



Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

Government of the Northwest Territories

Department of Infrastructure

Dempster Highway (NWT Highway #8) Operations and
Maintenance

Spill Contingency Plan



Table of Contents

1.0 INTRODUCTION	1
2.0 SITE DESCRIPTION	1
2.1 POTENTIAL CONTAMINANTS	1
3.0 RESPONSE ORGANIZATION	2
4.0 INITIAL ACTIONS	3
5.0 REPORTING PROCEDURE	4
6.0 ACTION PLANS	5
6.1 SPILL PREVENTION	5
6.2 SPILL RESPONSE	6
6.2.1 Spills on Land	7
6.3 COMMUNICATIONS PLAN	8
7.0 RESOURCE INVENTORY	9
7.1 ON-SITE RESOURCES	9
7.1.1 Personnel	9
7.1.2 Equipment	9
7.1.3 Spill Kits	11
7.1.3.1 Spill Kit Locations	11
7.1.3.2 Spill Kit Contents	11
8.0 TRAINING AND EXERCISES	12
8.1 OUTLINE	12
9.0 REFERENCES	12



**ATTACHMENT ANorthwest Territories Spill
Report Form**



1.0 INTRODUCTION

This Spill Contingency Plan (SCP) has been developed by the Government of the Northwest Territories (GNWT) Department of Infrastructure (INF) for use by project management staff and contractors during the operations and maintenance of the Dempster Highway (NWT Highway #8). 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 operations and 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 familiar with their responsibilities and 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 Spill Contingency Plan which will meet or exceed the features of this SCP and can be provided to the appropriate regulatory authorities once complete.

2.0 PROJECT AND SITE DESCRIPTION

The Land Use Permit for operations and maintenance of NWT Highway 8 allow:

- For the continuous and ongoing operation and maintenance of the existing NWT Public Highway system within the area along the Dempster Highway which includes community access roads as listed under the Highways Act, and includes highway infrastructure: (i.e. roadway embankment, bridge, and culvert maintenance and replacement, winter road and ice bridge construction and maintenance, etc.). All maintenance and operations will be undertaken following the Standards for Highway Maintenance as outlined in the Highway Maintenance Management System Manual, normal construction practices and in accordance with the various regulatory agencies, as applicable;



- For safety and grade improvements at strategic or critical locations and the temporary placement and storage of temporary construction/work camps, equipment, quarry operations including geotechnical investigations at approved areas, stockpiling and allow for these activities to be carried out all year long;
- For Quarry operations and stockpiling at various locations including the following sites: Km 23.9, Km 28.8, Km 34.6, Km 36.7, Km 141, Km 166.3, Km 178.1, Km 193.7, Km 211.2, Km 230.2, Km 235, and Km 251.
- For the construction, operations, and maintenance of community access roads including winter access roads along the Dempster Highway. These access roads include Inuvik, Tsiigehtchic, and Fort McPherson. Construction of a standard Highway Ice Bridge crossing the Mackenzie River along the Dempster Highway-No. 8 Dempster Highway (No. 8) between Km 142.6 to Km 143.6.
- Winter Access between Dempster Highway-No. 8 to the Tsiigehtchic community, including both the Arctic Red River Crossing (on ice) Tsiigehtchic Winter Access (over land). All winter road construction uses less than 100m³ of water daily.
- Stockpiling of material at Km 6

2.1 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
- Lubricating oils and grease
- Antifreeze and other coolants
- Contaminated soil, snow/ice/water



- Motor oil

Spills may result from any of the following occurrences:

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

3.0 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. Contact information for INF is provided in Table 3-1 below; the table will be updated following selection of the Contractor.

Table 3-1: Spill Contingency Contacts for Operations and Maintenance Activities for the Dempster Highway

INF Contact Information	Contractor Contact Information
Bruce Krutko (867-620-0966)	Rebecca Blake (867-678-5494)

4.0 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 Section 6.1 for more information on spill response procedures.

5.0 REPORTING PROCEDURE

All spills or potential spills of contaminants must be reported to the 24-hour Northwest Territories - Nunavut Emergency Spill Report Line to ensure that an investigation may be undertaken by the appropriate government authority. Reporting of any spills associated with the Project will be completed by the Contractor or the INF site representative. Additionally, spills will be reported to the Gwich'in Land and Water Board as well as the Department of Lands Inspector.

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. Where fax is available, **fax** the completed Northwest Territories Spill Report Form to



867-873-6924. Alternatively, if email is available, email the completed Northwest Territories Spill Report Form to 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:

- 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

6.0 ACTION PLANS

6.1 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. If fuel transfer is required it 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 the permitted activities. These activities may include, but not be limited to:

- Inspection of fuel and oil lines on all equipment;
- Completing on-site fuel transfer over spill pads/trays
- 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.

6.2 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 snow/ice, or on land).

6.2.1 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. 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 3 for contact information). Use materials on hand to attempt to control the spill.
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 3 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.

6.2.2 SPILLS IN SNOW/ICE

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).
5. 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 Section 3 for contact information). Use materials on hand to attempt to control the spill.
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 materials or a snow/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 GNWT site representative and report the spill (see Section 3 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 spilled contaminant and store contaminated materials in a secure container for disposal. Affected snow should be stored in drums for proper disposal.

6.2.3 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 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).
5. 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 Section 3 for contact information). Use materials on hand to attempt to control the spill.
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 Section 3 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.

6.3 COMMUNICATIONS PLAN

Should a spill occur, the Gwich'in Land and Water Board and Department of Lands Inspector will be notified as per permit conditions. In the unlikely event of a large spill that might affect public safety, The Community of Inuvik Department of



Emergency Services will be notified. In these circumstances the INF contacts listed in section 3 will have primary responsibility for ensuring communication following the Department’s policy.

Key contact information:

Gwich’in Land and Water Board: 777-4954

Lands Inspector: 777-8909 or 777-8906

RCMP: 777-1111

Fire Department: 777-2222

Advance Medical Solutions (Ambulance):777-4444

7.0 RESOURCE INVENTORY

7.1 ON-SITE RESOURCES

7.1.1 PERSONNEL

All personnel hired to work on the Project will be familiar with on-site in spill prevention, response and clean-up measures (see Section 9).

7.1.2 EQUIPMENT

The following is a list of equipment that is typically used for operations and maintenance on a highway. 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.

Type and Size	Size	Proposed use
Tracked Dozers	D3 through D9	Clearing right-of-way, drainage channels and granular borrow site, clearing granular investigation cutlines, pushing roadway



		construction material on the roadway and in borrow area, pushing borrow materials and leveling stockpiles, etc.
Hydraulic Excavators (Wheeled and Tracked)	E70 through 245B	Excavating drainage channels, excavating at culvert removal and installation sites, excavating at bridge sites, excavating borrow sites and loading haul vehicles, making repairs to roadway embankment, clearing right-of-way, granular investigations (test pitting), etc.
Loaders (Wheeled and Tracked)	Various	For loading haul trucks, moving granular materials at work areas, stockpiling granular materials, feeding crusher and asphalt plants, etc.
Motor Graders	Various	For roadway maintenance and road repairs, grading granular surfacing, right-of-way maintenance, snow ploughing, borrow source maintenance, etc.
Compaction Equipment	Various	To compact roadway surface and surfacing, compact roadway embankment, compact around culvert installations, etc.
Asphaltic Pavers	Various	To place asphaltic surfacing
Rotary Drills	Various	To carry out granular and geotechnical investigations, prepare for piling installations at bridge or ferry sites, to prepare for blasting at quarry sites, etc.
Gravel Crushing Plants (Cone and Jaw)	Various	To produce specified granular materials
Single Axle, Tandem Axle and Tridem Axle Haul Trucks	Various - water tankers, sewage tanks, rock, gravel, sanding trucks and plow trucks	For snow ploughing and road maintenance, watering on the road, hauling granular and rock materials to work site, stockpiling granular materials, gravel surfacing, sanding on the road, hauling construction materials, hauling water for work camps, sewage and waste removal.
Tractor Trailers	Various	To move equipment to, from and within work site and borrow areas (low/high boys),



		etc.
Rock Trucks	Various	To move rock between quarry areas, to haul construction materials within work area, etc.
Tractor Mowing Machines	Various	To clear right-of-way
Fuel Tankers	Various to 40,000 litres	To resupply fuel storage tank, to refuel equipment, etc.
Pile Drivers	Various	For installing piles at bridge sites, etc
Draglines	Various	For recovering granular materials dredging at bridge sites, etc
Cranes	Various	For hoisting and placing bridge components, removing and installing culverts, setting up asphalt and crushing plants, loading and unloading equipment, loading, unloading and placing temporary camp facilities, etc.
Service Vehicles	Various – pickup trucks, utility service trucks, flat decks, etc.	To support and maintain all equipment required for the ongoing operation and maintenance of the public highway system, roadways, access roads, etc.
Temporary Construction/Work camp facilities	Various	To support delivery of the ongoing operation and maintenance of the public highway system, roadways, access roads, short term construction activities, temporary ice/winter road construction.
Tree harvesters/mulchers	Various	For right-of-way clearing, borrow site clearing, etc.
Generators	Various	For temporary camps, lighting units, crusher plants, asphalt plants, to power small tools and equipment, etc.
Various small equipment – rock pickers, soil cultivators, roadway		To support the delivery of the ongoing operation and maintenance of the public highway system, access roads, temporary construction



sweepers, post hole drills, post drivers, water pumps, rig mats, patching units, tar pots, tampers, compressors, jack hammers, etc.		camps, temporary ice/winter road construction and maintenance camps, etc.
---	--	---

7.1.3 SPILL KITS

7.1.3.1 SPILL KIT LOCATIONS

Spill kits are required onsite and will be located in quarry sites as well as on vehicles equipped with tidy tanks. The contractor will be responsible for ensuring that there are spill kits accessible and located within the worksite.

7.1.3.2 SPILL KIT CONTENTS

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 5 m) 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.

8.0 TRAINING AND EXERCISES

8.1 OUTLINE

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.

9.0 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).



ATTACHMENT A
Spill Report Form



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH - DAY - YEAR		REPORT TIME		<input type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER
	B OCCURRENCE DATE: MONTH - DAY - YEAR		B OCCURRENCE TIME			
C	LAND USE PERMIT NUMBER (IF APPLICABLE)			WATER LICENCE NUMBER (IF APPLICABLE)		
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION				REGION <input type="checkbox"/> NWT <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		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES		U.N. NUMBER	
	SECOND PRODUCT SPILLED (IF APPLICABLE)		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 EQUIPMENT	
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 STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			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		REMARKS
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						