



# Spill Contingency Plan for Liard River Ferry Landing Maintenance

Government of the Northwest Territories – Department of Infrastructure



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## **Introduction**

The Government of the Northwest Territories (GNWT) Department of Infrastructure (INF) is applying for a Type B Water Licence to allow for the removal of in-stream boulders, cobbles, and other sediment from the navigational path of the Liard River Ferry, located at km 457 on Highway 1 near the Village of Fort Simpson, NWT.

This Spill Contingency Plan (SCP) has been developed by INF for use by project management and contractor staff. This spill contingency plan will be implemented for all activities undertaken for duration of the land use activity and will be revised as required. The purpose of the SCP is to provide a guide to all on-site personnel in the event of an accidental release of fuel or other waste during ongoing maintenance. All persons involved with on-site activities should read and be familiar with the SCP. To be effective, it is important that all personnel are acquainted with their responsibilities and the steps to take in the event of a spill. Personnel should not read the SCP for the first time during an emergency.

This SCP has been developed for land reserve and regulatory approvals in accordance with the Guidelines for Spill Contingency Planning prepared by Indian and Northern Affairs Canada (INAC 2007). Contractors are required to submit a SCP which will meet or exceed the features of this SCP and can be provided to the appropriate regulatory authorities once complete.

## **Project Overview**

Due to the predicted low water levels for this summer, GNWT-INF will need to undertake work to remove in-stream granular material from the ferry's navigational path, to prevent the ferry from running ashore during its operations. This work is vital to maintain ferry operations. The work will consist of the following:

- Removing 4,000 cubic meters of materials from both landing sites along the shores of the Liard River, for a combined total of 8,000 cubic meters of material to be removed.
- Operation of a long reach excavator from the ferry landing pads to remove material from the Liard River.
- Placing a long reach excavator in stream on the ferry landing pads.
- Stockpiling materials from the Liard River for reuse at the ferry landing pads or transport to a quarry.

Work is proposed to occur between August 15, 2024 and September 18, 2024 when water levels are at their lowest. This is to reduce the requirement to place equipment in the water on the ferry landing pads to reach the boulders and cobbles. Work is expected to take approximately 20 days.

### **Potential Contaminants**

Over the course of the Project, several contaminants may be used by equipment and crews working within or near the project footprint. These potential contaminants are listed below and may be involved in a spill:

- Gasoline
- Diesel
- Hydraulic oil
- Motor oil
- Lubricating oils and grease
- Antifreeze and other coolants

Spills may result from any of the following potential occurrences:

- Valve or line failure in systems, vehicles or heavy equipment
- Spill of lubricants during routine maintenance of equipment
- Vandalism

### **Response Organization**

Whenever a spill is identified, the Contractor and the INF representative will be contacted as soon as possible. The Contractor is responsible for initiating the SCP. The Contractor will be identified through an approved procurement process that is currently underway.

#### INF Contact Information

Jacqueline Demers  
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(867) 695-7650

#### Contractor Contact Information

TBD

### **Initial Response under Any Spill Circumstances**

The following actions should be taken by the first person(s) who identifies a spill:

1. Be alert and considerate of your safety and of those around you. If possible, identify the spilled contaminant. Notify your supervisor immediately.
2. Assess the hazard to persons in the area of the spill, including yourself.
3. Assess whether the spill can be readily stopped or brought under control.
4. If safe to do so, and if possible, stop the spillage of contaminant and/or provide containment.
5. Gather information about the status of the situation and the direction of flow.
6. Consult the workplace Spill Contingency Plan and implement measures provided.
7. Report the spill immediately to the 24-Hour Emergency Spill Report Line (867)920-8130.

NOTE: If the spill was the result of contractor or user actions, they should enact their own spill response procedures according to their Spill Contingency Plan. See Spill Prevention section for more information on spill response procedures.

### **Reporting Procedure**

All spills or potential spills of contaminants must be reported to the 24-hour Spill Report Line to ensure that an investigation may be undertaken by the appropriate authority. Reporting of any spills associated with the project will be completed by the Contractor or the INF site representative.

To report a spill:

1. Fill out the Northwest Territories Spill Report Form (found in Attachment A of this SCP) as completely as possible before calling in the spill report.
2. Contact the Government of the Northwest Territories 24-hour Emergency Spill Report Line  
**24-HOUR EMERGENCY SPILL REPORT LINE 867-920-8130**
3. Email the completed Northwest Territories Spill Report Form to [spills@gov.nt.ca](mailto:spills@gov.nt.ca)

Any person reporting a spill is required to give as much information as possible, however reporting of a spill should not be delayed if all of the necessary information is not known. Additional information can be provided later.

From the *Consolidation of Spill Contingency Planning and Reporting Regulations* (1998), as much of the following information should be reported during the initial spill report as possible:

- Date and time of spill
- Location of spill
- Direction spill is moving
- Name and phone number of a contact person close to the location of the spill
- Type of contaminant spilled and quantity
- Cause of spill
- Whether spill is continuing or has stopped
- Description of existing contaminant
- Action taken to contain, recover, clean up, and dispose of spilled contaminant
- Name, address and phone number of person reporting the spill
- Name of owner or person in charge, management or control of contaminants at the time of the spill

### **Spill Prevention**

The most likely spill possibilities during the project would be leakage or line failure from heavy equipment or other vehicles, or vehicular accident. No contaminants will be stored onsite. Fuel transfer is not expected on site, but if required will be transferred via a fuel truck. Drip trays will be used during fuel transfer. Where drips or spills occur, they will be cleaned up immediately.

The risk of spills will be further reduced through regular inspection and maintenance of all heavy equipment and vehicles associated with project activities. These activities may include but are not limited to:

- Inspection of fuel and oil lines on all equipment;
- Completing on-site fuel transfer over spill pads/trays;
- Completing on-site fuel transfer 100m from the ordinary high-water mark;
- Drip trays will be used for stationary equipment 24/7;
- Any vehicles or machinery parked for longer than 2 hours will require a drip tray;
- Machinery will be maintained and regularly inspected for fuel, oil, or other fluid leaks;

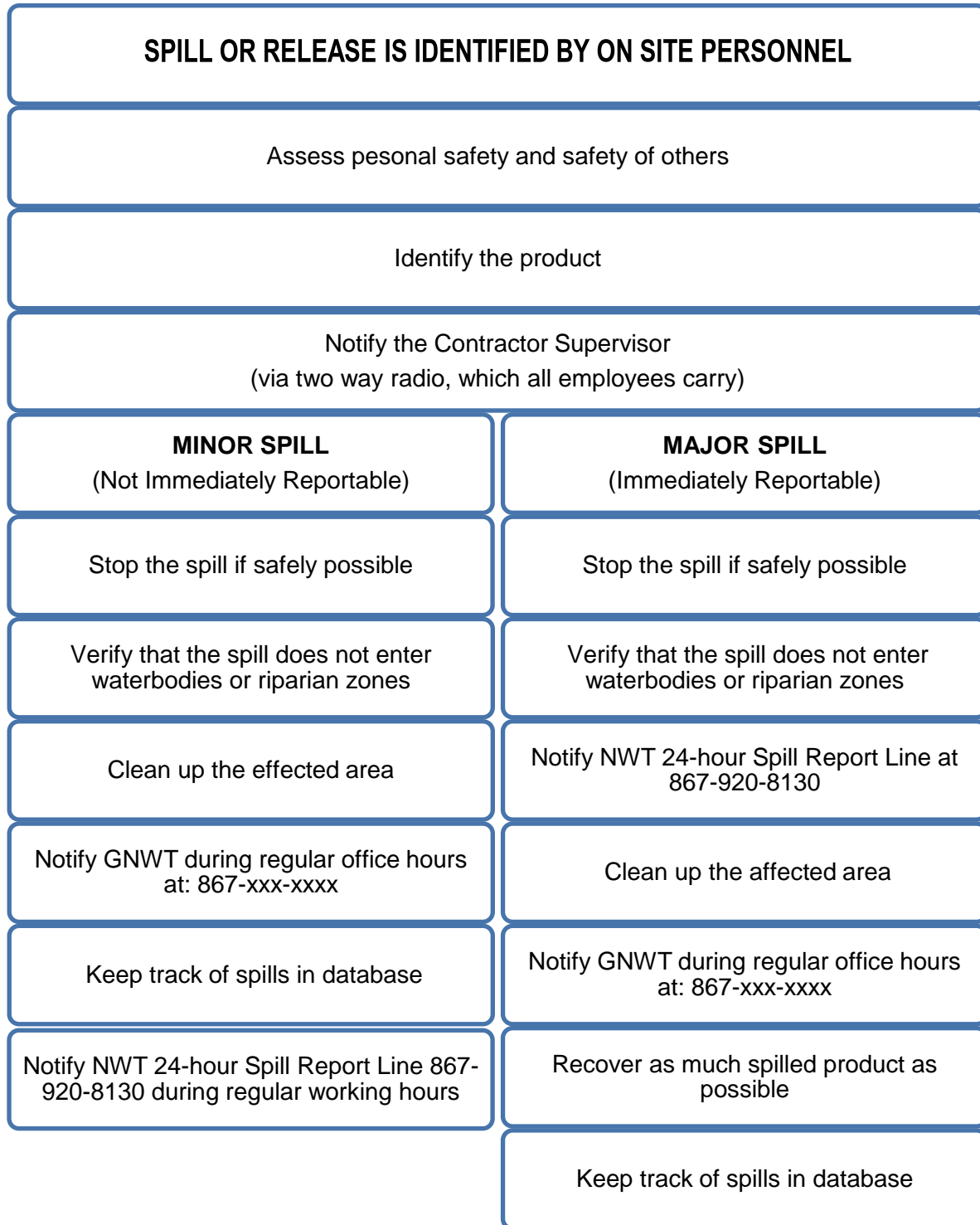
- Machinery working in water will be inspected prior to placement on the ferry landing pads for leaks as well as contaminants present on the machinery;
- Machinery working in water will be clean and free of contaminants;
- Where possible, vegetable-based biodegradable hydraulic fluids will be used by the excavator as precautionary measure in the event of a hydraulic fluid leak;
- Each vehicle and excavator will carry the required emergency spill kit to prevent fuel or hydraulic fluid from entering waterbodies;
- Monitoring of tank volume during fuel transfer;
- Cleaning up drips and minor spills immediately; and,
- Ensuring the quick repair of any identified deficiencies on heavy equipment or other vehicles.

## **Action Plans**

### *Spill Response*

The following steps outline the general spill response procedures for initial actions to be taken to contain and clean up a contaminant spill, as well as disposing of contaminated materials. Two procedures have been developed for handling contaminant spills, depending on where the spill has occurred (i.e., on land or water).

**Figure 1: Spill Response Organizational Hierarchy (INAC, 2007)**





### *Spills on Land*

1. Once a spill is identified, all sources of ignition should be turned off (e.g., no smoking, shut off engines).
2. The spilled material (e.g., gasoline, diesel, antifreeze, etc.) should be identified, if possible.
3. The affected area should be secured, ensuring the area is safe for entry and does not represent a threat to human health and safety of the spill responders. Public access of the area should be restricted.
4. If possible, identify where the spill is coming from (the source). Determine if the spill is still occurring (i.e., still leaking) or if the spillage has stopped. If the spill has not stopped, determine if it is safe to stop or control the spill (e.g., plug hole, close valve, upright container), or contain the spill (e.g., place a container or tarp with built up edges under the spill source to contain the spill).
5. Use materials on hand to attempt to control the spill. If the spill is too large to be controlled with the spill materials at hand, contact the Contractor or the INF site representative and report the spill immediately and request assistance (see section above for contact information).
6. If the spill is small enough to be controlled with the spill response materials at hand, prevent spilled contaminants from spreading or entering waterways by using sorbent (oil-absorbing) materials or a soil dyke down slope from the spill. This is especially the case with liquid contaminants (e.g. gasoline, diesel).
7. Once the spill has been controlled and further spreading prevented, contact the Contractor or the INF site representative and report the spill (see section above for contact information). The Contractor or the INF site representative is responsible to report the spill to the 24-Hour Emergency Spill Report Line.
8. If possible with spill response materials at hand, clean up the remaining spilled contaminant and store contaminated materials in a secure container for proper disposal. Do not flush the affected area with water.
9. If possible, remove any contained liquid by pumping into secure drums.

### *Spills in Water*

1. Once a spill is identified, all sources of ignition should be turned off (e.g. no smoking, shut off engines).
2. The spilled material (e.g. gasoline, diesel, antifreeze, etc.) should be identified, if possible.
3. The affected area should be secured, ensuring the area is safe for entry and does not represent a threat to human health and safety of the spill responders. Public access to the area should be restricted.
4. If possible, identify where the spill is coming from (the source). Determine if the spill is still occurring (i.e. still leaking) or if the spillage has stopped. If the spill has not stopped, determine if it is safe to stop or control the spill (e.g. plug hole, close valve, upright container).
5. Use materials on hand to attempt to control the spill. If the spill is too large to be controlled with the spill materials at hand, contact the Contractor or the GNWT site representative and report the spill immediately and request assistance (see above section for contact information).
6. If the spill is small enough to be controlled with the spill response materials at hand, use sorbent booms to contain the spill for recovery. Place sorbent sheets on the water within the boomed area to help contain the contaminant. For narrow waterways such as streams, place one or more sorbent booms across the waterway, downstream of the spill location, and anchor the booms on each bank.
7. Once the spill has been controlled and further spreading prevented, contact the Contractor or the GNWT site representative and report the spill (see above section for contact information). The contractor or the GNWT representative is responsible to report the spill to the 24-Hour Emergency Spill Report Line.
8. If possible with the spill response materials at hand, clean up the remaining spill contaminant within the boomed area. Store contaminated materials in a secure container for proper disposal.

## Communication Plan

In the unlikely event of a large spill that might affect public safety, Fort Simpsons Department of Emergency Services will be notified. In these circumstances the INF contacts listed above will have primary responsibility for ensuring communication following the Department's policy.

- Department of Emergency Services: 911
- Fire Department 867-695-2222
- RCMP 867-695-1111

## Resource Inventory

### ***On Site Resources (Personnel & Equipment)***

Personnel: All personnel hired to work on the Project will be familiar with on-site in spill prevention, response and clean-up measures (see sections above)

Equipment: The following is a list of equipment that is typically used for ongoing highway maintenance activities. Equipment and attachments listed may vary slightly as a result of make and model, and no specific numbers for equipment are listed as numbers are depended on the level of service being provided. If there are any significant deviations from the equipment listed below, the Contractor and GNWT-INF will notify the Mackenzie Valley Land and Water Board.

Equipment	Size	Purpose
Hydraulic Excavators (Wheeled and Tracked)	E70 through 245B	Long reach excavator for removal of boulders, cobbles, and other materials from the Liard River.
Loaders (Wheeled and Tracked)	Various	For loading haul trucks, moving materials at work areas.
Single Axle, Tandem Axle and Tridem Axle Haul Trucks	Various	Hauling materials to quarry sites.
Tractor Trailers	Various	To move equipment to, from and within work site and borrow areas (low/high boys), etc.
Service Vehicles	Various – Pickup trucks, utility service trucks, etc.	To support and maintain all equipment required for the ongoing operation and maintenance of the public highway system.

## Spill Kits

The following outlines the recommended minimum requirements for contents of spill kits to be used during the project; the Contractor is responsible to supply the spill kits. Each spill kit will be regularly inspected to ensure it always contains the following, at a minimum (in part from INAC 2007):

- 1 – 205 L open top steel drum with lid, bolting ring and gasket (spill kit container)
- 10 disposable large 5 mil polyethylene bags (dimensions 65 cm x 100 cm) with ties
- 4 – 12.5 cm x 3 m (5 in. X 10 ft.) sorbent booms
- 10 kg bag of sorbent particulate
- 100 sheets (1 bail) of 50 cm x 50 cm sorbent sheets
- 2 large (5 m x 5m ) plastic tarps
- 1 roll duct tape
- 1 utility knife
- 1 field notebook and pencil
- 1 rake
- 1 pick-axe
- 3 spark-proof shovels
- 4 Tyvex® splash suits
- 4 pairs chemical resistant gloves
- 4 pairs of splash protective goggles
- Instruction binder, including Spill Contingency Plan.

The entire spill kit contents, with the exception of the spark-proof shovels, can be stored within the 205 L steel drum. The drum will be sealed securely to protect the spill kit contents, though should always be accessible without the use of tools (i.e., finger tight bolt ring). The drum's bolt ring should be inspected regularly during inspections to ensure it turns freely and is lubricated.

Extra spill response materials should also be available for use, in addition to the spill kit contents. All spill kits will be located on vehicles and excavators for efficient use in spill circumstances.

## **Training and Exercises**

The Contractor will be responsible for providing a qualified supervisor and training site workers in spill response. All individuals hired to work on the project should be familiar with spill response, basic first aid and WHMIS (Workplace Hazardous Materials and Information System) training before working on site.

## **References**

Indian and Northern Affairs Canada (INAC). 2007. Guidelines for Spill Contingency Planning. Water Resources Division, INAC, Yellowknife, NT Available online: <http://www.aadncaandc.gc.ca/eng/1100100024236/1100100024253> (18 September 2014).

# Appendix A: Spill Report Form

# 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:
	B	Occurrence Date:	MM DD YY		
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:		Longitude:		
	Degrees Minutes Seconds		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:		Significance:		File Status:
	<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: _____		<input type="checkbox"/> Minor <input type="checkbox"/> Major <input type="checkbox"/> Unknown		<input type="checkbox"/> Open <input type="checkbox"/> Closed
	Agency:	Contact Name:	Contact Time:	Remarks:	
	Lead Agency:				
	First Support Agency:				
	Second Support Agency:				
	Third Support Agency:				