



**Spill Contingency Plan for the
NWT Highway #8 (Dempster Highway) Operations and Maintenance
Land Use Permit
G07E006**

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Environmental Affairs
Department of Transportation
Government of the Northwest Territories

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1.0 INTRODUCTION

This Spill Contingency Plan (SCP) has been developed by the Government of the Northwest Territories (GNWT) Department of Transportation (DOT). It is to be used by the Department and its Contractor(s) operations and maintenance activities on NWT Highway #8 (The Dempster Highway) licenced under LUP G07E006. This spill contingency plan will be implemented for all activities undertaken for the life of this land use permit.

The purpose of the SCP is to provide a guide to all site personnel in the event of an accidental release of fuel or other waste during the Project. All persons involved with the licenced 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 the land use permit and regulatory approvals in accordance with the Guidelines for Spill Contingency Planning prepared by Indian and Northern Affairs Canada (INAC) (2007). The Contractor is 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 DESCRIPTION

The activities to be completed under this land use permit include safety and grade improvements at strategic or critical locations, the temporary placement and storage of construction/work camps, equipment and fuel caching, and quarry operations throughout the permitted years. Other activities include the construction, operation and maintenance of a winter access road between the Dempster Highway and the Arctic Red River, near the community of Tsiigehtchic.

Equipment used to carry out the permitted activities will vary according to task requirements and is summarized in section 8.1.2.

This Spill Contingency Plan is applicable to the operations and maintenance activities as described above, it is not transferable to the ferry landings located at Km 74 (Peel River Ferry Landing) or Km 142.6 to 143.6 (Mackenzie/Arctic Red River Ferry Landing) which have their own SCP.

The permitted area extends along the highway #8 alignment between the NWT/Yukon Border and the town of Inuvik, NWT.

2.1 POTENTIAL CONTAMINANTS



Over the life of the permit, several contaminants may be used by equipment and crews working within the permitted alignment. 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
- Contaminated soil, snow/ice and/or water

As winter road construction does occur in the winter, contaminant spills may occur on snow or ice or on cleared land along the highway alignment.

Spills may result from any of the following occurrences:

- Leaks or ruptures of fuel storage drums or tanks;
- Vehicular accidents;
- Valve or line failure in systems, vehicles or heavy equipment;
- Spill during transfer of contaminant(s);
- Heat expansion due to overfilling or improper storage;
- Vandalism;
- Improper storage of contaminants.

3.0 RESPONSE ORGANIZATION

Whenever a spill is identified, the Contractor and the DOT representative will be contacted as soon as possible. The Contractor is responsible for initiating the SCP. The Contractor will be identified through a public tender process to be initiated after permits are obtained. Contact information for the DOT 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 of NWT Highway #8

DOT Contact Information	Contractor Contact Information
Joe Cooke Field Supervisor Department of Transportation – GNWT Inuvik, NT X1A 0T0 Phone: (867)777-7344 Cell: (867)678-0793 Fax: (867)777-4290	To be added.
Alternate Contact: Arvind Vashishtha Project Engineer Department of Transportation – GNWT Inuvik, NT X1A 0T0 Phone: (867)777-7343 Cell: (867)678-5994 Fax: (867)777-4290	

4.0 INITIAL RESPONSE

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.
2. Assess the hazard to persons in the area of the spill.
3. If possible, without further assistance, control any danger to human life or the environment.
4. Assess whether the spill can be readily stopped or brought under control.
5. If safe to do so, and if possible, try to stop the spillage of contaminant.
6. Gather information about the status of the situation.
7. Report the spill immediately to the Contractor or the DOT site representative who will report the spill to the **24-Hour Emergency Spill Report Line (867)920-8130**
8. Resume any effective action to contain, clean up or stop the flow of spilled contaminant. 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 DOT site representative.

To report a spill:

1. Fill out the Northwest Territories Spill Report Form (found in Appendix B 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, spilling during fuel transfer, or vehicular accident. No contaminants will be stored onsite and all equipment will be stored at least 100 metres from the water, within the right-of-way. Fuel will not be stored on-site; fuel transfers will occur via fuel truck, and not within 100 metres of a water body, drip trays will be used during fuel transfer.

The likelihood of a major spill is negligible as large quantities of contaminants will not be stored within the Project area. Where drips or spills occur they will be cleaned up immediately. Further, spill response kits will be kept in all vehicles.

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:

- Routine checks of fuel transfer hoses and equipment;
- Inspection of fuel and oil lines on all equipment;
- Completing on-site fuel transfer over spill pads/trays and a minimum of 100 m from the high water mark or active floodplain of Four Mile Creek;
- 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 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 DOT 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 DOT site representative and report the spill (see Section 3 above for contact information). The Contractor or the DOT 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. Impacted snow should be stored in drums for proper disposal.

6.2.2 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 DOT 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 DOT site representative and report the spill (see Section 3 for contact information). The Contractor or the DOT 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.

6.3 COMMUNICATIONS PLAN

In the unlikely event of a large spill which could reasonably be expected to enter the Mackenzie or Peel River it may be necessary to alert the downstream communities of Inuvik, Tsiigehtchic, and Fort McPherson. In these circumstances the DOT contacts listed in section 3 will have primary responsibility for ensuring communication following the Department's policy.

Key contact information:



Town of Inuvik	Inuvik RCMP	Inuvik Fire Response
Phone: 867-777-8600	867-777-1111	867-777-2222
Fax: 867-777-8601		
Charter Community of Tsiigehtchic	Tsiigehtchic RCMP	Tsiigehtchic Fire Response
Phone: 867-953-3201	867-952-1111	867-953-2222
Fax: 867-953-3302		
Hamlet of Fort McPherson	Fort McPherson RCMP	Fort McPherson Fire Response
Phone: 867-952-2428	867-952-1111	867-952-2222
Fax: 867-952-2725		
CBC North Radio		
Phone: 867-920-5400		
Fax: 867-920-5440		

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 will be on-site and available to respond to potential spills:

- Bulldozers
- Haul / dump trucks
- Excavator(s)
- Drum roller
- Generator
- Pick-up trucks / crew vehicles (light vehicle)

7.1.3 SPILL KITS

7.1.3.1 SPILL KIT LOCATIONS

Spill kits are required onsite. The contractor will be responsible for ensuring that there are spill kits are 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

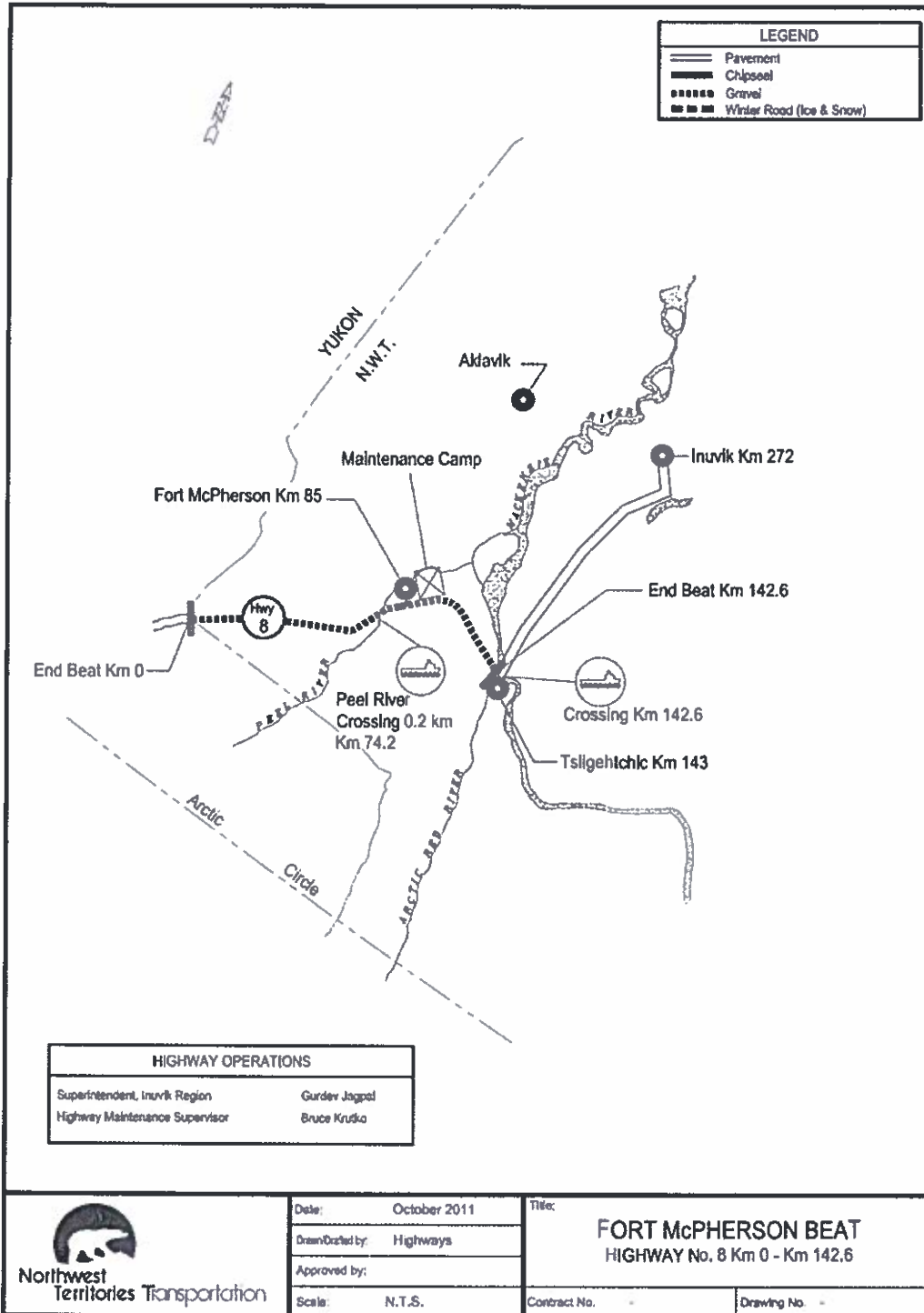
Indian and Northern Affairs Canada (INAC). 2007. Guidelines for Spill Contingency Planning. Water Resources Division, INAC, Yellowknife, NT Available online: <http://www.aadncaandc.gc.ca/eng/1100100024236/1100100024253> (19 November 2012).

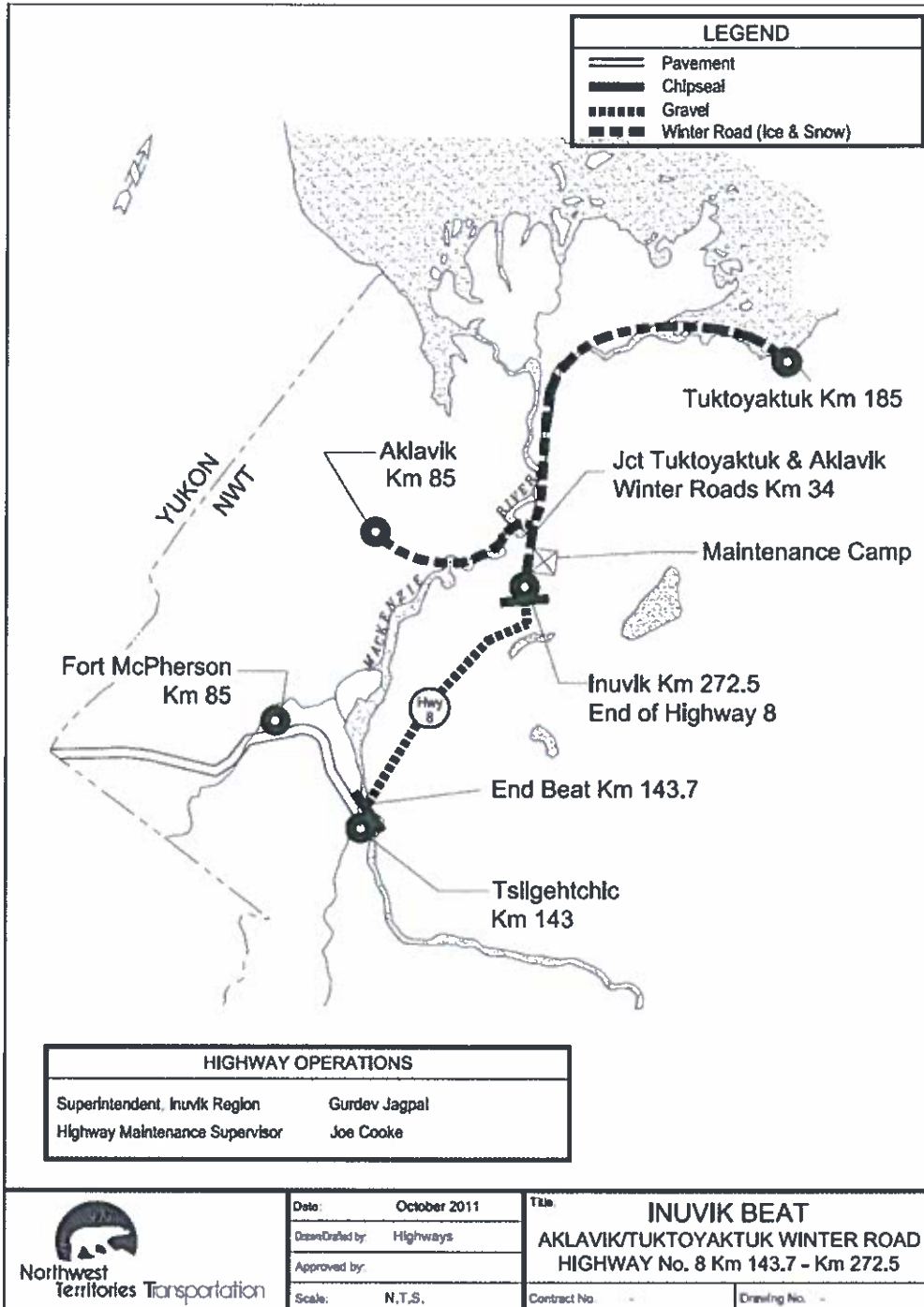


Spill Contingency Plan

APPENDIX A

Sketches







Spill Contingency Plan

APPENDIX B

Northwest Territories 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			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		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 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
			STATION OPERATOR		YELLOWKNIFE, NT	(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"/> AAND <input type="checkbox"/> NEB <input checked="" 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						