Indian and Northern Affairs Canada
Affaires indiennes et du Nord Canada

Guidelines for Spill Contingency Planning

Prepared by Water Resources Division Indian and Northern Affairs Canada Yellowknife, NT April 2007

Canada

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Preface

Under such legislation as the *Northwest Territories Waters Act*, the *Territorial Lands Act*, the *Arctic Waters Pollution Prevention Act*, and the *Mackenzie Valley Resource Management Act*, Indian and Northern Affairs Canada (INAC) has responsibilities with respect to the protection of land and water in the Northwest Territories and Nunavut. Of particular concern to INAC is the occurrence of spills and subsequent response and follow-up. As a result, INAC has been party to the Spills Working Agreement since its inception in 1979.

These Guidelines update and expand on the Northwest Territories Water Board's 1987 Guidelines for Contingency Planning and are intended to complement other existing guidelines and requirements for Spill Contingency Planning in the North. It is recognized that site-specific activities will vary and in certain instances may necessitate deviations from these Guidelines. However, it is the responsibility of the operator to ensure that they meet all applicable regulatory requirements.

The political and legislative environment in the North is in a period of unprecedented change. If these Guidelines are to keep pace with the shifting operational environment, and political and legislative developments, they must be a living document or they will lose their currency and effectiveness. To this end, Indian and Northern Affairs Canada (INAC), NWT Region, will update these Guidelines annually by means of external and internal reviews. A new updated version will be available in April of each New Year.

1.0 Introduction



Spills of petroleum products and other hazardous materials cannot be entirely prevented; however, the impacts of spills can be minimized by establishing a predetermined line of response and action plan. The remote location of developments in the NWT and the environmental sensitivity of the region underline the necessity for good spill contingency planning.

Under the *NWT Waters Act* and Section 6 g (i) and (ii) of the NWT Waters Regulations all operations requesting licences for water use and waste disposal must prepare comprehensive spill contingency plans. These plans are required to establish a state of readiness which will enable prompt and effective response to possible spill events. The plans submitted to Land and Water Boards must demonstrate that the Licence Holder is capable of responding and taking appropriate action in the event of a spill.

The purpose of this document is to provide guidance for the preparation of acceptable Spill Contingency Plans. The recommended structure and content of a spill contingency plan including response organization, action plan, resource inventory, and training is provided in Section 2.0. An example plan illustrating these components is also provided in Appendix A. The Land and Water Board issuing licences for specific projects will review all submitted plans and may require changes prior to final approval.

Spill contingency planning and risk assessment for larger projects involving more complex infrastructure and activities are often required as a part of licencing. Guidance on the approach for developing such plans is provided in Section 3.0. In some cases, general contingency plans are also required to address all types of emergency situations. General contingency plans follow the same basic format as spill contingency plans, and are discussed in Section 4.0. Finally, related regulatory requirements are discussed in Section 5.0.

Wherever possible, these Guidelines were developed to minimize inconsistencies with other regulators' requirements. However, it is the developer's responsibility to comply with relevant regulators' requirements.

2.0 Spill Contingency Plan Contents

A Spill Contingency Plan identifies lines of authority and responsibility, establishes proper reporting and communication procedures and describes an action plan to be implemented in the event of a spill. All the information necessary to effectively control and clean up a spill should be included in the plan. A copy of the plan should be kept on-site at all times and at the company's main office/headquarters.

The plan must reflect current state-of-the-art containment and clean up procedures and methods. The plan should be updated annually, at a minimum, to reflect changes such as fuel storage locations, new hazardous materials on site, new construction and new personnel and contact information. As a result, an easy-to-update format such as a binder where pages may be easily removed is most appropriate. Index tabs further increase the usability of the plan by improving access to specific information. The inclusion of an appendix identifying or summarizing revisions or changes made in annual updates is recommended to facilitate review and to aid in conformity checks.

The plan should include:

- an introduction
- a response organization description
- an action plan
- a resource inventory
- a description of training programs

Specific details on the contents of these sections are described below.

2.1 Introduction and Project Details

The introduction should include the following elements:

- company name, site name, site location
- effective date of plan, recently revised sections and their revision dates
- distribution list
- purpose and scope of the plan
- company environmental policy related to regulatory compliance, environmental protection, safety, spill response and clean-up
- project description
- site description, including the size, location, topography, buildings and infrastructure
- identification of potentially impacted communities, traditional use areas (e.g. hunting and trapping camps), other developments and any environmentally sensitive areas (e.g. parks, game preserves, resource harvesting areas, fish spawning areas, waterfowl habitat, animal migration routes, beaches, archaeological and historic sites, public or private water supplies, etc.)
- list of type and amount of hazardous materials normally stored on-site, the storage capacity and the type and number of storage containers. The storage locations for each of these materials should appear on the map of the site. Material Safety Data Sheets (MSDS's) for each hazardous material should be included in an Appendix
- existing preventive measures should be outlined, such as secondary containment, fuel handling procedures, etc.
- relationship of the spill contingency plan to territorial or local community contingency plans
- details on how to obtain additional copies of the plan

It is recommended that a process for response to media and public enquiries should be discussed in the plan, as guidance for their employees.

The plan should include a map (or maps) showing the following:

- buildings, roads, culverts, airstrips and other infrastructure
- all surface water bodies and direction of water flow including catchment basins
- storage locations of each hazardous material

- probable spill locations and direction of flow on land and in water
- locations of all response equipment
- environmentally sensitive areas
- any approved disposal sites
- topography e.g. slope of land
- any other important on or off-site features

The map should include any off-site areas that may be affected by a spill, such as nearby communities, wetlands, archaeological sites, protected areas, etc. Two or more maps at different scales may be needed to accommodate the on and off-site features.

2.2 Response Organization

This section should identify response personnel (e.g. On-scene Coordinator, Environmental/Safety Advisor, Field Operations Supervisor, etc.), their duties, on or off-site work locations and contact information, including 24-hour telephone numbers for those responsible for activating the plan. A flowchart should be prepared to depict communication lines and the response duties of each member of the response team. For remote areas, a summary of available communication equipment should be provided. An example flowchart is presented in Appendix B as part of the example Spill Contingency Plan.

2.3 Action Plan

This section outlines the procedures that must be taken in response to a spill. It should begin by indicating the size of spill that could occur for each material stored on-site, the potential source of the spill and the potential impacts related to that spill. A description of the worst probable case scenario for the site should also be included, for example a breach of the largest storage vessel and/or numerous vessels at once.

The following procedures should be described in the action plan:

1. ***Procedures for initial action.*** These procedures are for the first person arriving at the scene of a spill and should cover:

   a) protecting the safety of personnel at the site and notification of all personnel of spill occurrence

   b) shutting of ignition sources, if safe to do so

   c) activating the Spill Response Team

   d) identifying the spilled material

   e) locating the likely source of the spill

   f) stopping the spill at its source, if it is safe to do so

   g) take actions to contain and clean up the spilled material

   h) recording relevant information for reporting purposes (e.g. approximate quantity, product type, location, whether spill in still in progress, odour, colour, weather)

2. ***Spill reporting procedures.*** This part of the plan describes the communication system put in place by the plan holder to ensure an expedient response to a spill. Reporting typically occurs to parties inside and outside an organization. The procedures should include:

   a) telephone numbers of company officials, off-site spill response contractors and government officials who can provide technical assistance (e.g. include in response organization flowchart)

   b) instructions for when and how to report spills to the NWT 24-Hour Spill Report Line (1-867-920-8130). This service is used throughout the NWT to inform all relevant government departments (federal, territorial and/or Aboriginal) that a spill has occurred. The information to be reported to government is outlined on the Spill Report Form in Appendix A. Depending on the site location and industry, there may be specific reporting regulations or protocols that apply. To determine whether these apply to you, contact the permitting agencies

   c) if the public may be impacted by a spill, include notification procedures to alert the public

3. ***Procedures for containing and cleaning up the spill.*** This is one of the most important sections of your spill contingency plan. The procedures should identify the containment and clean up strategies for various spill scenarios, with detailed instructions for how to achieve the strategies. Procedures will vary depending on whether the spill is on land, water, snow, or on or under ice. Procedures need to be proactive to deal with the spill as quickly as possible. Provide criteria and procedures for scenarios which might require ignition and burning of oil or fuel spills.

4. ***Procedures for transferring, storing, and managing spill-related wastes.*** For example, contaminated soil, vegetative matter, snow/ice, spilled product, residual product (e.g. after burning) and waste response materials (e.g. sorbent materials). If materials are to be disposed on or off-site, the plan should describe the disposal method and approved location. Be sure to identify any regulatory steps that must be taken to acquire regulatory approval for the waste management options outlined in the plan.

5. ***Procedures for restoring affected areas, providing Inspectors with status updates and cleanup completion.*** Determining the required level of final cleanup and restoration is to be completed in consultation with, or to the satisfaction of, the Indian and Northern Affairs Canada (INAC) Inspector, Inuvialuit Land Administration and/or National Energy Board depending on location/operation. Site specific studies may need to be performed to determine the appropriate final clean up levels.

   Where appropriate, the procedures outlined above should discuss alternative actions to be taken in the case of impeding environmental conditions (e.g. poor visibility in blizzards, limited daylight hours, extreme cold, difficult terrain, etc.) For example, if spill response relies on contractors accessing the site via a winter road, response actions to be taken when roads are closed should be included in the plan.

   The action plan should address spills of all sizes including the probable worst case scenario. For smaller operations, it may be sufficient to develop one set of procedures to address all sizes of spills. At locations where spills may vary from those with little or no impacts to very large spills that could result in serious injury, fatalities or cause significant damage to the environment, it may be helpful to categorize spills by their potential hazards. Spill response procedures can then be developed for each category of spill. If a spill occurs, the level of success of the response effort should be examined and lessons learned should be incorporated into an updated spill plan.

2.4 Resource Inventory

This section should describe all resources available for responding to spills. This includes personnel and an inventory of and the location of clean up materials, tools and equipment. The resources should be described in two categories:

- ***On-site Resources.*** These may include spill kits, booms, sorbent materials, earth moving equipment, etc. Be sure to include the location and quantity of these resources on the map provided in the Introduction and Project Details section.

- ***Off-site Resources.*** Detailed instructions on how to obtain off-site resources must be provided in the plan. This includes contact numbers for deploying off-site resources and an estimate of how long it takes to deploy them. If spill response is primarily reliant on an off-site contractor, a written contract, mutual aid agreement or memorandum of understanding is strongly advised to ensure timely access to cleanup equipment.

2.5 Training Program

Training employees to familiarize them with the action plan and testing the plan's elements through mock spill exercises is critical to ensuring the success of the plan. Training and training exercises can prepare personnel, evaluate the plan holder's ability to respond to a spill and demonstrate to government and to the public that there is adequate preparation

should a spill occur. Training should be performed annually at a minimum, and under typical operating conditions.

This section should include:

- an outline of the company's training program, including a description of training materials and simulation exercises. The training program should ensure that employees understand the procedures in the action plan, the hazards of the materials stored on-site, where to find response equipment and how to operate it, and how to obtain off-site resources. Copies of training materials are not required in the plan but should be referenced
- a training schedule, indicating when training has occurred and future training dates
- a commitment to notify INAC Inspectors and other relevant regulators of planned upcoming mock spill exercises so that regulators have the option of observing the on-site exercise
- a description of the record keeping procedures that will document which employees have received training and when
- records of recent employee training (e.g. personnel sign-off sheets)

3.0 Spill Contingency Planning and Risk Assessment

Projects with a large and complex scope, usually requiring a Type A licence, in some cases requiring Type B licences, may warrant a risk-based method of spill contingency planning. By initially developing a pollution potential assessment, based on data collected as part of the impact assessment phase, areas of potential risk to spills are identified. To consider the combination of the probability and consequences of a spill incident, a technical analysis of the data will need to be conducted. This will facilitate risk-based decisions about contingency planning. This involves a sensitivity analysis to identify areas of the plan where a change in assumptions renders a change in results. The process of risk assessment will help reduce areas of uncertainties in the spill contingency plan as assumptions are tested.

The use of risk based spill contingency planning should be discussed on a case-by-case basis with the Land and/or Water Board issuing the licence for the project.

4.0 General Contingency Planning

Land and Water Boards in the NWT issuing licences occasionally require general contingency plans that address all types of emergency situations, not just spills. These may include fires, explosions, dam breaches, equipment failures, wildlife encounters, security threats and more. The basic approach to preparing a general contingency plan is very similar to that used for spill contingency plans. Specific instructions for spill contingency planning provided above should be used to develop general contingency plans, bearing in mind the additional situations that must be addressed.

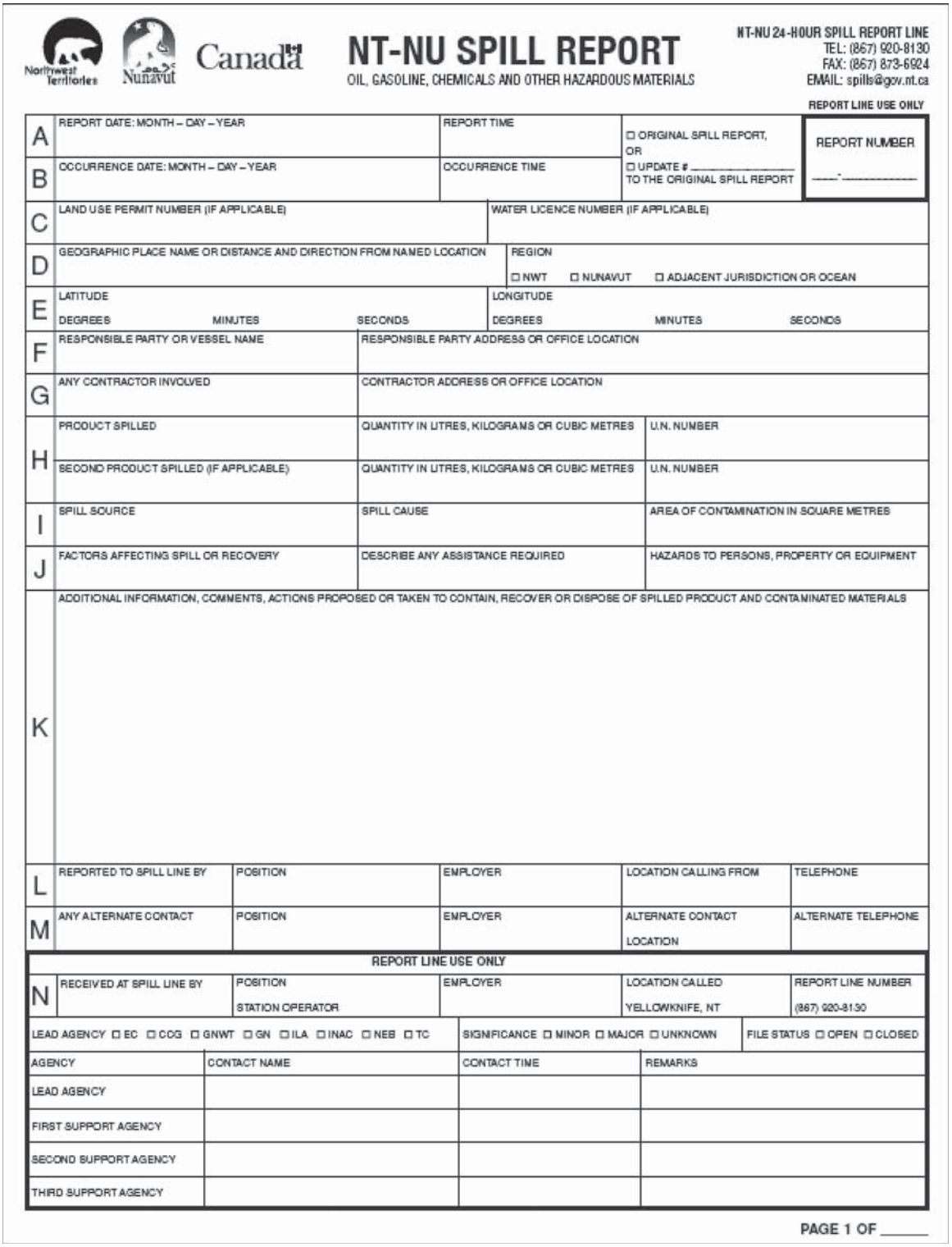
5.0 Related Requirements

There are several regulatory requirements, regulations, guidelines that are directly or indirectly linked to spill contingency planning in the NWT. Following the above guidelines for spill contingency planning does not absolve the licensee from ensuring compliance with all applicable federal, territorial and/or municipal legislation.

Related requirements are:

- Environment Canada's Environmental Emergency (E2) requirements
- Canadian Standards Association (CSA) Emergency Preparedness and Response document
- National Energy Board requirements such as those in the *Canada Oil and Gas Operations Act* and Regulations and the Onshore Pipeline Regulations, 1999
- Government of the Northwest Territories Spill Contingency Planning and Reporting Regulations
- Environment Canada's Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations
- Environment Canada's Guidelines for the Preparation of Hazardous Material Spill Contingency Plans, 1990
- National Energy Board Spill Reporting Protocol for Upstream Oil and Gas Operations in the Northwest Territories and Nunavut, 2003
- Indian and Northern Affairs Canada Spill Reporting Protocol for Upstream Oil and Gas Operations, 2003
- Indian and Northern Affairs Canada Reporting of Minor Spills on Frozen Waterbodies Used as Working Surfaces, 2005
- Indian and Northern Affairs Canada Spill Reporting Protocol for Mining Operations in the Northwest Territories and Nunavut, 2004

Appendix A: NT-NU Spill Report Form



Northwest Territories · Nunavut · 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	☐ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER ____-____
B	OCCURRENCE DATE: MONTH – DAY – YEAR	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 ☐ NWT ☐ NUNAVUT ☐ 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 ☐ EC ☐ COG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC | SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN | FILE STATUS ☐ OPEN ☐ CLOSED

AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			

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Instructions for Completing the NT-NU Spill Report Form

This form can be filled out electronically and faxed to the spill line at 867-873-6924. Commencing on January 2, 2007, the form can also be e-mailed as an attachment to spills@gov.nt.ca. Until further notice, please verify receipt of e-mail transmissions with a follow-up telephone call. Spills can still be phoned in by calling collect at 867-920-8130.

A. Report Date/Time	The actual date and time that the spill was reported to the spill line. If the spill is phoned in, the Spill Line will fill this out. **Please do not fill in the Report Number**: the spill line will assign a number after the spill is reported.
B. Occurrence Date/Time	Indicate, to the best of your knowledge, the exact date and time that the spill occurred. Not to be confused with the report date and time (see above).
C. Land Use Permit Number /Water Licence Number	This only needs to be filled in if the activity has been licenced by the Nunavut Water Board and/or if a Land Use Permit has been issued. Applies primarily to mines and mineral exploration sites.
D. Geographic Place Name	In most cases, this will be the name of the city or town in which the spill occurred. For remote locations – outside of human habitations – identify the most prominent geographic feature, such as a lake or mountain and/or the distance and direction from the nearest population center. **You must include the geographic coordinates** (Refer to Section E).
E. Geographic Coordinates	This only needs to be filled out if the spill occurred outside of an established community such as a mine site. Please note that the location should be stated in degrees, minutes and seconds of Latitude and Longitude.
F. Responsible Party Or Vessel Name	This is the person who was in management/control/ownership of the substance at the time that it was spilled. In the case of a spill from a ship/vessel, include the name of the ship/vessel. Please include full address, telephone number and e-mail. Use box K if there is insufficient space. **Please note that, the owner of the spilled substance is ultimately responsible for any spills of that substance, regardless of who may have actually caused the spill.**
G. Contractor involved?	Were there any other parties/contractors involved? An example would be a construction company who is undertaking work on behalf of the owner of the spilled substance and who may have contributed to, or directly caused the spill and/or is responding to the spill.
H. Product Spilled	Identify the product spilled; most commonly, it is gasoline, diesel fuel or sewage. For other substances, avoid trade names. Wherever possible, use the chemical name of the substance and further, identify the product using the four digit UN number (eg: UN1203 for gasoline; UN1202 for diesel fuel; UN1863 for Jet A & B)
I. Spill Source	Identify the source of the spill: truck, ship, home heating fuel tank and, if known, the cause (eg: fuel tank overfill, leaking tank; ship ran aground; traffic accident, vandalism, storm, etc.). Provide an estimate of the extent of the contaminated/impacted area (eg: 10 m^2)
J. Factors Affecting Spill	Any factors which might make it difficult to clean up the spill: rough terrain, bad weather, remote location, lack of equipment. Do you require advice and/or assistance with the cleanup operation? Identify any hazards to persons, property or equipment: for example, a gasoline spill beside a daycare centre would pose a safety hazard to children. Use box K if there is insufficient space.
K. Additional Information	Provide any additional, pertinent details about the spill, such as any peculiar/unique hazards associated with the spilled material. State what action is being taken towards cleaning up the spill; disposal of spilled material; notification of affected parties. If necessary, append additional sheets to the spill report. Number the pages in the same format found in the lower right hand corner of the spill form: eg. "Page 1 of 2", "Page 2 of 2" etc. **Please number the pages to ensure that recipients can be certain that they received all pertinent documents.** If only the spill report form was filled out, number the form as "Page 1 of 1".
L. Reported to Spill Line by	Include your full name, employer, contact number and the location from which you are reporting the spill. Use box K if there is insufficient space.
M. Alternate Contact	Identify any alternate contacts. This information assists regulatory agencies to obtain additional information if they cannot reach the individual who reported the spill.
N. Report Line Use Only	**Leave Blank**. This box is for the **Spill Line's use only**.

Appendix B

Example
Spill Contingency Plan

Spill Contingency Plan

Company Unknown

Lake Invisible Location,
Northwest Territories

Prepared by:

John Fiction, EHS Specialist

Approved by:

Jane Leader, EHS Manager

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3) **Action Plan**

   i) Potential spill sizes and sources for each hazardous material on site

   ii) Potential environmental impacts of spill (include worst case scenario)

   iii) Procedures (include alternative action in case of impeding environmental conditions):

      A. Procedures for initial actions

      B. Spill reporting procedures

      C. Procedures for containing and controlling the spill e.g. on land, water, snow, ice, etc.

      D. Procedures for transferring, storing, and managing spill-related wastes

      E. Procedures for restoring affected areas

4) **Resource Inventory – describe all resources available for responding to spills**

   i) On-site resources e.g. spill kits, booms, sorbent materials, earth moving equipment

   ii) Off-site resources e.g. contact numbers for deployment and time estimate

5) **Training Program**

   i) Outline of training program

   ii) Training schedule and record keeping

Figures

Figure 1: Site location map (1:50,000 scale)

Figure 2: Sketch of site plan including buildings, roads, water bodies, hazardous material locations, spill kit locations and direction of flow

Figure 3: Flowchart of response organization

Tables

Table 1: List of hazardous materials stored on-site, type and number of storage containers, the normal and maximum storage quantities and storage locations

Table 2: List of hazardous materials, potential discharge events and volumes and direction of flow

Appendices

Appendix B-1: Material Safety Data Sheets (MSDS) for hazardous materials stored on site

Appendix B-2: NWT Spill Report Form (most recent approved version)

Appendix B-3: Immediately Reportable Spill Quantities

1) Introduction and Project Details

Company Unknown has prepared this spill contingency plan for drilling and exploration activities being undertaken at their camp on the west shore of Lake Invisible, Northwest Territories. The plan demonstrates that Company Unknown has appropriate response capabilities and measures in place to effectively address potential spills at its Lake Invisible site.

i) Company name, location and mailing address

Company Unknown

West shore of Lake Invisible, Northwest Territories

Mailing address:

Box 1, Yellowknife, NT X1A 1A1

Phone: (867) 123-1111 Fax: (867) 123-2222

Email: CompanyUnknown@internet.ca

Attention: A. Bonito, Environmental Health and Safety Manager

ii) Effective date of spill contingency plan: January 1, 2004

iii) Last revisions to spill contingency plan: June 1, 2005 (Sections 2 and 3 were updated, and re-dated)

iv) Distribution list:

The plan and the most recent revisions have been distributed to:

A. Bonito	Environmental Health and Safety Manager, Company Unknown
C. Donald	Project Engineer, Company Unknown
D. Edwards	Public Relations, Company Unknown
C. Cat	Camp Manager, Company Unknown
F. Grolsch	President, Company Unknown
H. Inez	Contractor – ABC CleanUP Incorporated
J. Doe	Inspector, Indian and Northern Affairs Canada
S. Davie	Water Resources, Indian and Northern Affairs Canada
A. Smith	Environmental Protection, Environment Canada
I. Spell	Area Manager, Fisheries and Oceans Canada
P. Brown	Environmental Protection Division, Government of the NWT
J. Kraft	Chair, Land and Water Board

v) Purpose and scope:

The purpose of this plan is to outline response actions for potential spills of any size, including a worst case scenario for the Company Unknown site at Lake Invisible. The plan identifies key response personnel and their roles and responsibilities in the event of a spill, as well as the equipment and other resources available to respond to a spill. It details spill response procedures that will minimize potential health and safety hazards, environmental damage, and clean-up efforts. The plan has been prepared to ensure quick access to all the information required in responding to a spill.

vi) Company environmental policy

Company Unknown is committed to the concept of sustainable development and the protection of the environment and human health. Company Unknown's environmental, health and safety policy is to:

- protecting employees, the public and the environment
- fully comply with all applicable legislation, regulations, and authorizations
- work proactively with federal, territorial and Aboriginal governments, other relevant organizations, and the general public, on all aspects of environmental protection
- anticipate future spill control requirements and make provision for them
- keep employees, contractors, Inspectors, Land and Water Boards, appropriate governments

(Aboriginal, federal and territorial), and the public informed of any changes at the site or with project activities.

The plan is presented to all staff during their on-site orientation sessions. All employees and contractors are aware of the locations of the plan on the site at Lake Invisible and in the head office in Yellowknife. During the orientation meeting, training sessions are scheduled to ensure employees have an understanding of the steps to be undertaken in the event of a spill. All employees and contractors are shown where spill kits are stored, are aware of their contents and are trained in using spill equipment and responding to spills. The company is committed to keeping personnel up to date on the latest technologies and spill response methods.

vii) Project description:

The Lake Invisible location of Company Unknown is used as a camp and staging area for local test drilling as well as exploration activities in the surrounding region. Permits and licences are in place for the company's drilling and exploration activities. The camp operates year round, except freeze-up and break-up, at varying levels of capacity.

viii) Site description:

The camp is located xx kilometres north of Yellowknife on the west shore of Lake Invisible, at xox' N, xox' W. It is a remote area, with no adjacent communities or inhabitants. Thus the only people immediately affected by a potential spill are employees or contractors.

The site is located 50 kilometres north of a licenced fishing lodge, 60 kilometres northwest of the XX Protected Area and Yellowknife is the nearest community. Figure 1 illustrates the Company Unknown site on a 1:50,000 scale.

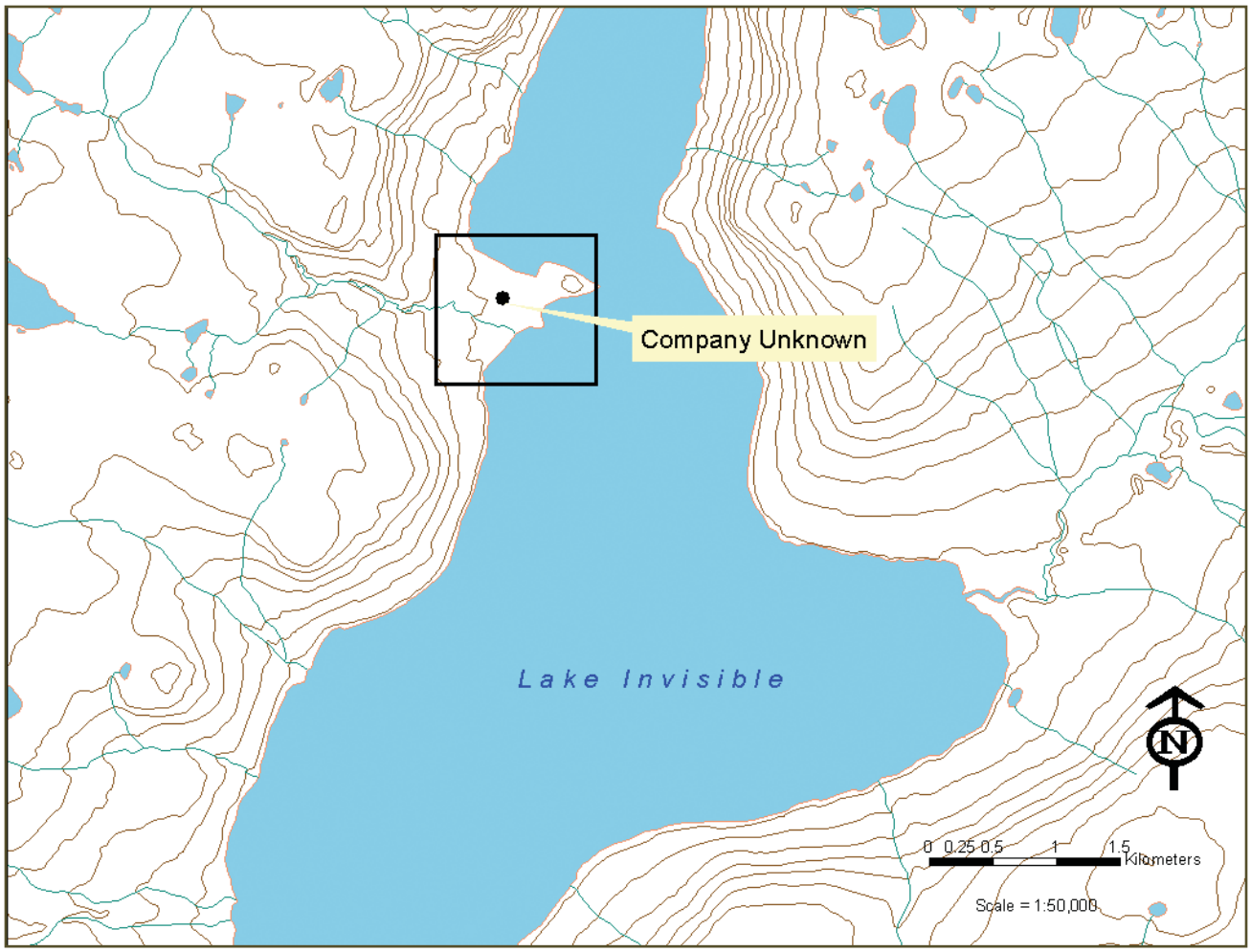


Figure 1: Site location map

A map of the site including the location of fuel storage areas, offices, kitchen, sleeping shelters, generators, helicopter landing pad, drilling site and surrounding water bodies and direction of flow is presented in Figure 2. All buildings and fuel storage areas are at least 100 meters from the nearest water body. All supplies arrive on-site via air (twin otter or helicopter). The lake is used for landing float planes in the summer and planes on skis in the winter on the north shore of the camp.

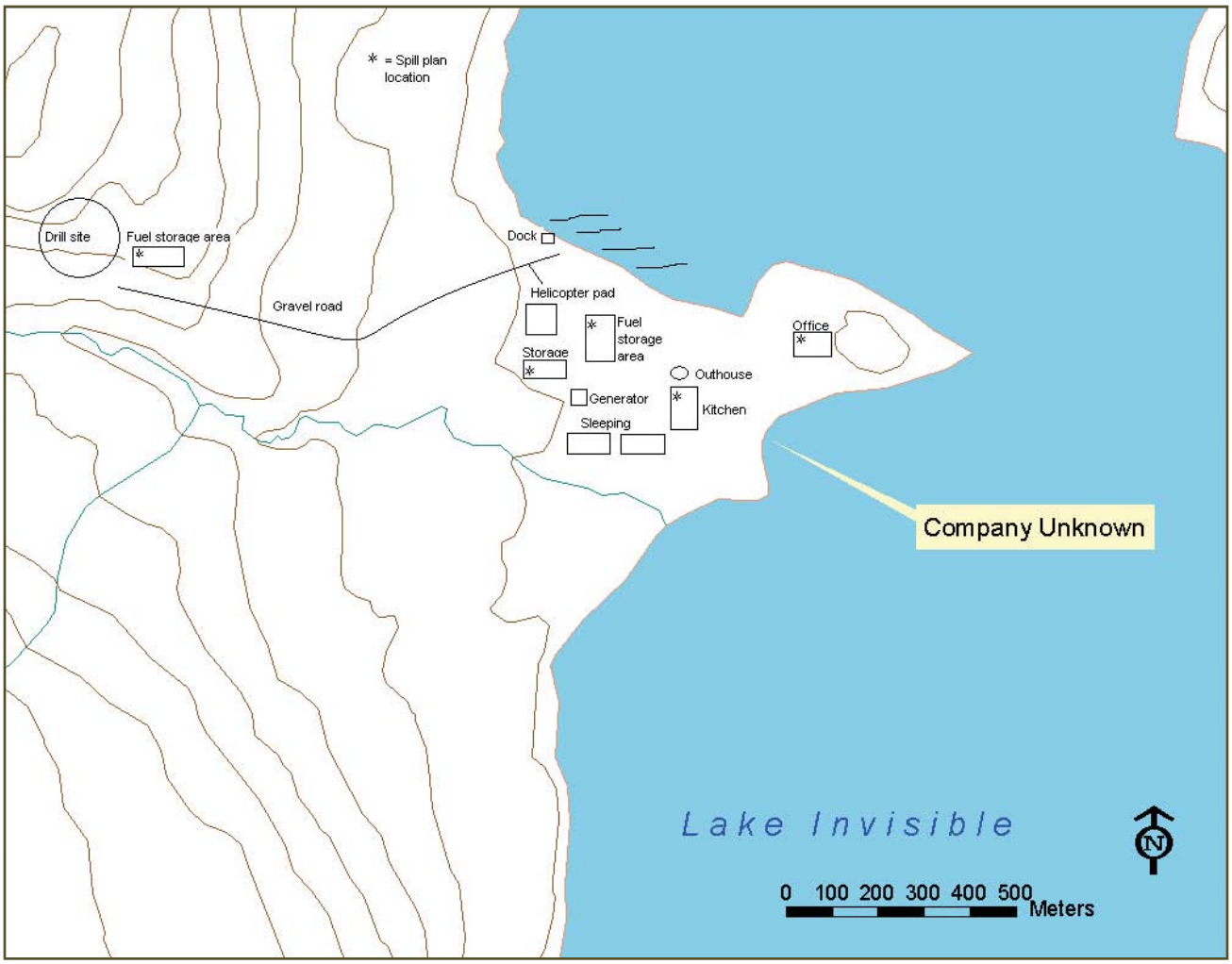


Figure 2: Sketch of site plan including buildings, roads, water bodies, hazardous material locations, spill kit locations and direction of flow

ix) List of hazardous materials on-site

There are two fuel storage areas on site. The fuel storage area near the helicopter pad is for storing diesel, jet B, gasoline and propane. The second fuel storage area near the drill site contains only diesel and gasoline. Smaller amounts of other petroleum products and oils/lubricants are stored on-site at the Lake Invisible camp in a storage building. Table 1 presents a list of hazardous materials on-site, the type of storage container, the average and maximum quantities stored and their storage location.

Table 1: List of hazardous materials stored on-site, type of storage container, the normal and maximum storage quantities, and storage locations

Material	Storage Container	Normally On-site	Maximum On-site	Storage Location (see Figure 1) and Uses
Diesel Fuel	200 L drums	3,000 L (15 drums)	5,000 L (25 drums)	Two fuel storage areas. Used to heat communal buildings by oil stoves and used for drill rig.
Jet B Fuel	200 L drums	2,000 L (10 drums)	4,000 L (20 drums)	Fuel storage area near helicopter pad. Used to power helicopters and twin otter aircraft.
Gasoline	200 L drums	1,000 L (5 drums)	2,000 L (10 drums)	Two fuel storage areas. Used for ATVs and snow machines.
Propane	45kg cylinders	900 kg (10cylinders)	1,800 kg (20cylinders)	Fuel storage area near helicopter pad. Used for kitchen stove and fridge.

Waste oil is stored in empty 200 L drums in either of the fuel storage areas, and shipped out by plane for off-site disposal at an appropriate waste facility.

Other hazardous materials found on-site in very small quantities are in a storage building and/or the kitchen. These include lubricants/oil/grease for maintenance of motorized equipment and general cleaning products for kitchen/bathroom/office use.

Motorized equipment on site includes two all-terrain vehicles, a small loader, a drill rig, three snow machines, a zodiac boat (for emergency response; e.g. airplane accident) and three fuel transfer hoses with pumps.

All buildings containing hazardous materials are over 100 m from any water body. Material Safety Data Sheets for each hazardous material are included in Appendix B-1.

x) Existing preventative measures:

Planning for an emergency situation is imperative, due to the nature of the materials stored on site as well as the remoteness of the site. Along with the preventative measures outlined below, adequate training of staff and contractors is paramount.

All hazardous materials arrive by air as needed throughout the year. They are unloaded by airplane and helicopter pilots and Company Unknown staff and carefully placed in the fuel storage areas. Protective flame retardant clothing, steel toe boots, hard hats and safety glasses are worn while unloading the fuel drums.

The storage areas for diesel fuel, jet B fuel, gasoline and propane are lined with impermeable liners and bermed with 110% containment. Planking is used to protect the liner from the fuel drums and cylinders. In addition the fuel drums used for the oil stoves heating common areas are in secondary containers that are leak proof and are placed on a drip tray.

Spill kits are located wherever fuel is stored or used (see Figure 2). See Section 4.i. for details on spill kit contents. Portable drip trays and appropriately sized fuel transfer hoses with pumps are used when refuelling aircraft, ATVs, or other motorized equipment, to avoid any leaks/drips onto the land.

The camp manager or designated fuel monitor conducts daily visual inspections to check for leaks or damage to the fuel storage containers, as well as for stained or discoloured soils around the fuel storage areas and adjacent motorized equipment. For example, lids/caps are checked for tight seals. A checklist is used to ensure no areas have been missed and results of the inspections are recorded in the company database. Regular maintenance and oil checks of all motorized equipment are also undertaken to avoid preventable leaks.

Gray water is piped to a sump at least 100 m inland of the kitchen, office and sleeping quarters. The sump must maintain a 1 meter freeboard at all times. The sump and pipe are inspected regularly for leaks or overflow.

xi) Additional copies:

Several copies of the plan are kept on-site at all times at the two fuel storage areas, in the office and in the kitchen building. A copy is also held at the company's main office/headquarters in Yellowknife, Northwest Territories and with the Land and Water Board. Additional copies of the plan can be obtained by contacting the company directly at the phone number, fax or email presented in section 1i).

xii) Process for staff response to media and public inquiries:

The company has established procedures for dealing with media and public inquiries. All inquiries are to be directed to the manager of public relations at the headquarters office in Yellowknife. If the manager is not available, there will be another staff member available to act in this position. If a reporter or member of the public arrives at the site unexpectedly, the official in charge of responding to their questions will be the camp manager or acting camp manager. Prior to responding to their questions, they should make every effort possible to contact the head of public relations to discuss the situation.

The camp manager should always keep the head of public relations informed of any news or updates of potential interest to the media or general public, such that the company is prepared to deal with inquiries any time.

If a spill has occurred and a NWT Spill Report needs to be filled out (see Appendix B-2). This information is available for the public to view upon request by contacting the NWT Spill Line or by viewing the GNWT Hazardous Materials Spills Database online at http://www.e-engine.ca/eps_spillreport/.

2) Response Organization

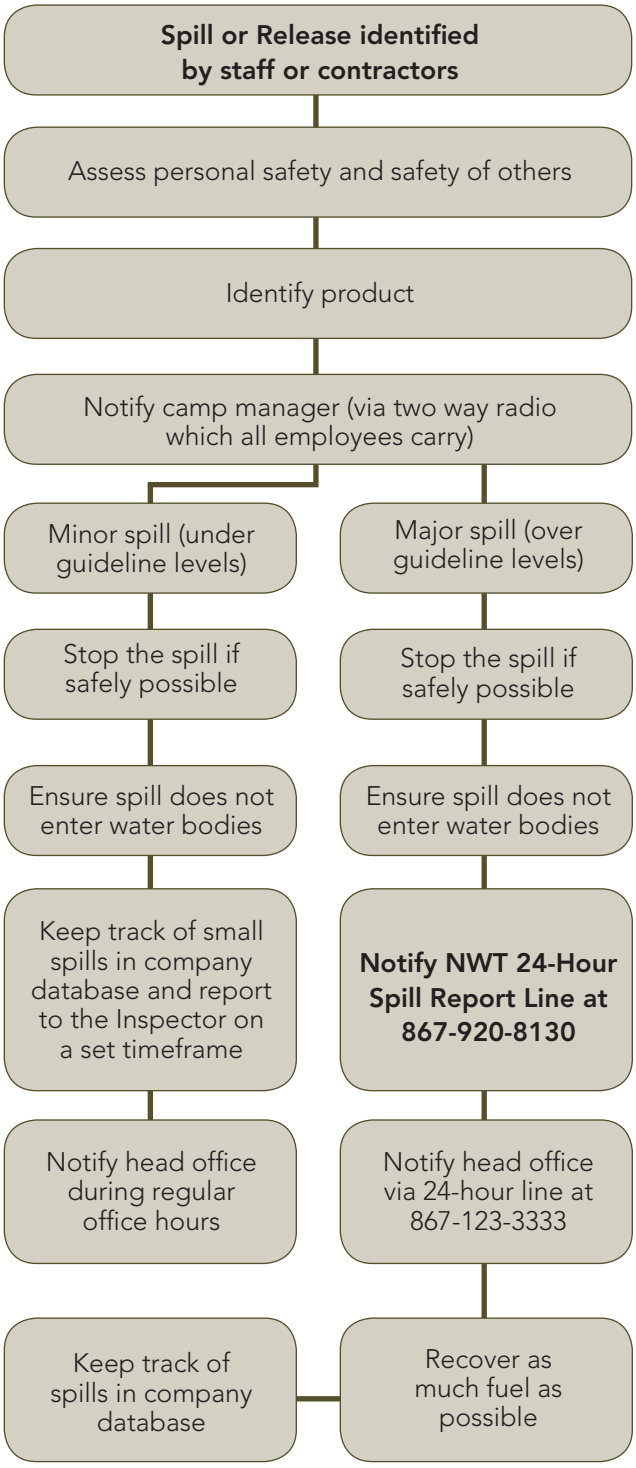
The flow chart depicted in Figure 3 identifies the response organization and when applicable their alternates, as well as the chain of command for responding to a spill or release. The duties of various response personnel are summarized, contact information is provided including 24-hour phone numbers for responsible people and the location of communications equipment on site is discussed.

An immediately reportable spill is defined as a release of a substance that is likely to be an imminent environmental or human health hazard or meets or exceeds the volumes outlined in Appendix B-3. It must be reported to the NWT 24-Hour Spill Report Line at 867-920-8130. Any spills less than these quantities do not need to be reported immediately to the spill reporting line. Rather, these minor spills will be tracked and documented by the company and submitted to the appropriate authority either immediately upon request or at a pre-determined reporting interval. If there is any doubt that the quantity spilled exceeds reportable levels, the spill will be reported to the NWT 24-Hour Spill Report Line.

Emergency satellite phones are located in the office and two fuel storage areas. In the event of a spill involving danger to human life these phones will be used to contact emergency response personnel in Yellowknife. In addition, all employees and contractors carry two-way radios for communication with the camp manager and other staff on site.

Following reporting of the spill to the camp manager, he/she will report spills to the NWT 24-Hour Spill Line as necessary. The camp manager will also inform the head office for tracking spills in company databases and notify the head office in the event of media inquiries. The 24-hour emergency head office number is 867-123-3333.

Figure 3: Flow chart of response organization (details of each step will be provided in the procedures for initial actions under Section 3 Action Plan)



3) Action Plan



i) Potential spill sizes and sources for each hazardous material on site

In Table 2, a list of potential discharge events, with associated discharge volumes and directions is presented for the primary hazardous materials stored on site. The most likely discharge volume is indicated and the spill clean up procedures will focus on spills of this quantity. A worst case scenario is also presented. Specific discharge rates are not indicated for each fuel type as these would vary from a few minutes to several hours, based on the source of leak or puncture.

Table 2: List of hazardous materials, potential discharge events, potential discharge volumes (worst case scenario in brackets) and direction of potential discharge

Material (sources)	Potential Discharge Event	Discharge Volume (worst case)	Direction of Potential Discharge
Diesel Fuel (drill rig, oil stoves)	1) Over pumping of fuel from drum into drill rig. 2) Leaking from drill rig. 3) Minor leaking fuel drum in/outside fuel storage area. 4) Large puncture, fast leaking drum in/outside fuel storage area. 5) From drum connection to stoves in communal buildings. 6) All drums punctured and leaking at once (very unlikely).	Likely under 200 L/1 drum (max 11,000 L/ 55 drums)	Toward stream from drill site or fuel storage area near drill site. In camp on flat ground, from fuel storage area or communal buildings with potential underground seepage to Lake Invisible and/or stream.
Jet B Fuel (twin otter, helicopter)	1) Overfilling of aircraft. 2) Leak from drum or hose while filling aircraft. 3) Minor leaking fuel drum in/out side fuel storage area. 4) Large puncture, fast leaking drum in/outside fuel storage area. 5) All drums punctured and leaking at once (very unlikely).	Likely under 200 L/1 drum (max 4,000 L/ 20 drums)	In camp on flat ground, from fuel storage area or helicopter pad with potential underground seepage to Lake Invisible and/ or stream. In Lake Invisible while refuelling twin otter.
Gasoline (ATVs, snow machines)	1) Overfilling of ATVs or snow machines (small spill). 2) Leak from drum or hose while filing ATVs or snow machines. 3) Minor leaking fuel drum in/outside fuel storage area. 3) Large puncture, fast leaking drum in/outside fuel storage area. 4) All drums punctured and leaking at once (very unlikely)	Likely under 200 L/1 drum (max 2,000 L/ 10 drums)	In camp on flat ground, from fuel storage area with potential underground seepage to Lake Invisible and /or stream. Toward stream from fuel storage area near drill site.

Propane (kitchen stove and fridge)	1) Leak while connected to kitchen stove or fridge. 2) Minor leaking cylinder in or outside fuel storage area. 3) Large puncture, fast leaking drum in/outside fuel storage area. 4) All drums punctured and leaking at once (very unlikely).	Likely under 45 kg/ 1 cylinder (max 900 kg/ 20 cylinders)	In camp on flat ground, from fuel storage area or communal buildings with potential underground seepage to Lake Invisible and/or stream.

Waste oil stored in empty 200 L drums, could potentially leak. The quantity of waste oil drums would be quite limited as they would be shipped out by plane as they are filled up. The risk of a spill from a waste oil drum impacting the environment is very low as waste oil is stored in a bermed site designated for certain wastes.

ii) Potential environmental impacts of spill (include worst case scenario)

Overall for all hazardous materials discussed below, impacts are lower during winter as snow is a natural sorbent and ice forms a barrier limiting or eliminating soil or water contamination, thus spills can be more readily recovered when identified and reported.

Gasoline

Environmental impacts: Gasoline may be harmful to wildlife and aquatic life. It is not readily biodegradable and has the potential for bioaccumulation in the environment. Gasoline is quick to volatize. Runoff into water bodies must be avoided.

Worst case scenario: All fuel drums were punctured or open simultaneously and contents seeped into surrounding soil and water bodies. This could cause illness or death to aquatic life and indirectly affect wildlife feeding from the land and water.

Diesel Fuel

Environmental impacts: Diesel may be harmful to wildlife and aquatic life. It is not readily biodegradable and has the potential for bioaccumulation in the environment. Diesel burns slowly and thus risk to the environment is reduced during recovery as burn can be more readily contained compared with volatile fuels. Runoff into water bodies must be avoided.

Worst case scenario: All fuel drums were punctured or open simultaneously and contents seeped into surrounding soil and water bodies. This could cause illness or death to aquatic life and indirectly affect wildlife feeding from the land and water.

Jet B Fuel

Environmental impacts: Jet B fuel may be harmful to wildlife and aquatic life. It is not readily biodegradable and has the potential for bioaccumulation in the environment. Jet B fuel volatizes relatively quickly. Runoff into water bodies must be avoided.

Worst case scenario: All fuel drums were punctured or open simultaneously and contents seeped into surrounding soil and water bodies. This could cause illness or death to aquatic life and indirectly affect wildlife feeding from the land and water.

Propane

Environmental impacts: Propane may be harmful to wildlife and the surrounding environment. It has the potential to accumulate in the environment. Propane is extremely volatile and is the most flammable material stored on site, thus immediate impacts to the surrounding environment are a concern.

Worst case scenario: All cylinders were punctured or failed simultaneously and contents leaked into the surrounding environment and ignited leading to an explosion. This could cause serious environmental impacts in the immediate surroundings. Safety during emergency response to a propane spill is of the utmost concern.

Waste Oil and Miscellaneous Oils/Grease

Environmental impacts: Waste oils may be harmful to wildlife and aquatic life. It is not readily biodegradable and has the potential for bioaccumulation in the environment. Runoff into water bodies must be avoided.

Worst case scenario: All storage drums were punctured or open simultaneously and contents seeped into surrounding soil and water bodies. This could cause illness or death to aquatic life and indirectly affect wildlife feeding from the land and water.

iii) Procedures:

A. Procedures for initial actions

- Ensure safety of all personnel.
- Assess spill hazards and risks.
- Remove all sources of ignition.
- Stop the spill if safely possible e.g. shut of pump, replace cap, tip drum upward, patch leaking hole. Use the contents of the nearest spill kit to aid in stopping the spill if it is safe to do so. Tyvek suits and chemical master gloves are located in the spill kit and should be worm immediately if there is any risk of being in contact with fuel.
- No matter what the volume is, notify camp manager via two way radio (all employees carry these, as well as on-site contractors if they are not accompanied by an employee).
- Contain the spill – use contents of spill kits to place sorbent materials on the spill, or use shovel to dig dike to contain spill. Methods will vary depending on the nature of the spill. See Section C for more details.

B. Spill reporting procedures

Report spill immediately to camp manager, who will determine if spill is to be reported to the NWT 24-Hour Spill Line at 867-920-8130.

Each spill kit, as well as the office and camp manager, will have copies of the NWT Spill Report form to be filled out (see Appendix B-2). Fill out and fax or email the Spill Report to the staff of the NWT 24-Hour spill line. Also fax or email the report to the head office.

NWT 24-Hour Spill Line
Phone: (867) 920-8130

NWT 24-Hour Spill Line
Fax: (867) 873-6924

NWT 24-Hour Spill Line
Email: spills@gov.nt.ca

Head office, Company Unknown
Phone: (867) 123-1111

Head office, Company Unknown
Fax: (867) 123-2222

Head office, 24 hr phone line
Phone: (867) 123-3333

C. Procedures for containing and controlling the spill (e.g. on land, water, snow. etc.)

- Initiate spill containment by first determining what will be affected by the spill.
- Assess speed and direction of spill and cause of movement (water, wind and slope).
- Determine best location for containing spill, avoiding any water bodies.
- Have a contingency plan ready in case spill worsens beyond control or if the weather or topography impedes containment.

Specific spill containment methods for land, water, ice and snow are outlined below.

1) Containment of Spills on Land

Spills on land include spills on rock, gravel, soil and/or vegetation. It is important to note that soil is a natural sorbent, thus spills on soil are generally less serious then spills on water as contaminated soil can be more easily recovered. Generally spills on land occur during the late spring, summer or fall when snow cover is at a minimum. It is important that all measures be undertaken to avoid spills reaching open water bodies.

Dykes

Dykes can be created using soil surrounding a spill on land. These dykes are constructed around the perimeter or down slope of the spilled fuel. A dyke needs to be built up to a size that will ensure containment of the maximum quantity of fuel that may reach it. A plastic tarp can be placed on and at the base of the dyke such that fuel can pool up and subsequently be removed with sorbent materials or by pump into barrels or bags. If the spill is migrating very slowly a dyke may not be necessary and sorbents can be used to soak up fuels before they migrate away from the source of the spill.

Trenches

Trenches can be dug out to contain spills as long as the top layer of soil is thawed. Shovels, pick axes or a loader can be used depending on the size of trench required. It is recommended that the trench be dug to the bedrock or permafrost, which will then provide containment layer for the spilled fuel. Fuel can then be recovered using a pump or sorbent materials.

2) Containment of Spills on Water

Spills on water such as rivers, streams or lakes are the most serious types of spills as they can negatively impact water quality and aquatic life. All measures need to be undertaken to contain spills on open water.

Booms

Booms are commonly used to recover fuel floating on the surface of lakes or slow moving streams. They are released from the shore of a water body to create a circle around the spill. If the spill is away from the shoreline a boat will need to be used to reach the spill, then the boom can be set out. More then one boom may be used at once. Booms may also be used in streams and should be set out at an angle to the current. Booms are designed to float and have sorbent materials built into them to absorb fuels at the edge of the boom. Fuel contained within the circle of the boom will need to be recovered using sorbent materials or pumps and placed into barrels or bags for disposal.

Weirs

Weirs can be used to contain spills in streams and to prevent further migration downstream. Plywood or other materials found on site can be placed into and across the width of the stream, such that water can still flow under the weir. Spilled fuel will float on the water surface and be contained at the foot of the weir. It can then be removed using sorbents, booms or pumps and placed into barrels or plastic bags.

Barriers

In some situations barriers made of netting or fence material can be installed across a stream, and sorbent materials placed at the base to absorb spilled fuel. Sorbents will need to be replaced as soon as they are saturated. Water will be allowed to flow through. This is very similar to the weir option discussed above.

Note that in some cases, it may be appropriate to burn fuel or to let volatile fuels such as gasoline evaporate after containment on the water surface. This should only be undertaken in consultation with, and after approval from the INAC or lead agency Inspector.

3) Containment of Spills on Ice

Spills on ice are generally the easiest spills to contain due to the predominantly impermeable nature of the ice. For small spills, sorbent materials are used to soak up spilled fuel. Remaining contaminated ice/slush can be scraped and shovelled into a plastic bag or barrel. However, all possible attempts should be made to prevent spills from entering ice covered waters as no easy method exists for containment and recovery of spills if they seep under ice.

Dykes

Dykes can be used to contain fuel spills on ice. By collecting surrounding snow, compacting it and mounding it to form a dyke down slope of the spill, a barrier is created thus helping to contain the spill. If the quantity of spill is fairly large, a plastic tarp can be placed over the dyke such that the spill pools at the base of the dyke. The collected fuel can then be pumped into barrels or collected with sorbent materials.

Trenches

For significant spills on ice, trenches can be cut into the ice surrounding and/or down slope of the spill such that fuel is allowed to pool in the trench. It can then be removed via pump into barrels, collected with sorbent materials, or mixed with snow and shovelled into barrels or bags.

Burning

Burning should only be considered if other approaches are not feasible, and is only to be undertaken with the permission of the INAC or lead agency Inspector.

4) Containment of Spills on Snow

Snow is a natural sorbent, thus as with spills on soil, spilled fuel can be more easily recovered. Generally, small spills on snow can be easily cleaned up by raking and shovelling the contaminated snow into plastic bags or empty barrels, and storing these at an approved location.

Dykes

Dykes can be used to contain fuel spills on snow. By compacting snow down slope from the spill, and mounding it to form a dyke, a barrier or berm is created thus helping to contain the spill. If the quantity of spill is fairly large, a plastic tarp can be placed over the dyke such that the spill pools at the base of the dyke. The collected fuel/snow mixture can then be shovelled into barrels or bags, or collected with sorbent materials.

5) Worst Case Scenarios

Dealing with spilled fuel which exceeds the freeboard of a dyke or barrier would present a possible worst case scenario for the Company Unknown site. To contain the overflow, a trench or collection pit would have to be created downstream of the spill to contain the overflow.

Another worst case scenario would be an excessive spill on water may be difficult to contain with the booms present at the site. In this case, an emergency response mobile unit would have to be called in to deal with the spill using appropriate equipment.

D. Procedures for transferring, storing, and managing spill related wastes

In most cases, spill cleanups are initiated at the far end of the spill and contained moving toward the centre of the spill. Sorbent socks and pads are generally used for small spill clean up. A pump with attached fuel transfer hose can suction spills from leaking containers or large accumulations on land or ice, and direct these larger quantities into empty drums. Hand tools such as cans, shovels, and rakes are also very effective for small spills or hard to reach areas. Heavy equipment can be used if deemed necessary, and given space and time constraints.

Used sorbent materials are to be placed in plastic bags for future disposal. All materials mentioned in this section are available in the spill kits located at Camp Unknown. Following clean up, any tools or equipment used will be properly washed and decontaminated, or replaced if this is not possible.

For most of the containment procedures outlined in Section C, spilled petroleum products and materials used for containment will be placed into empty waste oil containers and sealed for proper disposal at an approved disposal facility.

E. Procedures for restoring affected areas

Once a spill of reportable size has been contained, Company Unknown will consult with the INAC or lead agency Inspector assigned to the file to determine the level of cleanup required. The Inspector may require a site specific study to ensure appropriate clean up levels are met. Criteria that may be considered include natural biodegradation of oil, replacement of soil and revegetation.

4) Resource Inventory

i) On-site resources

Spill kits are located throughout the sites at the locations indicated in Figure 2. The contents are described below. In addition, earth moving and other equipment located at Camp Unknown is also listed below.

Contents of Spill Kits

4 tyvek splash suits

4 pairs of chemical master gloves

10 large bags with ties for temporary use

2 oil only booms (5" x 10')

50 oil only mats (16" x 20")

5 sorbent socks

10 sorbent pads

2 large tarps

1 roll duct tape

1 utility knife

1 field notebook and pencil

1 rake

1 pick axe

3 aluminium scoop shovels

1 instruction binder

Earth moving and other equipment

1 small loader

2 all-terrain vehicles

3 snow machines

1 zodiac boat

1 chain saw

3 fuel transfer hoses with pumps

tool kit including hack saw, hammer, screwdrivers, etc.

ii) Off-site resources

All the contacts listed below could reach the site in 2 hours at a minimum. However, realistically government officials would not be able to reach the site until the next business day, depending on the severity of the spill.

Company Unknown, 24-hour emergency line
(867) 123-3333

NWT 24-Hour spill line
(867) 920-8130

Indian and Northern Affairs Canada Inspector
(867) 669-2761

Environment Canada (Emergency) Yellowknife
(867) 669-4725

GNWT Environmental Protection Division
(867) 873-7654

GNWT Environmental Health Office
(867) 669-8979

RCMP (Yellowknife)
(867) 669-1111

Medivac (Yellowknife)
(867) 669-4115

Great Slave Helicopters (Yellowknife)
(867) 873-2081

Air Tindi (Yellowknife)
(867) 669-8218 or 669-8200

Arctic Sunwest (Yellowknife)
(867) 873-4464

As planning for an emergency situation is imperative due to the materials stored on-site and the remoteness of the site, an employee and contractor training program has been prepared. It is outlined below.

5) Training Program

i) Outline of training program

The employee and contractor training program was developed by the manager of environmental health and safety, and has been disseminated by the camp manager. The following are key steps in the program:

- all individuals entering the site are required to participate in an orientation session
- during this session, all locations of the spill plan and spill kits are provided on a map in hard copy
- an overview of the plan is provided by the camp manager leading the orientation session
- specific training sessions, including mock spill exercises, are scheduled for individuals directly involved in handling hazardous materials to ensure they know all steps to be undertaken in handling these materials, as well as the steps involved in the event of a spill, including the proper use of spill kits
- all employees and contractors are required to have their basic first aid training, as well as WHMIS training, before working on the site
- supervisors are required to have advanced level first aid training, as well as transport of dangerous goods training

ii) Training schedule and recordkeeping

A spreadsheet is kept by the camp manager and head office indicating the training undertaken, and expire dates of specific training e.g. first aid. It is regularly updated.

- diesel
- jet B
- gasoline
- propane

Appendix B-1:

Material Safety Data Sheets (MSDS) for hazardous materials stored on site

The formats of Material Safety Data Sheets vary greatly. Examples can be found on the internet and from Spill Contingency Plans in place for various Water Licences in the NWT (see Land and/or Water Board public registries).

Appendix B-2:

NT-NU Spill Report Form

Northwest Territories | Nunavut | 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	☐ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER ____-____
B	OCCURRENCE DATE: MONTH – DAY – YEAR	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 ☐ NWT ☐ NUNAVUT ☐ 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 ☐ EC ☐ COG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC | SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN | FILE STATUS ☐ OPEN ☐ CLOSED

AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			

PAGE 1 OF _____

Instructions for Completing the NT-NU Spill Report Form

This form can be filled out electronically and faxed to the spill line at 867-873-6924. Commencing on January 2, 2007, the form can also be e-mailed as an attachment to spills@gov.nt.ca. Until further notice, please verify receipt of e-mail transmissions with a follow-up telephone call. Spills can still be phoned in by calling collect at 867-920-8130.

A. Report Date/Time	The actual date and time that the spill was reported to the spill line. If the spill is phoned in, the Spill Line will fill this out. **Please do not fill in the Report Number**: the spill line will assign a number after the spill is reported.
B. Occurrence Date/Time	Indicate, to the best of your knowledge, the exact date and time that the spill occurred. Not to be confused with the report date and time (see above).
C. Land Use Permit Number /Water Licence Number	This only needs to be filled in if the activity has been licenced by the Nunavut Water Board and/or if a Land Use Permit has been issued. Applies primarily to mines and mineral exploration sites.
D. Geographic Place Name	In most cases, this will be the name of the city or town in which the spill occurred. For remote locations – outside of human habitations – identify the most prominent geographic feature, such as a lake or mountain and/or the distance and direction from the nearest population center. **You must include the geographic coordinates** (Refer to Section E).
E. Geographic Coordinates	This only needs to be filled out if the spill occurred outside of an established community such as a mine site. Please note that the location should be stated in degrees, minutes and seconds of Latitude and Longitude.
F. Responsible Party Or Vessel Name	This is the person who was in management/control/ownership of the substance at the time that it was spilled. In the case of a spill from a ship/vessel, include the name of the ship/vessel. Please include full address, telephone number and e-mail. Use box K if there is insufficient space. **Please note that, the owner of the spilled substance is ultimately responsible for any spills of that substance, regardless of who may have actually caused the spill.**
G. Contractor involved?	Were there any other parties/contractors involved? An example would be a construction company who is undertaking work on behalf of the owner of the spilled substance and who may have contributed to, or directly caused the spill and/or is responding to the spill.
H. Product Spilled	Identify the product spilled; most commonly, it is gasoline, diesel fuel or sewage. For other substances, avoid trade names. Wherever possible, use the chemical name of the substance and further, identify the product using the four digit UN number (eg: UN1203 for gasoline; UN1202 for diesel fuel; UN1863 for Jet A & B)
I. Spill Source	Identify the source of the spill: truck, ship, home heating fuel tank and, if known, the cause (eg: fuel tank overfill, leaking tank; ship ran aground; traffic accident, vandalism, storm, etc.). Provide an estimate of the extent of the contaminated/impacted area (eg: 10 m^2)
J. Factors Affecting Spill	Any factors which might make it difficult to clean up the spill: rough terrain, bad weather, remote location, lack of equipment. Do you require advice and/or assistance with the cleanup operation? Identify any hazards to persons, property or equipment: for example, a gasoline spill beside a daycare centre would pose a safety hazard to children. Use box K if there is insufficient space.
K. Additional Information	Provide any additional, pertinent details about the spill, such as any peculiar/unique hazards associated with the spilled material. State what action is being taken towards cleaning up the spill; disposal of spilled material; notification of affected parties. If necessary, append additional sheets to the spill report. Number the pages in the same format found in the lower right hand corner of the spill form: eg. "Page 1 of 2", "Page 2 of 2" etc. **Please number the pages to ensure that recipients can be certain that they received all pertinent documents.** If only the spill report form was filled out, number the form as "Page 1 of 1".
L. Reported to Spill Line by	Include your full name, employer, contact number and the location from which you are reporting the spill. Use box K if there is insufficient space.
M. Alternate Contact	Identify any alternate contacts. This information assists regulatory agencies to obtain additional information if they cannot reach the individual who reported the spill.
N. Report Line Use Only	**Leave Blank**. This box is for the **Spill Line's use only.**

Appendix B-3:

Immediately Reportable Spill Quantities

TDG Class	Substance for NWT 24 Hour Spill Line	Immediately Reportable Quantities
1 2.3 2.4 6.2 7 None	Explosives Compressed gas (toxic) Compressed gas (corrosive) Infectious substances Radioactive Unknown substance	Any amount
2.1 2.2	Compressed gas (flammable) Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L
3.1 3.2 3.3	Flammable liquids	> 100 L
4.1 4.2 4.3	Flammable solids Spontaneously combustible solids Water reactant	> 25 kg
5.1 9.1	Oxidizing substances Miscellaneous products or substances excluding PCB mixtures	> 50 L or 50 kg
5.2 9.2	Organic peroxides Environmentally hazardous	> 1 L or 1 kg
6.1 8 9.3	Poisonous substances Corrosive substances Dangerous wastes	> 5 L or 5 kg
9.1	PCB mixtures of 5 or more ppm	> 0.5 L or 0.5 kg
None	Other contaminants (e.g. crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids, waste water, etc.)	> 100 L or 100 kg
None	Sour natural gas (i.e. contains H2S) Sweet natural gas	Uncontrolled release or sustained flow of 10 minutes or more

In addition, all releases of harmful substances, regardless of quantity, are to be reported to the NWT spill line if the release is near or into a water body, is near or into a designated sensitive environment or sensitive wildlife habitat, poses imminent threat to human health or safety, poses imminent threat to a listed species at risk or its critical habitat, or is uncontrollable.

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