professional (QEP). An adequate supply of erosion and sediment control contingency supplies will be maintained at any site. The speed of any flowing water on site, specifically during periods of discharge, will be minimized since the erosive power of flowing water increases exponentially with velocity (speed). Supplies may include: provide a list. Details on how to install ESC measures are provided in the Erosion and Sediment Control Plan.

### 3.3 Monitoring Plan

NTD: Monitoring locations, frequency, and parameters for the Project are summarized in Table 3.1 as per the Type A Water Licence (provide number).

**Table 3.1** TBD

### 3.4 Discharge Criteria

NTD: Effluent discharged will be monitored as applicable and required under the [insert applicable regulations]. Provide effluent limits for the discharge based on where the effluent is being discharged.

### 3.5 Inspections

NTD: Routine visual inspections of all water management structures will be completed by site staff to determine whether the facilities are operating as designed and to assess maintenance requirements. Facility inspections are carried out following significant rain events and throughout the annual snowmelt period. During construction activities, freshet and significant rainfall events, daily visual are completed to:

Monitor for signs of erosion and implement mitigation measures to prevent entry of sediment to any water body

- Integrity of all piping and other water conveyance structures
- Signs of erosion or water pooling occurring during high flow periods
- Volumes of water in the contact water ponds
- Geotechnical integrity of contact water berms
- Integrity of erosion protection at the point of discharge.

Any irregularities identified during the visual inspection will be recorded and relayed to the [insert appropriate person] for the facility in order to ensure corrective action can be implemented.

### **3.6 Documentation and Reporting**

NTD: All monitoring data compiled will be documented and reported as prescribed under the water licence, [approval regulator], or otherwise. Any data not explicitly required to be reported monthly under the Water Licence will be reported in Annual Reports to the NWB. These reports will include but are not limited to:

- An assessment of data to identify areas of non-compliance with regulated discharge parameters
- A summary of all water inputs to the water treatment plant, water treatment plant discharges and other treated water discharges
- Annual review of the water balance and water quality prediction model
- Water management facility inspection and operations records will be retained on site and available for review upon request
- An Annual Geotechnical Inspection Report will be submitted to the NWB annually

A Construction Monitoring Report will be prepared in applicable years and submitted to regulators where required. The report will include, but is not limited to, the following:

- A summary of all inspections conducted during construction
- Updated “As-built” drawings of the constructed infrastructure.

#### **3.6.1 Record Keeping**

NTD: Update as the Environmental Management System is developed and all record-keeping procedures and reporting are developed.

#### **3.6.2 Monitoring**

NTD: Monitoring of the marine environment in the Port vicinity and any identified freshwater monitored lakes and streams will occur under the Aquatic Effects Management Plan (AEMP).

Update with all other ponded areas that may be identified to be monitored and processed for monitoring.

**Grays Bay Road and Port Project  
Water Management Plan (Draft)**

Section 3: Monitoring Plan  
April 2026

---

All volumes of water movements will be monitored with flow meters, tracked by truck load, or otherwise quantified as appropriate during the transfers. These include, but are not limited to, movements from:  
[provide list of discharges].

## **4 Care and Maintenance**

NTD: Should the Project be placed into Care and Maintenance following construction or during the operations and maintenance phase, compliant water will continue to be discharged to [identify location] seasonally to maintain water levels at or below the full supply level. Monitoring will continue as described above and as required under the conditions of the Water Licence [insert number].

## **5      References**

NTD: Update as necessary

## **Attachment H7      Waste Management Plan**

# Grays Bay Road and Port Project Waste Management Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Plan Scope and Objectives .....	2
1.2	Regulations, Approvals, and Guidelines .....	2
1.3	Related Plans and Studies .....	2
1.4	Roles and Responsibilities .....	3
<b>2</b>	<b>Waste Management.....</b>	<b>4</b>
2.1	Waste Identification .....	4
2.2	Waste Management Methods .....	4
2.3	Project Waste Flow .....	4
2.3.1	Generation Points .....	5
2.3.2	Waste Collection .....	5
2.3.3	Waste Management Facilities .....	5
2.4	Waste Handling and Minimization by Category .....	5
2.4.1	Grubbed Organic Soil Material .....	6
2.4.2	Used Oil Reuse .....	6
2.4.3	Non-Hazardous Waste Materials – Construction .....	6
2.4.4	Domestic Waste from Accommodation Complexes .....	6
2.4.5	Sewage .....	6
2.4.6	Hazardous Waste .....	6
2.4.7	Miscellaneous Refuse .....	6
2.4.8	Office Paper .....	6
2.5	Incinerators .....	6
2.5.1	Personnel Training Programs for Incinerator Operation .....	7
2.5.2	Air Emissions .....	7
2.5.3	Ash Disposal .....	7
2.5.4	Monitoring During Operations .....	7
2.6	Open Burning .....	8
2.6.1	Personnel Training Programs for Open Burning Operation .....	8
2.6.2	Ash Disposal .....	8
2.6.3	Monitoring During Operations .....	8
2.7	Landfill Facility Operations .....	8
2.7.1	Landfill Facility Operations .....	8
2.7.2	Personnel Training Programs for Landfill Operation .....	8
2.7.3	Monitoring During Operation .....	8
2.8	Hazardous Waste Storage and Disposal .....	9
2.9	On-Site Treatment of Hydrocarbon Contaminated Material .....	9
2.10	Oily Water .....	9
2.11	Ship Waste Management .....	9

2.12	Used Tires .....	9
2.13	Relevant Operational Environmental Standards .....	9
<b>3</b>	<b>Roles and Responsibilities .....</b>	<b>10</b>
<b>4</b>	<b>Monitoring and Reporting Requirements .....</b>	<b>11</b>
4.1	Waste Monitoring .....	11
4.1.1	Incinerator Monitoring .....	11
4.1.2	Open Burning Monitoring .....	11
4.1.3	Landfill Monitoring .....	11
4.1.4	Hazardous Waste Monitoring .....	11
4.1.5	Landfarm Monitoring .....	11
4.2	Operations Monitoring .....	11
4.3	Data Management .....	11
4.4	Regulatory Reporting .....	11
<b>5</b>	<b>Adaptive Strategies .....</b>	<b>12</b>
<b>6</b>	<b>References .....</b>	<b>13</b>

## List of Tables

Table 2.1	Waste Disposal by Generation Location .....	4
Table 2.2	Waste Handling and Disposal by Waste Type .....	4
Table 2.3	Waste Management Facilities Summary .....	5
Table 2.4	Incinerator Capacity .....	6

## Abbreviations

CIRNAC.....	Crown-Indigenous Relations and Northern Affairs Canada
EPP .....	Environmental Protection Plan
ERC.....	Emergency Response Coordinator
GN.....	Government of Nunavut
HTA .....	Hunters and Trappers Association
IOL.....	Inuit Owned Land
NTD.....	Note to Draft
NWB.....	Nunavut Water Board
Project, the.....	Grays Bay Road and Port Project
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

## Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

## **1.1 Plan Scope and Objectives**

The Waste Management Plan provides operational guidelines to reduce the generation of waste and facilitate the collection, storage, transportation, and disposal of wastes, while reducing the potential for adverse effects on the environment.

The Plan is a “living document.” It will be updated based on management reviews, monitoring results, regulatory changes, or other Project-related changes.

## **1.2 Regulations, Approvals, and Guidelines**

The following Acts and Regulations provide specific requirements for the management of solid waste generated at the Project:

- *Territorial Lands Act*
- Territorial Land Use Regulations
- *Nunavut Waters and Nunavut Surface Rights Tribunal Act*
- *Canadian Environmental Protection Act*
- *Safety Act*, Occupational Health and Safety Regulations
- National Fire Code
- *Public Health Act*
- *Fisheries Act*
- *Transportation of Dangerous Goods Act* and Transportation of Dangerous Goods Regulations

Due to the complexities and the number of acts and regulations involved, the Government of Nunavut has published several guidelines to assist waste generators in effectively developing waste management plans for activities completed at Project sites. These guidelines have been used to develop this Plan.

## **1.3 Related Plans and Studies**

The Waste Management Plan is intended to act as a stand-alone document; however, it aligns with and draws upon information from other management plans in the Project EMS framework. The following management plans provide complimentary information:

- Environmental Protection Plan
- Water Management Plan
- Spill Contingency Plan
- Progressive Reclamation Plan
- Port Management Plan
- Road Management Plan
- Risk Management and Emergency Response Plan

## **1.4 Roles and Responsibilities**

Note to Draft (NTD): Update as roles/responsibilities are identified

Confirm roles and responsibilities for the Waste Management Plan; coordinate with the EMS and identify roles for the construction, operations and maintenance phases of the Project.

## 2 Waste Management

### 2.1 Waste Identification

NTD: Update as planning / design progress.

A summary of the types of waste expected to be generated by the Project, and the disposal method, are provided below.

Table 2.1 and Table 2.2 provide the waste types generated at the Project and the prescribed disposal method(s). Table 2.3 provides the Project's planned waste management facilities.

### 2.2 Waste Management Methods

Waste remaining after application of waste minimization strategies is managed in a practical and environmentally responsible manner utilizing the following methods appropriate for each waste type generated:

- Waste sorting at all generation points
- Incineration of non-hazardous waste (combustible)
- Authorized open burning of untreated wood, cardboard and paper products
- Landfilling of inert non-combustible wastes at Project Landfill Facilities
- Temporary storage and off-site shipping of hazardous and recyclable waste materials
- Temporary storage and off-site shipping of used tires
- On-site treatment for contaminated soil from hydrocarbon spills at Project landfarm facilities
- On-site treatment of contaminated water and snow generated from hydrocarbon spills using a contaminated snow containment berm and oil water separator

**Table 2.1 Waste Disposal by Generation Location**

[Insert table]

**Table 2.2 Waste Handling and Disposal by Waste Type**

[Insert table]

### 2.3 Project Waste Flow

NTD: Waste flow block diagrams will be developed for the various sites (construction, operations and maintenance phases), waste streams and will be attached to this Plan. Project waste streams are illustrated by their storage and treatment paths.

### **2.3.1 Generation Points**

Waste generated during the Project will be sorted and collected. To facilitate efficient and effective waste management, waste will be required to be disposed of in labelled receptacles based on waste type and disposal methods outlined in Table 2.1.

Project waste will be managed to prevent it from entering nearby waterbodies. Areas designated as waste disposal or storage locations will be located a minimum of 31 metres from the ordinary High Water Mark of nearby waterbodies.

### **2.3.2 Waste Collection**

Collection of wastes at Project sites, including permanent shelters along the Grays Bay Road, will be completed by trained personnel from the WKR Operations and Maintenance Department and transported to the appropriate waste management facilities, where it is sorted (visual inspection) upon arrival to ensure proper segregation.

### **2.3.3 Waste Management Facilities**

NTD: Identify where waste management buildings will be located. Include details on the facility functions and ancillary components.

Waste oil storage tanks, as well as oil filter draining and crushing equipment, are located at XX.

A summary of the proposed waste management facilities planned for the Project is provided in Table 2.3 below.

**Table 2.3 Waste Management Facilities Summary**

[Insert table]

## **2.4 Waste Handling and Minimization by Category**

This Plan has been developed to ensure that WKR's waste management strategies focus on implementing the principles of reduction, recovery, reuse and recycling throughout the life of the Project, using the following initiatives:

- Grubbed organic soil material
- Used oil re-use
- Non-hazardous waste – construction materials
- Domestic waste from accommodation complexes
- Sewage
- Hazardous waste
- Office paper

NTD: update subsections below

#### **2.4.1 Grubbed Organic Soil Material**

NTD: update subsections

#### **2.4.2 Used Oil Reuse**

NTD: update subsections

#### **2.4.3 Non-Hazardous Waste Materials – Construction**

NTD: update subsections

#### **2.4.4 Domestic Waste from Accommodation Complexes**

NTD: update subsections

#### **2.4.5 Sewage**

NTD: update subsections

#### **2.4.6 Hazardous Waste**

NTD: update subsections

#### **2.4.7 Miscellaneous Refuse**

NTD: update subsections

#### **2.4.8 Office Paper**

NTD: update subsections

### **2.5 Incinerators**

Combustible non-hazardous wastes generated at the Project will be incinerated to minimize the negative impacts of attraction vectors to wildlife. Project Incinerators are located [update locations]. Incinerator volume capacities for Project sites are provided in Table 2.4.

**Table 2.4 Incinerator Capacity**

[Insert table]

NTD: Update with additional details when incinerators are chosen.

### **2.5.1 Personnel Training Programs for Incinerator Operation**

Only personnel trained in the Incinerator Operation procedure will be permitted to operate Project Incinerators. The incinerator manufacturer will be requested to provide support and guidance, including on-site specialized training, as required.

### **2.5.2 Air Emissions**

NTD: Update and coordinate between the Air Quality Management Plan

### **2.5.3 Ash Disposal**

The incineration process produces bottom ash as a process residual. Several factors influence this process, including the operating conditions in the burn chamber (i.e., temperature, holding time, air turbulence and waste compaction), and the wetness and chemical composition of the waste. Disposal of incinerator bottom ash and other unburned residue from incinerator operations will be completed with caution due to physical (e.g., glass, nails) and chemical hazards. Appropriate PPE will be required when operating the incinerator and handling the residual ash. Bottom ash will only be handled once it has completely cooled.

NTD: Confirm process for where ash will be stored, and analyzed prior to final disposal.

### **2.5.4 Monitoring During Operations**

Monitoring of Project Incinerators will include routine inspections for signs of leakage, corrosion or other physical defects. If defects are identified, an assessment of health, safety, and environmental risk will be required prior to further operation of the incinerator, and if significant risks are identified, repairs will be required to be completed before the equipment is used again.

Operation of incinerators at the Project will be monitored using online sensors capable of continuous monitoring of combustion processes; this includes temperature in both the primary and secondary burn chambers, as well as in the stack. Temperature readings outside of the normal range provide a warning to the operator that the system is not functioning properly. The combustion process monitor is equipped with visible alarms to warn operators of poor incinerator operation.

Incinerator operation records required to be maintained on-site and provided upon request to the Inspector (CIRNAC) or the NWB include:

- Data from the process monitoring instruments
- Repairs and maintenance performed on the incinerator and monitoring instruments
- Modifications to operation procedures
- Quantity, condition and analysis results of collected bottom ash
- Operator training
- Incinerator logs recorded by operators, detailing waste volumes, waste type and date/time of burns

## **2.6 Open Burning**

Untreated wood, cardboard, and paper products generated onsite will be disposed of by authorized open burning. Open burning disposal reduces the volume of inert waste disposed at Project Landfill Facilities. Only waste suitable for open burning will be segregated for open burning disposal. [NTD: Open burning authorization prohibits the burning of hazardous wastes, non-combustible materials, food waste, plastics, Styrofoam or treated wood products (plywood).] To ensure removal of prohibited wastes, secondary waste segregation will be completed during the loading process at Project Open Burn Facilities.

### **2.6.1 Personnel Training Programs for Open Burning Operation**

Site personnel responsible for open burning activities will be required to be trained on the specific requirements necessary to maintain compliance with any Open Burning Authorization.

### **2.6.2 Ash Disposal**

Bottom ash from the open burning of paperboard packing and untreated wood waste is suitable for disposal at Project land facilities. Ash is removed from Project Open Burn Facilities weekly or as required.

### **2.6.3 Monitoring During Operations**

On-going monitoring of open burning operations will be completed by Environment Department personnel to ensure operator compliance with any Open Burning Authorization.

Biweekly inspections of Open Burn Facilities will be completed to ensure that wastes deposited remain in compliance with the established procedures.

Operators are required to document waste type and volume (based on visual estimation of volume to nearest cubic meter) for each burn event.

## **2.7 Landfill Facility Operations**

NTD: Update once landfill facilities for the Project are confirmed.

### **2.7.1 Landfill Facility Operations**

NTD: Update once landfill facilities for the Project are confirmed.

### **2.7.2 Personnel Training Programs for Landfill Operation**

NTD: Update once landfill facilities for the Project are confirmed.

### **2.7.3 Monitoring During Operation**

NTD: Update once landfill facilities for the Project are confirmed.

## **2.8 Hazardous Waste Storage and Disposal**

Project waste streams will be classified as hazardous wastes based on potential risk to human health and safety, property and the environment. Hazardous wastes generated onsite include, but are not limited to: [used oils, solvents and paints, used and/or surplus chemicals, biomedical wastes, gas cylinders, electronic waste, batteries, light bulbs and smoke detectors].

WKR will ensure that all hazardous waste generated at the Project is effectively managed and disposed. Hazardous waste will be properly stored, transported, treated and disposed. All site personnel (including contractors) will be responsible for managing the waste they generate and will be required to comply with the procedures provided in this Plan, and will be subject to monitoring and enforcement.

## **2.9 On-Site Treatment of Hydrocarbon Contaminated Material**

NTD: Update once on-site treatment confirmed.

## **2.10 Oily Water**

NTD: Update once on-site treatment confirmed.

## **2.11 Ship Waste Management**

NTD: Update based on what / if ship waste is accepted at the Grays Bay Port.

## **2.12 Used Tires**

NTD: Update based on whether or not used tires waste is of concern for the Project.

## **2.13 Relevant Operational Environmental Standards**

NTD: Cross-reference with the Environmental Protection Plan and other standards that may be included elsewhere.

## **3 Roles and Responsibilities**

NTD: Update as roles / responsibilities are identified

## **4 Monitoring and Reporting Requirements**

### **4.1 Waste Monitoring**

NTD: Update / coordinate based on approval conditions and procedures outlined above.

#### **4.1.1 Incinerator Monitoring**

NTD: Update

#### **4.1.2 Open Burning Monitoring**

NTD: Update

#### **4.1.3 Landfill Monitoring**

NTD: Update

#### **4.1.4 Hazardous Waste Monitoring**

NTD: Update

#### **4.1.5 Landfarm Monitoring**

NTD: Update

### **4.2 Operations Monitoring**

NTD: Update

### **4.3 Data Management**

NTD: Update

### **4.4 Regulatory Reporting**

NTD: Update

## 5 Adaptive Strategies

NTD: WKR is committed to continual improvement in its work activities with the aim of reducing risks to the environment and improving operational effectiveness. [insert strategies for continued implementation of adaptive management].

## **6      References**

NTD: Update as necessary

## **Attachment 2      Contingency Measures**

NTD: to be updated (e.g., inclement weather contingency measures, etc.)



WEST  
KITIKMEOT  
RESOURCES  
CORP

# Appendix 371

## Port Management Plan

### (Draft)

# Grays Bay Road and Port Project Port Management Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>1</b>
1.1	Purpose .....	1
1.2	Scope and Objectives .....	1
1.2.1	Port Location and Regional Setting .....	1
1.3	Regulations, Approvals, and Guidelines .....	2
1.4	Related Management Plans.....	2
<b>2</b>	<b>Port Marine-based Description</b> .....	<b>3</b>
2.1	Port Marine-based Layout and Limits .....	3
2.2	Vessel Access, Navigation, and Monitoring.....	3
2.2.1	Shipping Lane and Project Access Corridor.....	3
2.2.2	Navigation.....	3
2.2.3	Marine Traffic Monitoring – NORDREG .....	4
2.3	Port Marine-based Components .....	4
2.3.1	Large Vessel Wharf/Wharves.....	4
2.3.2	Barge Landing and Lightering Activities .....	4
2.3.3	Medium Vessel Wharf and Tug Facilities .....	5
2.3.4	Fuel Manifolds .....	5
2.3.5	Small Craft Harbour.....	5
2.3.6	Marine Navigational Aids.....	5
<b>3</b>	<b>Port Landside Description</b> .....	<b>6</b>
3.1	Port Landside Layout and Limits.....	6
3.2	Cargo Handling, Laydown, and Third-Party Staging .....	6
3.3	Port Landside Components .....	6
3.3.1	Buildings and Facilities .....	6
3.3.2	Bulk Fuel Storage .....	7
3.3.3	Fuel Pipelines and Dispensing .....	7
3.3.4	Laydown Areas.....	7
3.3.5	Public Use Area.....	7
3.3.6	Access Roads and Parking .....	8
3.3.7	Seawater Inlet / Outlet and Desalination Plant.....	8
3.3.8	Freshwater Intake and Treatment Plant.....	8
3.3.9	Wastewater Treatment System .....	8
3.3.10	Waste Storage, Incineration, and Transfer Facilities .....	9
3.3.11	Diesel Power Plant .....	9
3.3.12	Alternative Energy System .....	9
3.3.13	Future Concentrate Storage Area .....	9

**Grays Bay Road and Port Project  
Port Management Plan (Draft)**

Table of Contents  
April 2026

---

<b>4</b>	<b>Aerodrome Description .....</b>	<b>10</b>
4.1	Aerodrome Layout and Limits .....	10
4.2	Aircraft Access, Navigation, and Monitoring .....	10
4.2.1	Navigation.....	10
4.2.2	Air Traffic Monitoring .....	10
4.3	Aerodrome Components .....	10
4.3.1	Airstrip and Taxiway .....	11
4.3.2	Apron .....	11
4.3.3	Air Terminal Building .....	11
4.3.4	Access Road .....	11
4.3.5	Air Navigational Aids .....	11
<b>5</b>	<b>Port Marine-based Operations.....</b>	<b>12</b>
5.1	General .....	12
5.2	Standards and Inspections .....	12
5.3	Maritime Information and Communications .....	12
5.4	Ship Notification .....	13
5.4.1	Vessel Advance Notification.....	13
5.4.2	Vessel Declaration.....	13
5.4.3	Notice of Departure .....	13
5.5	Vessel Operations.....	13
5.5.1	Offshore Operations .....	13
5.5.2	Operations at Berth .....	14
<b>6</b>	<b>Port Landside Operations .....</b>	<b>15</b>
6.1	General .....	15
6.2	Standards and Inspections .....	15
6.3	Cargo Handling .....	15
6.4	Fuel Handling.....	15
6.4.1	Fuel Manifolds and Pipelines.....	15
6.4.2	Bulk Fuel Storage Facility.....	15
6.5	Access Areas .....	16
6.6	Buildings / Offices .....	16
6.7	Equipment Parking, Storage, and Refuelling.....	16
6.8	Vehicle Access and Movement.....	16
6.9	Dangerous Goods and Hazardous Materials.....	16
6.10	Waste Management.....	16
6.11	Wastewater Management .....	17
6.12	Power Generation .....	17
6.13	Lighting and Signage .....	17
6.14	Third-Party Concentrate Storage Area .....	17

**Grays Bay Road and Port Project  
Port Management Plan (Draft)**

Table of Contents  
April 2026

---

<b>7</b>	<b>Aerodrome Operations .....</b>	<b>18</b>
7.1	General .....	18
7.2	Standards and Inspections .....	18
7.3	Aeronautical Information and Communications .....	18
7.4	Air Traffic Control .....	18
7.5	Aircraft Movements .....	18
7.6	Helicopter Operations .....	18
7.7	Apron and Parking Management .....	19
7.8	Equipment Parking, Storage, and Refuelling Areas .....	19
7.9	Access Areas .....	19
7.10	Buildings.....	19
7.11	Dangerous Goods and Hazardous Materials.....	19
7.12	Lighting and Signage .....	19
<b>8</b>	<b>Site Safety.....</b>	<b>20</b>
8.1	Purpose and Objectives .....	20
8.2	General Approach to Safety.....	20
8.3	Site Security, Safety Orientation, and Access .....	20
	8.3.1 Shared Security Considerations.....	20
8.4	Site Safety Meetings and Communication.....	20
8.5	Hazard Awareness and Assessment.....	20
8.6	Site PPE Requirements .....	21
8.7	Fitness for Duty and Drug and Alcohol Guidelines .....	21
8.8	Incident Reporting and Investigation.....	21
	8.8.1 Incident and Near-Miss Reporting.....	21
	8.8.2 Incident Investigation.....	21
	8.8.3 Corrective Actions .....	21
8.9	Emergency Response Planning.....	21
	8.9.1 Responsibilities and Actions.....	21
	8.9.2 Emergency Scenarios and Response Procedures .....	21
8.10	Simultaneous Operations.....	22
8.11	Contractors Conducting Work on Site.....	22
8.12	Vehicle and Equipment Requirements.....	22
	8.12.1 Controlled Access.....	22
	8.12.2 Traffic Management.....	22
8.13	Environmental Management.....	22
	8.13.1 General Spills and Vehicle / Equipment Leaks .....	22
	8.13.2 Marine Environmental Spills and Controls .....	22
	8.13.3 Aviation Environmental Spills and Controls.....	22
8.14	Wildlife.....	23
8.15	Radio Usage .....	23

**Grays Bay Road and Port Project  
Port Management Plan (Draft)**

Table of Contents  
April 2026

---

8.16	Forms .....	23
<b>9</b>	<b>Roles and Responsibilities .....</b>	<b>24</b>
9.1	General Approach to Operations .....	24
9.2	Port Marine-based Roles and Responsibilities .....	24
9.2.1	Port Manager .....	24
9.2.2	Cargo Vessel Operators .....	24
9.2.3	Fuel Vessel Operators .....	24
9.2.4	Canadian Coast Guard .....	24
9.2.5	Other Users and Third-Parties .....	24
9.2.6	Contact List .....	24
9.3	Port Landside Roles and Responsibilities .....	25
9.3.1	Port Landside Manager .....	25
9.3.2	Other Users and Third-Parties .....	25
9.3.3	Contact List .....	25
9.4	Aerodrome Roles and Responsibilities .....	25
9.4.1	Aerodrome Manager .....	25
9.4.2	Aircraft Operators .....	25
9.4.3	Other Users and Third-Parties .....	25
9.4.4	Contact List .....	25
<b>10</b>	<b>References .....</b>	<b>26</b>

## Abbreviations

EMS.....	Environmental Management System
NORDREG .....	Northern Canada Vessel Traffic Services Zone Regulations
NTD .....	Note to Draft
PMP.....	Port Management Plan
Project, the .....	Grays Bay Road and Port Project
WKR.....	West Kitikmeot Resources Corp.

# Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the Port to the northern terminus of the Tibbitt to Contwoyto Winter Road at Jericho Station (the former Jericho Mine site).

## 1.1 Purpose

Note to Draft (NTD):

This section is intended to describe the purpose of the Port Management Plan (PMP) and will establish it as the primary operational governance and control document for port activities during the Operations and Maintenance Phase of the Project. For the purpose of this document, the term Port includes marine-based, landside, and aerodrome components (see Volume 2, Section 1.5 Project Overview).

The PMP will define how port marine-based, port landside, and aerodrome activities are planned, coordinated, and controlled to support safe, efficient, and environmentally responsible operations. The PMP will also describe the anticipated roles, procedures, and mechanisms to support the management of operations. The PMP will be developed to meet regulatory requirements and support compliance with conditions of the Project Certificate issued by the Nunavut Impact Review Board (NIRB).

## 1.2 Scope and Objectives

NTD:

This section is intended to define the scope of the PMP, including port areas and activities expected to be addressed, and will outline the general objectives of the PMP. The PMP will apply to the operator(s), and maintainer(s) of the port marine-based, landside, and aerodrome components, as well as transportation service providers (air, land, sea), contractors, public users, third-party users, and government agencies operating within port limits.

### 1.2.1 Port Location and Regional Setting

NTD:

This section is intended to describe the geographic setting of the Grays Bay Port, encompassing its marine-based, landside, and aerodrome components, and its role within the Project and the regional transportation network. It may outline how the port is intended to support project logistics, third-party shipping, and potential future regional development while operating within the Arctic context.

## **1.3 Regulations, Approvals, and Guidelines**

NTD:

The PMP is intended to identify the key federal and territorial frameworks relevant to port operations for the Project. It will describe the regulatory context for operations, including oversight roles, land tenure and leasing arrangements, and the responsibilities of authorities such as NIRB, Transport Canada, and other relevant agencies.

The PMP is intended to align with applicable regulatory requirements and support compliance with conditions of the NIRB Project Certificate related to port operations, including how these requirements are anticipated to be reflected in day-to-day operational activities.

## **1.4 Related Management Plans**

NTD:

This section is intended to describe how the PMP relates to the Project's broader Environmental Management System (EMS), and if applicable, will identify other management plans that interface with port operations.

## 2 Port Marine-based Description

NTD:

This section is intended to describe the Grays Bay Port marine-based infrastructure, including two deep water wharves, a tug / medium vessel wharf, a barge landing area, marine navigational aids, and a small craft harbour including a boat launch ramp.

### 2.1 Port Marine-based Layout and Limits

NTD:

This section is intended to define the port marine-based layout and limits for operational control and enforcement, and describe how these limits will be used to manage activities and interactions among users.

### 2.2 Vessel Access, Navigation, and Monitoring

NTD:

This section is intended to describe factors influencing vessel access to the port, including vessel size/class considerations, seasonal constraints, weather conditions, and operational requirements for safely calling at and operating within the port.

#### 2.2.1 Shipping Lane and Project Access Corridor

NTD:

This section is intended to describe the planned marine vessel approach to the port which runs approximately 40 nautical miles southward of the existing, well-defined shipping lane within the Northwest Passage.

#### 2.2.2 Navigation

NTD:

This section is intended to describe navigational considerations relevant to marine-based port operations, including operator responsibilities and use of existing navigational information sources, based on regulator requirements / compliance (e.g., Transport Canada).

### **2.2.3 Marine Traffic Monitoring – NORDREG**

NTD:

This section is intended to outline requirements related to marine traffic monitoring and reporting, including obligations under the Northern Canada Vessel Traffic Services Zone Regulations (NORDREG). It will describe how marine traffic information will be used to support safe port operations.

## **2.3 Port Marine-based Components**

NTD:

This section is intended to provide a structured description of marine-based port infrastructure relevant to operational management, with cross-references to figures and appendices. See Volume 2, Section 2.6.1.1 Grays Bay Port – Marine-Based and Landside Infrastructure.

### **2.3.1 Large Vessel Wharf/Wharves**

NTD:

Description of intended operational use, design vessel, and service capacities.

Wharf structures providing up to two deep water berths, each able to accommodate moorage for a Post-Panamax, approximately 100,000 deadweight tonnes (DWT) Ore-Bulk-Oil ice class 1A vessel. This design will accommodate vessels with an approximate loaded draught of 15 m and a length of approximately 240 m. As feasible, each berth will be designed to accommodate other cargo vessels (e.g., sealift), Coast Guard vessels, naval vessels, and tankers that currently operate in the Arctic. A future third-party ship loader is planned for one of the berths.

### **2.3.2 Barge Landing and Lightering Activities**

NTD:

Description of intended barge operations, seasonal use, and interaction with other port activities.

Shallower barge area including up to two barge berths, envisioned to consist of a side-loading berth structure and/or a front-loading barge ramp structure. This infrastructure, located separately from other marine infrastructure, will facilitate roll-on-roll-off loading and unloading of ocean-going and community barges. The design barges include a larger heavy lift/container barge (Class ABS A1) of approximately 13,200 DWT and 123 m length, as well as a smaller lightering barge (Non-Ice Class) of approximately 1,500 DWT and 60 m length.

### **2.3.3 Medium Vessel Wharf and Tug Facilities**

NTD:

Description of intended operational use, design vessels, and roles for tug support, Canadian Coast Guard, and similar vessels.

Wharf structure providing moorage for up to three tug vessels (or vessels of similar size). Tugs and other support vessels will be deployed as required to facilitate safe arrival and departure of vessels calling at the Grays Bay Port. As feasible, this wharf will also be designed to accommodate other medium-size vessels, such as smaller Coast Guard and naval vessels.

### **2.3.4 Fuel Manifolds**

NTD:

Shore connection to vessels at the Large Vessel Wharves, and/or Barge Landing Area via flexible floating fuel lines or direct connection. Fuel manifolds will facilitate offloading of bulk fuel from import vessels to landside fuel storage, potential refueling of smaller vessels, and loading of bulk fuel from landside fuel storage to export vessels (e.g., community resupply barges).

### **2.3.5 Small Craft Harbour**

NTD:

Description of intended use, design vessels, access controls, and safety considerations.

Seasonal moorage for approximately 24 vessels up to approximately 7 m length, separated from the other marine-based infrastructure for public safety. Floating docks, boat launch ramp, offshore anchor buoys, and/or beach landing area are envisioned to be available during the open-water season.

Inuit and Nunavummiut will have access to the Small Craft Harbour during the ice-free season (i.e., when floats are installed). Floats are anticipated to only be available for use between July and September. The areas for Inuit and Nunavummiut use will have limited services and will be available without a reservation.

### **2.3.6 Marine Navigational Aids**

NTD:

This section is intended to describe the anticipated marine aids to navigation associated with marine-based port operations, including aids located on marine-based port infrastructure, surrounding shorelines, and offshore islands within the port limits, that support safe vessel access and movement.

The specific location, method, and type of navigational infrastructure and aids will meet Transport Canada and Canadian Coast Guard requirements for marine safety and navigation.

## 3 Port Landside Description

NTD:

Landside infrastructure at the Grays Bay Port includes permanent accommodations, and other buildings; bulk fuel storage facility, fuel pipelines, and refueling facilities; public use area; all-season gravel access roadways and parking; water intakes, desalination, and treatment plants; utilities, waste management facilities, laydown, and storage areas (temporary and permanent); diesel generators and potential renewable power generation; and future concentrate storage area.

### 3.1 Port Landside Layout and Limits

NTD:

This section is intended to define the port landside layout and limits for operational control and enforcement, and describe how these limits will be used to manage activities and interactions among users.

### 3.2 Cargo Handling, Laydown, and Third-Party Staging

NTD:

This section is intended to describe the primary functions of the port landside components, including cargo and materials handling, temporary laydown, and third-party staging. It will identify controls to manage space allocation, traffic, and safety during port landside activities.

### 3.3 Port Landside Components

NTD:

The subsections are intended to provide a structured description of port landside infrastructure relevant to operational management, with cross-references to figures and appendices. See Volume 2, Section 2.6.1.1 Grays Bay Port – Marine-Based and Landside Infrastructure.

#### 3.3.1 Buildings and Facilities

NTD:

This subsection is intended to describe the operational management of permanent facilities at the port.

Permanent facilities will include accommodations for approximately 80 people (including associated areas for food service, recreation, etc.), administration spaces (e.g., offices, meeting space, port operations / communication centre, emergency response centre), maintenance building and supply storage, and associated services and utility connections. Additional short-term accommodations for up to approximately 150 visitors will also be developed. These facilities are anticipated to be prefabricated or pre-engineered buildings.

### **3.3.2 Bulk Fuel Storage**

NTD:

A permanent fuel storage and refueling facility will include secondary containment berms, piping and pipelines, fuel storage tanks, and an industrial building to house dispensing equipment, constructed with materials suitable for -45°C operations. The secondary containment berms will be constructed to allow winds to clear fuel vapour buildups and will be sized per applicable regulatory requirements.

The foundation and secondary containment berms will be constructed of quarried material with appropriate membrane material integrated into the containment berm. The fuel storage tanks will be installed in a phased approach to meet demand, with an initial capacity of approximately 10 million L. Space for additional bulk fuel tanks to provide up to approximately 160 million L of total capacity will be available for future third-party users. Where possible, required fuel piping and pipelines will be above ground rather than buried, as is standard practice for arctic environments.

### **3.3.3 Fuel Pipelines and Dispensing**

NTD:

The dispensing facilities will include separate dispensing piping and equipment based on fuel and vehicle/equipment type and will be constructed with materials suitable for -45°C operations.

The dispensing facilities will be able to accommodate refueling of diesel trucks and equipment (e.g., tanker trucks), dispensing jet fuel into an aviation bowser truck, and refueling of gasoline vehicles.

### **3.3.4 Laydown Areas**

NTD:

Laydown areas will accommodate loading, unloading, and storage of containerized or breakbulk cargo from marine vessels, interfacing with on-shore mobile and/or shipboard cranes for loading and unloading activities. The anticipated footprint of the laydown area adjacent to the Large Vessel Wharves is approximately 35,000 square metres (m<sup>2</sup>), with approximately 20,000 m<sup>2</sup> of additional laydown area at the Barge Landing Area. Additional laydown areas within the landside Port PDA and Aerodrome PDA, either adjacent to marine-based infrastructure or upland, may be established based on third-party user needs to accommodate loading and unloading of aircraft or vehicle-based shipments.

### **3.3.5 Public Use Area**

NTD:

Adjacent to the Small Craft Harbour, an area for public use will be developed. This will consist of vehicle access and parking to facilitate short-term community use. As interest and usage increases, this area may also include development of a seasonal, public accommodation building and auxiliary facilities.

### 3.3.6 Access Roads and Parking

NTD:

Gravel roads will be constructed to accommodate safe movement of traffic and equipment within the port area. Road design will include consideration of dark winter conditions and slow-moving traffic, as well as safe management between public and commercial vehicles. Local roads will be designed and built to accommodate large vehicles and equipment (e.g., transport trucks). Adequate parking for port operations staff and users will be provided throughout the port site.

### 3.3.7 Seawater Inlet / Outlet and Desalination Plant

NTD:

If desalination is conducted, a prefabricated desalination plant will be installed on a prepared foundation at the port. The seawater intake would likely be on the east side of the Grays Bay peninsula near the Small Craft Harbour, and outlet likely on the west side of the peninsula near the Barge Landing area.

### 3.3.8 Freshwater Intake and Treatment Plant

NTD:

At one or both of the potential freshwater lake sources along the northern portion of the Grays Bay Road, an intake and prefabricated pumphouse may be constructed on a prepared foundation. The treatment will either be integrated within the pumphouse or at a standalone water treatment plant at the port. Water system infrastructure will include aboveground, insulated, self-draining piping with freeze protection, as well as thaw recovery systems for tanks, intakes, hydrants, truckfill arms, and drain lines.

Water services will be provided for both human consumption and operations and maintenance of the Project. Potable water is required with an estimated consumption rate of around 500 L per person per day. Potable water will meet *The Guidelines for Canadian Drinking Water Quality Nunavut Health Act* and have approval of the Chief Public Health Officer. Water system infrastructure will include aboveground, insulated, self-draining piping with freeze protection, as well as thaw recovery systems for tanks, intakes, hydrants, truckfill arms, and drain lines.

### 3.3.9 Wastewater Treatment System

NTD:

Wastewater treatment system to treat domestic sewage production that accounts for the maximum number of personnel accommodated for the Project, which may also include security vessel domestic wastewater. Treatment processes will be determined through the design phase. An option for a mechanical plant could be a self-contained prefabricated sewage treatment facility, with primary aeration chamber, clarifier section, blower assemblies, effluent chlorination system, all ancillary piping, control panel and wiring. The facility control systems will allow for remote monitoring from off-site locations and an alarm system. The effluent discharge point will be confirmed during the design phase. An alternative

option is a lagoon and wetland treatment system located near the port area. Treatment and disposal processes for the selected option will be designed to meet all applicable environmental guidelines.

### **3.3.10 Waste Storage, Incineration, and Transfer Facilities**

NTD:

Solid waste storage (i.e., non-hazardous landfill), incineration, and transfer (i.e., hazardous waste) facilities. These areas will have sufficient space for safe handling of the volume and type of material anticipated, including contingencies for additional storage space where transfer, treatment, or disposal may be interrupted or delayed.

### **3.3.11 Diesel Power Plant**

NTD:

A diesel power plant will include four generator units with a capacity of approximately 6 MW. Demand is not anticipated to regularly exceed 4 MW. Two of the units will operate regularly to meet routine demand, and two will be on standby for occasional peaks and emergency use. The power plant will be constructed in a location to reduce the length of transmission and fuel lines. Location of the power plant and associated infrastructure will be confirmed during detailed design of the Project. The power plant will be constructed with a focus on modular and skid-mounted installation on a prepared foundation.

### **3.3.12 Alternative Energy System**

NTD:

An alternative energy system with capacity of around 1 MW may be installed at the port area to offset diesel consumption and reliance on diesel-generated power. This may include a combination of wind turbines, solar PV, and/or battery storage. Phasing, number, size, and location of wind turbine(s) and/or solar array(s) will be determined later in the design process.

### **3.3.13 Future Concentrate Storage Area**

NTD:

An undeveloped area considered in the site layout for future mineral concentrate storage pad(s) or building(s), and future mineral concentrate handling infrastructure, to be developed by third-parties.

## 4 Aerodrome Description

NTD:

This section is intended to describe the Project's aerodrome, including an approximately 1,800 m (6,000') airstrip and taxiway, apron, all-season access road, vehicle parking, and associated infrastructure, east of the Grays Bay Port.

### 4.1 Aerodrome Layout and Limits

NTD:

This section is intended to define the aerodrome layout and limits for operational control.

### 4.2 Aircraft Access, Navigation, and Monitoring

NTD:

This section is intended to describe factors influencing aircraft access to the aerodrome, including aircraft size/class considerations, weather conditions, and operational requirements for safe arrivals, ground operations, and departures at the aerodrome.

#### 4.2.1 Navigation

NTD:

This section is intended to describe aviation navigation considerations, including approach considerations, and references to applicable aeronautical information sources. The intent is to support safe aircraft movements while recognizing the aerodrome's role in supporting project operations.

#### 4.2.2 Air Traffic Monitoring

NTD:

This section is intended to outline requirements related to air traffic monitoring and reporting. It will describe how air traffic information will be used to support safe aerodrome operations.

### 4.3 Aerodrome Components

NTD:

This section is intended to provide a structured description of aerodrome infrastructure relevant to operational management, with cross-references to figures and appendices. See Volume 2, Section 2.6.1.2 Aerodrome.

### **4.3.1 Airstrip and Taxiway**

NTD:

A 6,000 ft (1,829 m) gravel airstrip will be built to the east of the Grays Bay Port. The airstrip will be lighted and approximately 45 m wide.

### **4.3.2 Apron**

NTD:

Adjacent to the airstrip, lighted, gravel-surface taxiways and apron will include parking areas for up to three fixed wing aircraft and two helicopters.

### **4.3.3 Air Terminal Building**

NTD:

An Air Terminal Building at the aerodrome will be used to accommodate a flight planning and communications office, weather shelter, toilet facilities, field electrical centre, and maintenance vehicle parking and service space.

### **4.3.4 Access Road**

NTD:

An access road will be built from the port landside area to the aerodrome. Road design will include consideration of dark winter conditions and slow-moving traffic, as well as safe management between public and commercial vehicles. Local roads will be designed and built to accommodate large vehicles and equipment (e.g., fuel trucks).

### **4.3.5 Air Navigational Aids**

NTD:

This section is intended to describe the anticipated air navigational aids to support aerodrome operations.

Non-precision instrument approaches to the airstrip will make use of satellite-based navigation systems. The use of satellite-based systems such as Global Navigation Satellite System (GNSS) instead of ground-based aids will be employed to reduce operational costs and take advantage of increased capabilities associated with satellite-based systems.

## 5 Port Marine-based Operations

NTD:

This section is intended to describe rules, procedures, and considerations for port marine-based operations.

The Large Vessel Wharves, Medium Vessel Wharf, Barge Landing Area, and Small Craft Harbour at Grays Bay Port will be operated during ice-free conditions, which is generally forecasted from late June through October, with annual variation depending on weather conditions. Grays Bay Port will be made available during the shoulder season (i.e., early June and into November) to the Canadian Coast Guard, which carries out icebreaking services from June to November for search and rescue, environmental response, community resupply, breakouts, ship escorts and marine communications and traffic services and other approved vessels during this time, as necessary. Marine-based infrastructure at the Grays Bay Port will not be available for use between December to May, annually.

### 5.1 General

NTD:

This section is intended to describe general operational rules applicable to all vessels and port marine-based users. General operational hours for port marine-based activities will also be identified.

### 5.2 Standards and Inspections

NTD:

This section is intended to describe general standards and inspection considerations applicable to the port marine-based infrastructure and operations.

### 5.3 Maritime Information and Communications

NTD:

This section is intended to present general maritime information and communication protocols for interactions with and use of the port.

## **5.4 Ship Notification**

NTD:

This section is intended to describe general notification and information requirements for vessels intending to call at the port and will describe procedures for departure notifications and coordination.

### **5.4.1 Vessel Advance Notification**

### **5.4.2 Vessel Declaration**

### **5.4.3 Notice of Departure**

## **5.5 Vessel Operations**

NTD:

This section is intended to describe rules governing vessel operations within port limits, including berth allocation, anchoring areas, vessel priorities, support vessel assistance, mooring requirements, movement controls, speed limits, and activities requiring approval.

### **5.5.1 Offshore Operations**

#### **5.5.1.1 *Vessel Movement and Speed Limits***

#### **5.5.1.2 *Pilotage***

#### **5.5.1.3 *Anchorage***

#### **5.5.1.4 *Tugs and Line Boats***

**5.5.2 Operations at Berth**

**5.5.2.1 *Moorage***

**5.5.2.2 *Nesting Ships***

**5.5.2.3 *Cargo Handling***

**5.5.2.4 *Fuel Handling***

**5.5.2.5 *Bunkering***

## 6 Port Landside Operations

NTD:

This section is intended to describe rules, procedures, and considerations for port landside operations.

### 6.1 General

NTD:

This section is intended to describe general operational topics related to cargo handling, access, fuel transfer, equipment use, waste management, utilities, and lighting.

Port landside operations will be based out of the administration offices located at the port and carried out by approximately 10 to 20 permanent staff. Third-party users may also require additional staff to support their related operations being conducted at the port, such as loading and shipping of ore, and receiving equipment and materials for transport to third-party operations. General operational hours for port landside activities will also be identified.

### 6.2 Standards and Inspections

NTD:

This section is intended to describe general standards and inspection considerations applicable to the port landside infrastructure and operations.

### 6.3 Cargo Handling

NTD:

This section is intended to describe cargo handling operations within cargo areas.

### 6.4 Fuel Handling

NTD:

This section is intended to describe fuel handling operations and general access considerations during fuel transfer activities.

#### 6.4.1 Fuel Manifolds and Pipelines

#### 6.4.2 Bulk Fuel Storage Facility

## **6.5 Access Areas**

NTD:

This section is intended to describe how access to port landside areas is managed during operations.

Landside infrastructure will be used and accessible via Grays Bay Road all year round for approved third-party users, for activities such as stockpiling of ore and equipment that will be shipped during the operating season of the port.

## **6.6 Buildings / Offices**

NTD:

This section is intended to describe the general use and operational management of buildings and office facilities that support port operations.

## **6.7 Equipment Parking, Storage, and Refuelling**

NTD:

This section is intended to describe general considerations and operational management for equipment parking, storage, and refuelling.

## **6.8 Vehicle Access and Movement**

NTD:

This section is intended to describe the general vehicle access and movement considerations within the port.

## **6.9 Dangerous Goods and Hazardous Materials**

NTD:

This section is intended to describe general considerations for handling and management of dangerous goods and hazardous materials in port areas.

## **6.10 Waste Management**

NTD:

This section is intended to describe general considerations for managing waste generated by port operations.

## **6.11 Wastewater Management**

NTD:

This section is intended to describe the general considerations for managing wastewater associated with port operations.

## **6.12 Power Generation**

NTD:

This section is intended to describe power generation infrastructure and operational considerations associated with port operations.

## **6.13 Lighting and Signage**

NTD:

This section is intended to describe general lighting and signage considerations for port landside areas.

## **6.14 Third-Party Concentrate Storage Area**

NTD:

This section is intended to describe the general use and management of areas identified for third-party concentrate storage.

## **7 Aerodrome Operations**

NTD:

This section is intended to describe rules, procedures, and considerations for aerodrome operations.

### **7.1 General**

NTD:

This section is intended to describe general operational rules applicable to all aircraft and aerodrome users. General operational hours for aerodrome activities will also be identified.

### **7.2 Standards and Inspections**

NTD:

This section is intended to describe general standards and inspection considerations applicable to the aerodrome.

### **7.3 Aeronautical Information and Communications**

NTD:

This section is intended to present general aeronautical information and communication protocols for interactions with and use of the aerodrome.

### **7.4 Air Traffic Control**

NTD:

This section is intended to outline air traffic services or coordination relevant to aerodrome operations.

### **7.5 Aircraft Movements**

NTD:

This section is intended to describe general considerations related to aircraft movements.

### **7.6 Helicopter Operations**

NTD:

This section is intended to describe general considerations related to helicopter operations.

## **7.7 Apron and Parking Management**

NTD:

This section is intended to describe general apron use and aircraft parking considerations.

## **7.8 Equipment Parking, Storage, and Refuelling Areas**

NTD:

This section is intended to describe general considerations for equipment and aircraft refuelling at the aerodrome, including access restrictions during these activities.

## **7.9 Access Areas**

NTD:

This section is intended to describe access management considerations for aerodrome areas.

## **7.10 Buildings**

NTD:

This section is intended to describe the general use of aerodrome buildings.

## **7.11 Dangerous Goods and Hazardous Materials**

NTD:

This section is intended to describe general considerations related to dangerous goods and hazardous materials at the aerodrome.

## **7.12 Lighting and Signage**

NTD:

This section is intended to describe general lighting and signage considerations associated with aerodrome operations.

## **8 Site Safety**

### **8.1 Purpose and Objectives**

NTD:

This section is intended to establish safety objectives and a safety management framework applicable to all port operations and users.

### **8.2 General Approach to Safety**

NTD:

This section is intended to define safety-related responsibilities, training, personnel protections, emergency response, environmental protection, incident reporting, wildlife interactions, traffic control, communications, and coordination.

### **8.3 Site Security, Safety Orientation, and Access**

NTD:

This section is intended to describe general site security arrangements, safety orientation expectations, and access considerations.

#### **8.3.1 Shared Security Considerations**

### **8.4 Site Safety Meetings and Communication**

NTD:

This section is intended to describe general safety communication practices, including meetings and information sharing.

### **8.5 Hazard Awareness and Assessment**

NTD:

This section is intended to describe general considerations for identifying and assessing hazards associated with port operations.

## **8.6 Site PPE Requirements**

NTD:

This section is intended to describe general personal protective equipment considerations applicable to site-specific activities.

## **8.7 Fitness for Duty and Drug and Alcohol Guidelines**

NTD:

This section is intended to describe general expectations related to fitness for duty.

## **8.8 Incident Reporting and Investigation**

NTD:

This section is intended to describe general considerations for reporting and investigating incidents and near-misses at the port, and general corrective actions to be applied.

### **8.8.1 Incident and Near-Miss Reporting**

### **8.8.2 Incident Investigation**

### **8.8.3 Corrective Actions**

## **8.9 Emergency Response Planning**

NTD:

This section is intended to describe general emergency response planning considerations applicable to port operations.

### **8.9.1 Responsibilities and Actions**

### **8.9.2 Emergency Scenarios and Response Procedures**

## **8.10 Simultaneous Operations**

NTD:

This section is intended to describe general considerations for managing activities occurring concurrently at the port, including marine-based, landside, and aerodrome activities.

## **8.11 Contractors Conducting Work on Site**

NTD:

This section is intended to describe general considerations applicable to contractors working on site.

## **8.12 Vehicle and Equipment Requirements**

NTD:

This section is intended to describe general considerations applicable to vehicle and equipment requirements, access, and management associated with operational activities at the.

### **8.12.1 Controlled Access**

### **8.12.2 Traffic Management**

## **8.13 Environmental Management**

NTD:

This section is intended to describe general environmental management considerations relevant to operations at the port.

### **8.13.1 General Spills and Vehicle / Equipment Leaks**

### **8.13.2 Marine Environmental Spills and Controls**

### **8.13.3 Aviation Environmental Spills and Controls**

## **8.14 Wildlife**

NTD:

This section is intended to describe how wildlife considerations relevant to port operations are addressed and managed. Detailed mitigation and monitoring measures for wildlife are provided in the Wildlife Mitigation and Monitoring Plan (Volume 11, Appendix 37B).

## **8.15 Radio Usage**

NTD:

This section is intended to describe general radio communication considerations applicable to port operations.

## **8.16 Forms**

NTD:

This section is intended to identify forms and documentation that may be required to support implementation of safety and compliance with the PMP.

## **9 Roles and Responsibilities**

### **9.1 General Approach to Operations**

NTD:

This section is intended to describe the overall governance structure for managing responsibilities for port operations, including assigning accountability and authority, coordination among users, regulatory compliance, and integration with the Project EMS.

### **9.2 Port Marine-based Roles and Responsibilities**

NTD:

This section is intended to define the marine-based responsibilities of the operator of the port and the port's marine users, including responsibilities related to safety, environmental protection, and operational coordination.

#### **9.2.1 Port Manager**

#### **9.2.2 Cargo Vessel Operators**

#### **9.2.3 Fuel Vessel Operators**

#### **9.2.4 Canadian Coast Guard**

#### **9.2.5 Other Users and Third-Parties**

#### **9.2.6 Contact List**

## **9.3 Port Landside Roles and Responsibilities**

NTD:

This section is intended to define the landside responsibilities of the operator of the port and the port's landside users, including responsibilities related to safety, environmental protection, and operational coordination.

### **9.3.1 Port Landside Manager**

### **9.3.2 Other Users and Third-Parties**

### **9.3.3 Contact List**

## **9.4 Aerodrome Roles and Responsibilities**

NTD:

This section is intended to define the responsibilities of the operator of the aerodrome and the aerodrome's users, including responsibilities related to safety, environmental protection, and operational coordination.

### **9.4.1 Aerodrome Manager**

### **9.4.2 Aircraft Operators**

### **9.4.3 Other Users and Third-Parties**

### **9.4.4 Contact List**

## **10      References**

NTD: Update as necessary

# Appendix 37J

## Inuit Human Resources and Business Development Plan (Draft)

# Grays Bay Road and Port Project Inuit Human Resources and Business Development Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp.**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Plan Scope and Objectives .....	1
1.2	Regulations, Approvals, and Guidelines .....	1
1.3	Influence of Inuit Qaujimaningit, Indigenous Knowledge, and Community Knowledge.....	2
<b>2</b>	<b>Roles and Responsibilities .....</b>	<b>3</b>
<b>3</b>	<b>Inuit Human Resources and Business Development Strategy .....</b>	<b>5</b>
3.1	Labour Relations and Inuit Hiring Strategy .....	5
3.1.1	Gender, Equity and Diversity Policies .....	5
3.2	Training Strategy .....	7
3.2.1	Apprenticeship Programs .....	8
3.3	Procurement Strategy .....	8
<b>4</b>	<b>Monitoring, Adaptive Management, and Reporting.....</b>	<b>9</b>
<b>5</b>	<b>References.....</b>	<b>10</b>

## List of Tables

Table 1.1	Applicable Legislation and Guidelines .....	1
Table 2.1	Roles and Responsibilities.....	3

## Abbreviations

CIRNAC.....	Crown-Indigenous Relations and Northern Affairs Canada
EPP .....	Environmental Protection Plan
ERC.....	Emergency Response Coordinator
GN.....	Government of Nunavut
HTO.....	Hunters and Trappers Organizations
IS.....	Impact Statement
IOL.....	Inuit Owned Land
KIA.....	Kitikmeot Inuit Association
NIRB.....	Nunavut Impact Review Board
NTD.....	Note to Draft
NWB.....	Nunavut Water Board
O&M.....	Operation and Maintenance
Project, the .....	Grays Bay Road and Port Project
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

## Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

## 1.1 Plan Scope and Objectives

This Inuit Human Resources and Business Development Plan (the Plan) applies to all phases of the Grays Bay Road and Port Project (the Project), including construction and operations and maintenance. The objective of this Plan is to outline the commitments, strategies, and procedures that West Kitikmeot Resources Corp. (WKR) will implement to manage the workforce and enhance local and regional employment and contracting benefits. The Plan applies to all Inuit Project personnel, including employees, contractors, and subcontractors, and governs workforce management practices associated with project employment, training, labour relations, accommodation, transportation, and worker wellbeing. It also addresses the topic of preferential contracting opportunities with Inuit owned businesses.

This Plan is a living document and will be reviewed and updated as required to reflect Project phase, regulatory direction, community feedback, monitoring results, and operational experience.

## 1.2 Regulations, Approvals, and Guidelines

WKR will operate in full compliance with all applicable federal and territorial laws, regulations, standards, and guidelines governing human resources. The following government legislation and policy applies to employment and procurement for the Project, and WKR commits to compliance with all applicable requirements outlined in Table 1.1.

**Table 1.1 Applicable Legislation and Guidelines**

Requirement / Instrument	Relevant HR Obligations
Labour Standards Act, RSNWT (Nu.) 1988	Minimum employment standards, overtime, vacation entitlements
Safety Act, RSNWT (Nu.) 1988 c.S-1	General safety obligations for workplaces
Workers' Compensation Act, Snu. 2007 c.15	Compensation and rehabilitation for injured workers
Official Languages Act, Snu. 2008 c.10	Inuktitut, English, and French language rights in workplace communications
Inuit Language Protection Act, Snu. 2008	Rights of Inuktitut speakers; WKR workplace language policy
Canadian Human Rights Act, R.S.C. 1985 c.H-6	Non-discrimination in employment

<b>Requirement / Instrument</b>	<b>Relevant HR Obligations</b>
Employment Equity Act, S.C. 1995 c.44	Equity for designated groups including Indigenous peoples
NIRB Project Certificate Conditions (anticipated)	Reporting on Inuit employment, training, and procurement indicators
WKR Inuit Human Resources and Business Development Plan (this document)	Overarching framework for Inuit employment, training, and retention
WKR Environmental Management System	Integration of socio-economic monitoring with environmental monitoring

WKR will continually monitor legislation for any amendments and implement a compliance program and employee communication with these changes, as required.

### **1.3 Influence of Inuit Qaujimaningit, Indigenous Knowledge, and Community Knowledge**

NTD: Discussion of how Inuit Qaujimaningit, Indigenous Knowledge, and Community Knowledge, scientific research, community, and regulator feedback informed the specific monitoring and mitigation plans and proposed actions. WKR has committed to updating these sections during the NIRB process while incorporating relevant engagement feedback.

## 2 Roles and Responsibilities

Note to Draft (NTD): Update as necessary and as roles/ titles are refined.

Effective human resource and procurement management requires meaningful commitments and clear accountability at every level of the organization. WKR is committed to a shared responsibility model in which every individual on site, from senior management to workers and contractors, has specific, documented obligations under the Project's Inuit Human Resources and Business Development Plan. It is necessary that all roles, responsibilities, and accountabilities be defined, documented, and communicated. All employees and contractors are required to understand and comply with all pertinent regulations. Key roles and responsibilities under this Plan are summarized in Table 2.1.

**Table 2.1 Roles and Responsibilities**

Role	Responsibilities
<b>West Kitikmeot Resources Corp. (WKR)</b>	<ul style="list-style-type: none"> <li>• Overall accountability for implementation of Project management plans (HR, Road Management, OHS) and related commitments</li> <li>• Oversees compliance with applicable legislation, permits, and Project Certificate conditions</li> <li>• Allocates resources to support workforce management, safety, and road operations</li> <li>• Oversees contractor performance and corrective actions</li> </ul>
<b>WKR Human Resources Manager</b>	<ul style="list-style-type: none"> <li>• Implements and maintains the Inuit Human Resources and Business Development Plan</li> <li>• Oversees Inuit employment, training, and retention programs</li> <li>• Oversees compliance with employment standards, equity, and workplace conduct policies</li> <li>• Coordinates workforce monitoring and socio-economic reporting</li> </ul>
<b>WKR Operations Manager</b>	<ul style="list-style-type: none"> <li>• Integrates HR, OHS, and Road Management requirements into construction and operations planning</li> <li>• Verifies contractor compliance with Project requirements</li> <li>• Coordinates response to operational incidents</li> </ul>
<b>WKR Kitikmeot Community Liaison Officer</b>	<ul style="list-style-type: none"> <li>• Communicate Project-related matters to the communities and public as required</li> <li>• Acts as a contact point for community members on employment and other Project-related matters</li> </ul>
<b>WKR Indigenous and Northern Affairs Team</b>	<ul style="list-style-type: none"> <li>• Leads engagement with Inuit organizations and communities</li> <li>• Supports culturally appropriate workforce practices</li> <li>• Facilitates communication related to employment, training, and road use concerns</li> <li>• Incorporates Inuit Knowledge and community input where applicable</li> </ul>
<b>WKR Inuit Employment and Training Coordinators</b>	<ul style="list-style-type: none"> <li>• Support recruitment, onboarding, and retention of Inuit employees</li> <li>• Coordinate training, apprenticeships, and career development opportunities</li> <li>• Act as liaison between workers, communities, contractors, and WKR management</li> </ul>

**Grays Bay Road and Port Project  
Inuit Human Resources and Business Development Plan (Draft)**

Section 2: Roles and Responsibilities  
April 2026

---

<b>Role</b>	<b>Responsibilities</b>
<b>WKR Procurement and Business Development Coordinator</b>	<ul style="list-style-type: none"><li>• Support procurement and development of Inuit owned businesses</li></ul>
<b>Contractors and Subcontractors</b>	<ul style="list-style-type: none"><li>• Comply with all applicable Project plans (HR, Road Management, OHS)</li><li>• Implement site-specific procedures consistent with approved plans</li><li>• Support Inuit employment and training commitments</li><li>• Facilitate worker compliance with safety, conduct, and road use requirements</li><li>• Report incidents, hazards, and non-compliance to WKR</li></ul>
<b>Workers and Site Personnel</b>	<ul style="list-style-type: none"><li>• Comply with Project policies, procedures, and training requirements</li><li>• Follow road access, traffic safety, and camp rules</li><li>• Use required personal protective equipment and safe work practices</li><li>• Report unsafe conditions, incidents, and concerns</li></ul>

## 3 Inuit Human Resources and Business Development Strategy

NTD: Ongoing development to confirm against Labour regulations.

The overarching objective of the Inuit Human Resources and Business Development Strategy is to effectively manage human resources in the workforce and Inuit procurement opportunities. This objective is supported by the following elements:

- A **Labour Relations Strategy** to enhance and retain local Inuit employment through preferential hiring opportunities, clear communication of employment opportunities, and supportive workforce practices. The strategy will outline skills and entrance requirements, employee benefits, work rotation schedules, orientation, and ongoing support programs to promote employee retention and wellbeing.
- A **Training Strategy** to identify the skills required for Project employment and support Inuit and youth participation through pre-employment, on-the-job, and apprenticeship training. Training will be delivered in collaboration with Inuit organizations and educational institutions, using community-based facilities or mobile training units where feasible, to build long-term regional workforce capacity.
- A **Procurement Strategy** to prioritize Inuit and regional businesses by facilitating access to contracting opportunities at the Project and structuring procurement packages to be accessible to local suppliers. Where practical, the strategy will emphasize the use of local equipment and services to increase regional economic benefits and reduce reliance on externally sourced resources.

### 3.1 Labour Relations and Inuit Hiring Strategy

NTD: WKR will develop, implement, and maintain a Labour Relations Strategy that includes Inuit hiring commitments and programs. This will include enhancing and retaining local Inuit employment and supporting equitable participation in Project employment and training opportunities, including for under-represented populations.

#### 3.1.1 Gender, Equity and Diversity Policies

To support equitable access to Project employment opportunities and to reduce barriers to participation for under-represented groups, WKR will undertake the following measures:

- Develop, implement, and maintain gender, equity, and diversity policies that prioritize hiring Inuit, other Indigenous peoples, and women, with the objective of increasing Project employment among under-represented populations;
- Regularly communicate employment and contracting opportunities through accessible, community appropriate channels to support awareness of Project opportunities among local Inuit, as outlined in the Community Engagement Plan;

- Conduct community engagement activities, including résumé writing support, career presentations, and open forums, to connect residents with Project employment opportunities;
- Provide employee support services, including transportation assistance, accommodation arrangements, and wellness programs, to reduce barriers to employment and support employee retention and success.

### **3.1.1.1 Employee Code of Conduct**

NTD: This section will include the Employee Code of Conduct.

### **3.1.1.2 Cultural Awareness**

NTD: WKR will develop, implement, and maintain a cultural awareness training program for personnel at the Project's main camps / accommodations to support a respectful, inclusive, and culturally safe work environment, in alignment with NIRB requirements and Project commitments related to Inuit employment and wellbeing.

### **3.1.1.3 Travel Policy**

NTD: WKR will develop, implement, and maintain a Travel Policy to manage circumstances where Project personnel are overnighing or are weathered-in within Kitikmeot Region communities while transiting to or from the Project site. The Travel Policy will be implemented to avoid or minimize adverse effects on communities and community services, and to set clear expectations for personnel conduct consistent with Project commitments, regulatory requirements, and community expectations.

### **3.1.1.4 Employee and Family Assistance Program**

NTD: WKR will provide and maintain an Employee and Family Assistance Program (EFAP) for Project personnel as part of its commitment to supporting worker health, safety, and overall wellbeing throughout construction and operations.

The EFAP will provide confidential, voluntary, and short-term support services to employees and their eligible family members to assist with personal, family, health-related, or work-related concerns that may affect wellbeing or job performance.

WKR will implement the EFAP such that it:

- Provides confidential access to professional support services, including short-term counselling and referral services;
- Is available to employees and their eligible family members;
- Is accessible throughout all Project phases, including construction and operations;
- Supports early intervention and preventative care to promote mental health, resilience, and workforce stability;
- Protects individual privacy, with no personal information disclosed to WKR except in aggregated or anonymized form, as required for program administration and reporting.

The EFAP will be implemented in coordination with the Occupational Health and Safety Plan, where program delivery mechanisms, access procedures, and health-related protocols are further defined.

### ***Inuit Employee Assistance Program***

WKR may provide and maintain an Inuit Employee Assistance Program (IEAP) as a culturally appropriate support program for Inuit employees as part of its commitment to fostering a respectful, inclusive, and culturally safe workplace throughout construction and operations. The decision to pursue this is likely to depend in large part on the existing third-party availability of such a program and its history of delivering successful outcomes.

#### **3.1.1.5      *No Drug and Alcohol Policy***

NTD: WKR will develop, implement, and maintain a No Drug and Alcohol Policy for the Project to support a safe, healthy, and productive workplace.

#### **3.1.1.6      *Anti-harassment and Discrimination Policy***

NTD: WKR will develop, implement, and maintain an Anti-harassment and Discrimination Policy for the Project to support a safe, healthy, and productive workplace.

## **3.2      Training Strategy**

NTD: WKR will develop, implement, and maintain a Training Strategy for the Project to support Inuit workforce readiness, employment, and long-term skills development throughout construction and operations.

NTD: WKR will support Inuit workforce development and employment readiness for Nunavut Inuit youth, particularly, through the following commitments:

- Apprenticeship and skills development:  
WKR will work with Inuit organizations, local educational institutions, and training providers to support apprenticeship and skills development opportunities for Nunavut Inuit youth, enabling participants to gain practical work experience while progressing toward recognized trade or technical certifications, where practicable.
- Youth employment opportunities:  
WKR will support internships, summer employment, and entry level work opportunities for Nunavut Inuit youth during Project construction and operations, where feasible. Flexible employment arrangements (e.g., part-time or seasonal work) will be considered to help youth participate in employment without compromising educational commitments. Relevant age restrictions will apply.
- Career awareness and outreach:  
WKR will participate in career fairs, school outreach, and community engagement activities to provide information on Project employment opportunities, skill requirements, and pathways to employment.

- **Education-focused engagement:**  
WKR will engage with schools and education partners, where opportunities arise, to support career awareness initiatives that emphasize the importance of completing formal education prior to entering the workforce.
- **Mentorship and role model visibility:**  
Where feasible, WKR will support mentorship or information sharing initiatives that connect Inuit youth with Inuit professionals or workers involved in the Project, to promote awareness of employment pathways and career development.
- **Equity, diversity, and inclusion:**  
WKR will develop and implement gender, equity, and diversity policies that support the participation of Inuit, other Indigenous peoples, and women in Project employment, with the objective of increasing opportunities for underrepresented groups.
- **Accessible employment information:**  
WKR will make information related to employment and contracting opportunities accessible to local Inuit, using community appropriate communication channels and working with Inuit organizations where appropriate.
- **Community-based engagement:**  
WKR will conduct or participate in community engagement activities (as outlined in the Community Engagement Plan), such as employment information sessions, résumé writing support, and career presentations, to connect community members with Project job opportunities.
- **Employee support services:**  
WKR will provide employee support measures, including transportation assistance, accommodation arrangements, and wellness supports, as described elsewhere in this Plan, to reduce barriers to employment and support workforce retention.

### **3.2.1 Apprenticeship Programs**

NTD: Apprenticeship program details will be included as they are further developed.

## **3.3 Procurement Strategy**

NTD: Procurement details to prioritize Inuit and regional businesses by facilitating access to contracting opportunities at the Project and structuring procurement packages to be accessible to local suppliers will be included as they are further developed. Where practical, the strategy will emphasize the use of local equipment and services to increase regional economic benefits and reduce reliance on externally sourced resources.

## 4 Monitoring, Adaptive Management, and Reporting

NTD: WKR is committed to continual improvement in its work activities with the aim of reducing risks to the socio-economic environment and improving operational effectiveness. Strategies for continued implementation of adaptive management will be added through Project planning.

WKR is committed to tracking and reporting aspects of labour relations, training, and procurement as required. Further information is available in the Socio-economic Monitoring Plan developed for the Project. This section will be updated as the plans are developed.

## 5 References

NTD: Update as necessary



WEST  
KITIKMEOT  
RESOURCES  
CORP

# Appendix 37K

## Socio-economic Monitoring Plan

### (Draft)

# Grays Bay Road and Port Project Socio-economic Monitoring Plan (Draft)

Prepared for:

**West Kitikmeot Resources Corp.**

Prepared by:

**Nunami Stantec Limited**

April 2026

Project No.: 123514868



# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Plan Scope and Objectives .....	1
1.2	Regulations, Approvals, and Guidelines .....	2
1.3	Roles and Responsibilities .....	2
1.4	Influence of Engagement on the Plan .....	2
<b>2</b>	<b>Monitoring Framework .....</b>	<b>3</b>
<b>3</b>	<b>Reporting .....</b>	<b>7</b>
<b>4</b>	<b>Adaptive Management .....</b>	<b>8</b>
<b>5</b>	<b>References .....</b>	<b>9</b>

## List of Tables

Table 1.1	TBD .....	2
Table 2.1	Socio-economic Monitoring Framework .....	4

## Abbreviations

CIRNAC.....	Crown-Indigenous Relations and Northern Affairs Canada
EPP .....	Environmental Protection Plan
ERC.....	Emergency Response Coordinator
GN.....	Government of Nunavut
HTO.....	Hunters and Trappers Organizations
IQ.....	Inuit Qaujimaningit
IS.....	Impact Statement
IOL.....	Inuit Owned Land
KIA.....	Kitikmeot Inuit Association
NIRB.....	Nunavut Impact Review Board
NWB.....	Nunavut Water Board
O&M .....	Operation and Maintenance
Project, the .....	Grays Bay Road and Port Project
TCWR.....	Tibbitt to Contwoyto Winter Road
WKR.....	West Kitikmeot Resources Corp.

## Glossary

Term	Definition
XXX	XXX

# 1 Introduction

The Grays Bay Road and Port Project (the Project) has two primary components: the development and operation of a deep water port at Grays Bay on the Coronation Gulf, referred to as Grays Bay Port; and the construction and operation of an all-season controlled access road, referred to as the Grays Bay Road, that will connect the port to the northern terminus of the Tibbitt to Contwoyto Winter Road (TCWR) at Jericho Station. The Grays Bay Road includes approximately 230 km of all-season road extending to Jericho Station, as well as an additional 3 km winter road segment from Jericho Station, connecting to the existing TCWR.

## 1.1 Plan Scope and Objectives

NTD: This Socio-economic Monitoring Plan (SEMP) outlines management and mitigation measures to address potential adverse effects of the Project and augment the anticipated positive effect the Project for Inuit and regional communities. The SEMP will be one of the key strategies used to guide the implementation of mitigation and management measures, measure the effectiveness of those measures, track how communities are experiencing effects (both positive and adverse), help with the socio-economic development of Inuit communities, and enable adaptive management of potential new/emerging socio-economic effects. The focus of the plan is on the indicators identified in the Impact Statement (IS) related to the socio-economic environment, in areas such as health, culture, wellbeing, and food security of the communities potentially to be affected by the Project. WKR has committed to updating these sections during the NIRB process while incorporating relevant engagement feedback.

This objective is supported by the following specific sub-objectives:

- Monitor and evaluate the effectiveness of workforce-related mitigation and enhancement measures, and apply adaptive management where monitoring or feedback indicates improvements are required.
- Provide employment opportunities for Inuit and residents of the Kitikmeot Region through preferential hiring, transparent recruitment processes, and targeted workforce development initiatives.
- Support long-term workforce capacity building by implementing training, apprenticeship, and youth employment programs that improve job readiness, skill development, and career progression opportunities aligned with Project needs.
- Promote fair, respectful, and culturally safe labour relations through the implementation of clear workplace policies, including a Code of Conduct, cultural awareness and sensitivity training, and measures that support equity, diversity, and inclusion.
- Support worker health, safety, and wellbeing through coordinated implementation of employee assistance programs, drug and alcohol policies, accommodation standards, and alignment with the Occupational Health and Safety Plan.

- Reduce pressures on regional communities and services through managed transportation, travel, accommodation, and mobilization practices that reduce unplanned community interactions and temporary population increases.
- Ensure effective engagement and communication with Inuit organizations, communities, and regulators regarding workforce-related matters, and provide mechanisms for feedback, issue resolution, and adaptive management.

## **1.2 Regulations, Approvals, and Guidelines**

WKR will operate in full compliance with all applicable federal and territorial laws, regulations, standards, guidelines, and terms and conditions governing Inuit human resources or socio-economic monitoring. The following government legislation and policy applies to the Project, and WKR commits to compliance with all applicable requirements outlined in Table 1.1.

NTD: In consultation with the Kitikmeot Socio-Economic Monitoring Committee, WKR will identify the role it will take in regional monitoring initiatives, including how the Project's monitoring plans will align with those of the Kitikmeot Socio-Economic Monitoring Committee.

[insert table with legislation and regulations that are relevant]

**Table 1.1**      **TBD**

## **1.3 Roles and Responsibilities**

NTD: Update as roles / responsibilities are identified

Although WKR maintains overall accountability for implementing the monitoring program that will be described in this Plan, considerable coordination with supporting or collaborating organizations will be required. Roles will be developed based to clearly define and communicate roles, responsibilities and accountabilities throughout the construction, and operation, and maintenance of the Project. Roles and responsibilities will align with guidance and requirements, as applicable.

## **1.4 Influence of Engagement on the Plan**

NTD: This section will provide information on how Inuit Qaujimaningit, Indigenous Knowledge, and Community Knowledge, scientific research, community, and regulator feedback informed the plan.

## 2 Monitoring Framework

NTD: WKR will update this section further, as it is developed over the course of the NIRB review and through consideration of relevant stakeholder feedback.

To support the effective implementation of the SEMP and to meet regulatory monitoring and reporting requirements, WKR has established a framework (Table 2.1) for monitoring the effectiveness of key mitigation, management, and enhancement measures related to workforce management, Inuit employment and training, labour relations, community wellbeing, and other aspects of the socio-economic environment identified as indicators in the IS, as appropriate. The monitoring framework is designed to track implementation of commitments, evaluate outcomes over time, and support adaptive management where required.

The framework identifies measurable indicators linked to each mitigation measure, along with corresponding data sources and data collection time periods. Relevant thresholds/targets are also identified. Monitoring will draw primarily on WKR human resources, training, procurement, and transportation records, as well as aggregated information provided by third party service providers and contractors, where applicable.

The SEMP will track Project effects, including food-related indicators. Annual reporting will support early identification of trends and help inform responsive measures if conditions change.

**Grays Bay Road and Port Project  
Socio-economic Monitoring Plan (Draft)**

Section 2: Monitoring Framework  
April 2026

**Table 2.1 Socio-economic Monitoring Framework**

<b>Mitigation Measure / Commitment</b>	<b>Monitoring Indicator(s)</b>	<b>Threshold / Target</b>	<b>Data Source(s)</b>	<b>Collection Time Period / Frequency</b>
Preferential Inuit hiring and local recruitment	<ul style="list-style-type: none"> <li>Percentage of Inuit employees or FTEs</li> <li>Number of local hires by community</li> <li>Workforce by Project phase</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrated prioritization of Inuit and local hiring</li> <li>Year-over-year improvement where practicable</li> <li>Compliance with Project Certificate and agreements</li> </ul>	<ul style="list-style-type: none"> <li>HR employment records</li> <li>Contractor workforce reports</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> <li>Annually during operations</li> </ul>
Gender, equity, and diversity policies	<ul style="list-style-type: none"> <li>Workforce composition by gender and Indigenous identity</li> <li>Participation of under-represented groups</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of policies across all Project phases</li> <li>Increasing participation of under-represented groups where practicable</li> </ul>	<ul style="list-style-type: none"> <li>HR records</li> <li>Voluntary self-identification data</li> </ul>	<ul style="list-style-type: none"> <li>Annually</li> </ul>
Labour Relations Strategy implementation	<ul style="list-style-type: none"> <li>Outreach and recruitment activities delivered</li> <li>Inuit employment rates</li> <li>Workforce turnover</li> </ul>	<ul style="list-style-type: none"> <li>Strategy implemented as described in the Plan</li> <li>Issues addressed through adaptive management where identified</li> </ul>	<ul style="list-style-type: none"> <li>HR records</li> <li>Engagement logs</li> </ul>	<ul style="list-style-type: none"> <li>Annually</li> </ul>
Training Strategy and pre-employment training	<ul style="list-style-type: none"> <li>Number of Inuit and youth trained</li> <li>Training types delivered</li> <li>Completion rates</li> </ul>	<ul style="list-style-type: none"> <li>Training opportunities delivered as planned</li> <li>Completion rates reviewed and improved where feasible</li> </ul>	<ul style="list-style-type: none"> <li>Training provider records</li> <li>HR training logs</li> </ul>	<ul style="list-style-type: none"> <li>Annually</li> </ul>
Apprenticeship and youth employment programs	<ul style="list-style-type: none"> <li>Number of apprentices and youth employed</li> <li>Duration and type of placements</li> <li>Progress toward certification (where applicable)</li> </ul>	<ul style="list-style-type: none"> <li>Programs implemented where practicable</li> <li>Continued participation supported throughout Project phases</li> </ul>	<ul style="list-style-type: none"> <li>HR records</li> <li>Training partner reports</li> </ul>	<ul style="list-style-type: none"> <li>Annually</li> </ul>
Cultural awareness training	<ul style="list-style-type: none"> <li>Cultural awareness training completion rates</li> <li>Cultural awareness activities implemented</li> </ul>	<ul style="list-style-type: none"> <li>Cultural awareness training delivered to all long-term personnel</li> <li>Cultural awareness maintained throughout construction and operations</li> </ul>	<ul style="list-style-type: none"> <li>Training attendance records</li> <li>Program documentation</li> </ul>	<ul style="list-style-type: none"> <li>Annually</li> </ul>

**Grays Bay Road and Port Project  
Socio-economic Monitoring Plan (Draft)**

Section 2: Monitoring Framework  
April 2026

<b>Mitigation Measure / Commitment</b>	<b>Monitoring Indicator(s)</b>	<b>Threshold / Target</b>	<b>Data Source(s)</b>	<b>Collection Time Period / Frequency</b>
Flexible work scheduling for cultural and harvesting activities	<ul style="list-style-type: none"> <li>• Number of flexible schedule requests approved</li> <li>• Use of cultural leave provisions</li> </ul>	<ul style="list-style-type: none"> <li>• Requests considered and accommodated where operationally feasible</li> </ul>	<ul style="list-style-type: none"> <li>• HR records</li> <li>• Supervisor reports</li> </ul>	<ul style="list-style-type: none"> <li>• Annually</li> </ul>
Employee Code of Conduct	<ul style="list-style-type: none"> <li>• Code of Conduct training completion</li> <li>• Number and type of reported incidents</li> <li>• Corrective actions implemented</li> </ul>	<ul style="list-style-type: none"> <li>• Code of Conduct applied to all personnel</li> <li>• Incidents addressed in accordance with procedures</li> </ul>	<ul style="list-style-type: none"> <li>• HR records</li> <li>• Incident and investigation logs</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing tracking</li> <li>• Annual summary</li> </ul>
Employee and Family Assistance Program (EFAP)	<ul style="list-style-type: none"> <li>• EFAP utilization trends (aggregated)</li> <li>• Awareness activities delivered</li> </ul>	<ul style="list-style-type: none"> <li>• EFAP available to all eligible personnel throughout Project phases</li> </ul>	<ul style="list-style-type: none"> <li>• EFAP service provider summary reports</li> </ul>	<ul style="list-style-type: none"> <li>• Annually</li> </ul>
Inuit Employee Assistance Program (IEAP) - If available	<ul style="list-style-type: none"> <li>• IEAP utilization trends (aggregated)</li> <li>• Access to culturally appropriate services</li> </ul>	<ul style="list-style-type: none"> <li>• IEAP implemented and accessible throughout Project phases</li> </ul>	<ul style="list-style-type: none"> <li>• IEAP provider summary reports</li> </ul>	<ul style="list-style-type: none"> <li>• Annually</li> </ul>
No Drug and Alcohol Policy	<ul style="list-style-type: none"> <li>• Policy training completion rates</li> <li>• Number of incidents related to impairment or prohibited substances</li> </ul>	<ul style="list-style-type: none"> <li>• Policy implemented for all personnel</li> <li>• Incidents managed in accordance with policy</li> </ul>	<ul style="list-style-type: none"> <li>• Training records</li> <li>• Incident reports</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing tracking</li> <li>• Annual summary</li> </ul>
Travel Policy and managed transportation approach	<ul style="list-style-type: none"> <li>• Travel-related delays/unplanned community stopovers</li> <li>• Workforce movements by routing</li> </ul>	<ul style="list-style-type: none"> <li>• Managed transportation approach implemented</li> <li>• Community interactions reduced where practicable</li> </ul>	<ul style="list-style-type: none"> <li>• Transportation logs</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing tracking</li> <li>• Annual summary</li> </ul>
No Harvesting Policy	<ul style="list-style-type: none"> <li>• Policy communication and training completion</li> <li>• Incidents of non-compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Zero tolerance for harvesting by Project personnel</li> <li>• Policy communicated and enforced</li> </ul>	<ul style="list-style-type: none"> <li>• Training records</li> <li>• Incident reports</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing tracking</li> <li>• Annual summary</li> </ul>
Community engagement and feedback process	<ul style="list-style-type: none"> <li>• Engagement activities delivered</li> <li>• Issues/complaints raised and resolved</li> <li>• Response timelines met</li> </ul>	<ul style="list-style-type: none"> <li>• Engagement conducted as planned</li> <li>• Issues responded to in a timely manner</li> </ul>	<ul style="list-style-type: none"> <li>• Engagement logs</li> <li>• Complaint tracking system</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing tracking</li> <li>• Annual summary</li> </ul>

**Grays Bay Road and Port Project  
Socio-economic Monitoring Plan (Draft)**

Section 2: Monitoring Framework  
April 2026

<b>Mitigation Measure / Commitment</b>	<b>Monitoring Indicator(s)</b>	<b>Threshold / Target</b>	<b>Data Source(s)</b>	<b>Collection Time Period / Frequency</b>
Overall HR Plan implementation	<ul style="list-style-type: none"> <li>• Compliance with HR Plan commitments</li> <li>• Issues identified and corrective actions</li> </ul>	<ul style="list-style-type: none"> <li>• Full implementation of HR Plan commitments</li> <li>• Adaptive management applied where needed</li> </ul>	<ul style="list-style-type: none"> <li>• Internal audits</li> <li>• Management reviews</li> </ul>	<ul style="list-style-type: none"> <li>• Annually</li> </ul>
Adaptive management and continuous improvement	<ul style="list-style-type: none"> <li>• Changes made to measures based on monitoring or feedback</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring results reviewed and actions documented</li> </ul>	<ul style="list-style-type: none"> <li>• Management review records</li> <li>• Community and regulatory feedback</li> </ul>	<ul style="list-style-type: none"> <li>• As required; documented in annual reporting</li> </ul>

## 3 Reporting

NTD: Monitoring activities will be conducted throughout construction and operations, with results summarized and reported through annual socio-economic monitoring submissions to NIRB, or as required by regulatory authorities.

Annual reports will be submitted to NIRB, and other interested parties as required.

## 4 Adaptive Management

NTD: Monitoring results will be regularly reviewed by WKR management to assess the effectiveness of implemented measures, identify emerging issues or trends, and inform potential updates to policies, programs, or procedures. Where monitoring indicates that mitigation measures are not achieving intended outcomes or targets, WKR will apply adaptive management approaches, which may include additional investigations, modifying implementation methods, enhancing engagement with Inuit organizations and communities, or revising commitments in consultation with regulators. The monitoring framework will be updated as necessary to reflect project phase, regulatory direction, and community feedback.

## 5 References

NTD: Update as necessary