

Appendix D Spill Contingency Plan

Dhu-1 Quarry Development Project – Project Description Report

Appendix D Spill Report Guidelines
September 15, 2021

SPILL CONTINGENCY PLAN

DHU-1 QUARRY

Mackenzie Valley Winter Road KM 966.6 Right

**Government of the NWT
Infrastructure**

**Revision 0
September 2021**

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1.0 INTRODUCTION

1.1 Purpose

The purpose of this Spill Contingency Plan is to identify measures to reduce the possibility of occurrence of unplanned releases of contaminants associated with the development and operation of the Dhu-1 Quarry Project (the Project) and associated access road and to identify actions to be taken should a spill occur, in order to minimize impacts to the environment. This plan applies to the Government of the Northwest Territories (GNWT), its contractors or other personnel working on the Project.

1.2 Revisions

This Spill Contingency Plan may be revised from time to time by the GNWT.

Revision	Date	Summary of Revisions
0	September 2021	Submitted to SLWB for approval

1.3 Responsibilities

This Spill Contingency Plan Applies to **Name of Contractor** and its subcontractors for all aspects of the Project. The Project Owner is GNWT.

Primary Contacts

Name	Role	Phone / Email
	GNWT Project Manager	
	Alternate GNWT Project Manager	
	Contractor Project Manager	
	Site Foreman	
	Media	

1.4 Training

All project personnel will receive training on the purpose and procedures provided in this Spill Contingency Plan. All personnel will receive training in safe work procedures related to handling of petroleum products and refueling equipment.

1.5 Project and Site Description

The Project includes:

- Construction and use of an approximately 4 kilometre (km) winter access road from km 966.6 of the Mackenzie Valley Winter Road (MVWR) to Dhu-1 quarry
 - Development and operation of the Dhu-1 quarry to produce up to 600,000 m³ of crushed rock
 - Stockpiling of quarried material
 - Construction and operation of temporary facilities such as laydown areas, construction camp, explosive storage/mixing facility, fuel storage, equipment maintenance and storage areas, water supply, power generation and waste management
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2.0 SPILL PREVENTION

2.1 Materials and Equipment Storage

The following substances/materials may be present at work sites:

- Gasoline
 - Diesel
 - Engine Oil
 - Lubricants
 - Sewage
 - Greywater
 - Waste oils, lubricants
 - Compressed gases
 - Explosives
- *The final Spill Contingency Plan is to include a site map showing the location of all potentially spillable materials*
 - *The final Spill Contingency Plan is to include a bulleted list of substances including approximate amounts, risk of a spill and potential effects.*
 - *the final Spill Contingency Plan is to identify methods of fuel transfer*
- MSDS for substances are to be stored on site during the Project are to be included with this Spill Contingency Plan and kept on site at all times.
 - Fuels and oils/lubricants must be stored more than 50 m from the bank of a watercourse or waterbody. All fuels and lubricants will be stored in drums and tanks within secondary containment capable of retaining 110% of the capacity of the tanks/drums.
 - Fuel-fired equipment such as generators and pumps will have secondary containment installed capable of containing fuel drips or leaks during operations and refueling.
 - Mobile equipment will be refueled at least 50 m away from the bank of a watercourse or waterbody.
 - Sewage is to be stored in approved holding tanks for this purpose prior to removal from site, or disposed of in accordance with the land use permit.
 - Greywater is to be stored in suitable containment and in accordance with the land use permit.

2.2 Monitoring

- Fuel storage areas will be checked daily for leaks and condition of tanks and containers to minimize potential for spill to surrounding environment. Damaged tanks will be replaced and contents transferred.
 - Sewage and greywater holding tanks will be checked daily for leaks and conditions of containers. Contents will be transferred from damaged tanks and tanks will be repaired or replaced.
 - Vehicles will be checked daily prior to operation for evidence of leaking hoses or tanks, and leaks will be repaired promptly.
 - Observations and actions taken will be recorded as part of daily pre-op check.
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3.0 SPILL RESPONSE

3.1 Response Equipment

Emergency spill kits will be maintained at the following locations:

- Camp kitchen
- Camp generator
- Fuel Storage Areas
- Designated refueling areas

Each kit contains the following items stored into a 55 gallon plastic drums:

- 5 Tyveck coveralls
- 10 pairs of disposable gloves
- 2 x 100 absorbent pad packs
- 1 x 20kg granular absorbent bag
- 4 x 2" diam. Floating absorbent booms
- 10 yellow storage bags
- One shovel

Additionally, each vehicle will be equipped with a spill kit, to include:

- 4 pairs disposable gloves
- 20 absorbent pads
- 2 clear or yellow storage bags

Suitable communication equipment and all emergency numbers are to be available to all supervisory personnel.

3.2 General Response Procedures

The following are general procedures that apply immediately in the case of a spill of any size. Steps are listed in the order of importance; however, depending on the circumstances, conditions, and potential injuries, this order may need to be altered to meet specific needs.

In the event of a spill or a release of materials, the first person on the scene will:

- Stop, look, assess and control site hazards and risks to personnel.
 - Is there a fire or explosion hazard?
 - Are there people nearby?
 - What is the spilled material? Check MSDS. Is additional PPE needed?
 - Eliminate all sources of ignition
 - Stop the source of the spill if safe to do so
 - Obtain the assistance of others to use material in spill kit or other available materials to contain the spill
 - Notify site foreman
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3.3 Specific Response Procedures

Spill on Land

- Determine the likely movement of the spill overland and into the ground.
- Prevent spilled material from entering water using booms, creating berms or using absorbents
- Use absorbents to collect free product
- Excavate a shallow depression or construct a surface berm constructed in the path of the flowing product to stop and contain the flow. If feasible, without unduly delaying containment efforts, stripping may be salvaged and stored separately during excavations.
- Excavate affected soil into empty drum or lined container, while minimizing destruction of root zone
- If spill source is a leaking fuel truck, pump tanker dry (into appropriate containers or another tanker).
- Heavily contaminated soil and vegetation, as well as used sorbent material, shall be disposed of at an approved hazardous waste treatment facility.
- Traffic will be minimized on and around contaminated areas.
- Attempts will be made to restrict the movements of wildlife near the area affected by the spill.
- Remediation and final clean-up will be conducted until the spill and immediate area has been completely reclaimed to an equivalent capability prior to the incident.

Spill on or Near Water

- Block entry into water using booms and absorbent pads, trenches or other barriers
- If spilled material enters an open water body, booms, skimmers and sorbent pads will be deployed, if feasible, to contain and recover the spill material.
- Remove minor spills with sorbent pads.
- Major spill in water will require pumping and disposal of contaminated water and other actions as determined in discussion with regulatory authorities.
- Contaminated areas, including downstream shorelines (non-frozen conditions), will be cleaned up in consultation with spill response specialists and the appropriate government agencies.
- In the event that spilled materials enter a frozen water body through or under the ice to flowing or standing water, auguring will be conducted to determine the extent of the spill plume. If feasible, a vacuum truck will be brought to the site to skim off the contaminants. As well, the appropriate regulatory agencies will be contacted and a post-break-up monitoring and reclamation plan will be implemented to determine the extent of the impacts of the spill on the water body and its banks.

Spill on Ice

- Evaluate ice conditions before proceeding
 - If spilled material is released onto a frozen water body, snow and sorbent pads will be used to contain and clean up the spill. A backhoe, or similar equipment, will be used to remove all materials to prevent release into the water body.
 - Use snow or ice berms to prevent spill from spreading
 - Use booms to contain free product
 - Manually remove contaminated snow and ice from the surface
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Spot Spills

- Since impacts from small spills can generally be minimized if immediate action is taken, all small spot spills (**those below reportable quantities**) will be cleaned up immediately.
 - Excavate affected soil into empty drum or lined container, while minimizing destruction of root zone
 - Activities in the immediate vicinity will be suspended until the Site Foreman grants permission to resume.
 - Locations where spot spills have occurred will be flagged and the location GPS coordinates recorded by the person in charge of the spill. Flags will be removed once reporting is complete.
- Heavily contaminated soil and vegetation, and/or removed contaminated materials will be disposed of at an approved waste facility.
- The person in charge of the spill will document and report all details pertaining to the incident.

3.4 Reporting

A. **All spills** must be reported to the Site Foreman and to the GNWT Project Manager.

B. **If the spill exceeds the threshold quantity** as listed in Appendix B:

1. Immediately report the spill to:

NT/NU 24 Hour Spill Report Line (867) 920-8130

2. Complete the Northwest Territories (NT) **Spill Report Form** (see attached form in Appendix A) and submit within 12 hours of the incident to spills@gov.nt.ca

The GPS coordinates of the spill location must be recorded. All information and pictures will be used for the spill report.

The person preparing the spill report shall give as much of the following information as possible. Reportable information includes but is not limited to the following:

- Date and time of spill
 - Direction spill is moving (or if it has stopped)
 - Name and phone number of persons close to the location of the spill
 - Type of contaminant spilled and quantity spilled
 - Cause of spill
 - Whether the spill is continuing or has stopped
 - Description of the existing containment
 - Actions taken to recover, clean-up and dispose of spilled contaminant
 - Name, address and phone number of person reporting the spill
 - Name of person in charge of management or control at time of spill
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Table 3-1: Reportable Spill Quantities in NWT

Substance	Reportable Quantity
Explosives Compressed gas (toxic/corrosive) Infectious substances Sewage and Wastewater (unless otherwise authorized) Radioactive materials Unknown substance	Any amount
Compressed gas (Flammable) Compressed gas (Non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100L
Flammable liquid (fuels)	≥100 L
Flammable solid Substances liable to spontaneous combustion Water reactant substances	≥ 25 kg
Oxidizing substances	≥ 50 L or 50 kg
Organic peroxides Environmentally hazardous substances intended for disposal	≥1 L or 1 kg
Toxic substances	≥ 5 L or 5 kg
Corrosive substances Miscellaneous products, substances or organisms	
Other contaminants--for example waste or spent chemicals, used or waste oil, vehicle fluids, wastewater.	≥ 100 L or 100 kg
Flammable liquid Vehicle fluid	≥ 20 L When released on a frozen water body that is being used as a working surface
Reported releases or potential releases of any size that: <ul style="list-style-type: none"> • are near or in an open water body; • are near or in a designated sensitive environment or habitat; • Pose an imminent threat to human health or safety; or • Pose an imminent threat to a listed species at risk or its critical habitat 	Any amount

4.0 EMERGENCY CONTACT LIST IN CASE OF SPILL

Name	Company	Emergency Phone
tbd	Contractor Site Foreman	
Tbd	GNWT Regional Superintendent	
<i>Above to confirm if spill is reportable prior to continuing with call-down</i>		
Tbd	GNWT Project Manager	
NWT/NU Spill Reporting Line		867-920-8130
tbd	GNWT Inspector	
Other tbd		

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



NT-NU 24-HOUR SPILL REPORT LINE

Tel: (867) 920-8130 • Email: spills@gov.nt.ca

REPORT LINE USE ONLY

A	Report Date: MM DD YY	Report Time:	<input type="checkbox"/> Original Spill Report OR <input type="checkbox"/> Update # _____ to the Original Spill Report		Report Number:
	Occurrence Date: MM DD YY	Occurrence Time:			
C	Land Use Permit Number (if applicable):		Water Licence Number (if applicable):		
D	Geographic Place Name or Distance and Direction from the Named Location:			Region: <input type="checkbox"/> NT <input type="checkbox"/> Nunavut <input type="checkbox"/> Adjacent Jurisdiction or Ocean	
E	Latitude: _____ Degrees _____ Minutes _____ Seconds		Longitude: _____ Degrees _____ Minutes _____ Seconds		
F	Responsible Party or Vessel Name:		Responsible Party Address or Office Location:		
G	Any Contractor Involved:		Contractor Address or Office Location:		
H	Product Spilled: <input type="checkbox"/> Potential Spill	Quantity in Litres, Kilograms or Cubic Metres:	U.N. Number:		
I	Spill Source:	Spill Cause:	Area of Contamination in Square Metres:		
J	Factors Affecting Spill or Recovery:	Describe Any Assistance Required:	Hazards to Persons, Property or Environment:		
K	Additional Information, Comments, Actions Proposed or Taken to Contain, Recover or Dispose of Spilled Product and Contaminated Materials:				
L	Reported to Spill Line by:	Position:	Employer:	Location Calling From:	Telephone:
M	Any Alternate Contact:	Position:	Employer:	Alternate Contact Location:	Alternate Telephone:

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: <input type="checkbox"/> EC <input type="checkbox"/> CCG/TCMSS <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> AANDC <input type="checkbox"/> NEB <input type="checkbox"/> Other: _____			Significance: <input type="checkbox"/> Minor <input type="checkbox"/> Major <input type="checkbox"/> Unknown		File Status: <input type="checkbox"/> Open <input type="checkbox"/> Closed
Agency:		Contact Name:		Contact Time:	
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					
Remarks:					