Appendix B

SNC-Lavalin Inc. 2005 Spill Contingency Plan

CLIENT: Defence Construction Canada (DCC)

PROJECT: DYE-M Cape Dyer DEW Line Clean-Up

		SIGNATURE	DATE
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ISSUE/REVISION INDEX

Issue Code	Revision No.	By	Rev'd.	App.	Date	Revision Details
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Issue Codes: RC = Released for Construction, RD = Released for Design, RF = Released for Fabrication, RI = Released for Information, RP = Released for Purchase, RQ = Released for Quotation, RR = Released for Review and Comments.

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1.0 INTRODUCTION

DYE-M Cape Dyer is situated on 23,288 acres on the Cumberland Peninsula of Baffin Island, within the Territory of Nunavut, at the most easterly projection into Davis Strait (Figure 1). As a result of the replacement of the Distant Early Warning (DEW) Line with the upgraded system called the North Warning System (NWS). Fifteen of the DEW Line sites located on Department of National Defence (DND) reserves within the Nunavut Settlement Area (NSA) were decommissioned. Environmental investigations of these sites were carried out to identify the principal contaminants and identify the impacts to the Arctic ecosystem. Evaluation of past waste disposal practices (specifically landfill locations, contamination sources, and the potential for contaminant migration) were conducted for each site leading to the development of the Dew Line Clean Up Protocol which would provide a consistent approach to the clean-up of the sites. A cooperation Agreement (Environmental Provisions) between the Department of National Defence (DND) and the Nunavut Tunngavik Incorporated (NTI), which outlined the requirements for the restoration, clean-up and related activities at the DEW Line sites in Nunavut, was signed in 1998. It is under this agreement that the clean up activities specifically targeting contaminated soil, landfills, demolition, and exposed debris at DYE-M Cape Dyer will be undertaken. SNC-Lavalin Engineers and Constructors Inc. (SLE&C) have been retained by Defence Construction Canada (DCC) to undertake the Clean-up Project for the DYE-M Cape Dyer.

SLE&C have prepared a Spill Contingency Plan (SCP) in accordance with the requirements of the Nunavut *Spill Contingency Planning and Reporting Regulations,* A Guide to the Spill Contingency Planning and Reporting Regulations and Tender Documents.

1.1 Purpose

The purpose of the Spill Contingency Plan is to provide a course of action to be implemented in the event of an incidental or accidental release of hazardous/toxic substances in order to prevent and/or minimize any possible harmful effects to the environment.

The plan describes detail actions for monitoring, prevention and containment of spills, spill response reporting to regulatory agencies, as well as provisions for clean-up and disposal of spilled hazardous materials.

The SCP is designed for all on-site personnel, including its sub-contractors, and defines responsibilities of key personnel and procedures/protocols to be followed when responding to a spill.

The SCP for DYE-M Cape Dyer is intended to allow for the most effective deployment of resources to achieve the following primary objectives:

Insert Figure 1

- immediate notification within the company to assure that an appropriate and timely response is initiated;
- ensure compliance with regulations for notification and reporting of spills to all parties involved;
- provide the earliest possible response to a spill scenario with available on-site and off-site resources;
- a response consistent with remedial action requirements, which include the need for containment, clean-up and disposal phases; and
- to assign roles and responsibilities in the event of a spill.

1.2 Description of Clean-up Activities

Environmental investigations and engineering surveys to document the environmental implications and potential effects of the clean up activities were undertaken over the period of 1989 to 1993 with detailed investigations carried out from 1997-2002. The objective of the detailed environmental and engineering site investigations was to more accurately locate contaminated areas, verify overall site conditions, identify mitigation/monitoring and/or actual project activity modification. On-site activities for the clean-up project commenced in 2004 with camp set-up and borrow pit pre-work with re-mobilization to site scheduled for late spring/early summer of 2005. A site plan showing the layout of key facilities at DYE-M Cape Dyer is presented in Figure 1 .

The primary work activities to be undertaken as part of the clean-up of DYE-M Cape Dyer, as specified in the Project specifications include:

- excavation of DCC Tier I and II, Type A and B hydrocarbon contaminated soils and hazardous contaminated soils;
- disposal and treatment of contaminated soils (excluding hazardous);
- demolition and disposal of
  - buildings
  - POL storage tanks and distribution lines
  - Sewage storage tanks and distribution lines
  - Above ground power and communication cables
- Collection and disposal of
  - Scrap metal and building components
  - POL barrels and contents (includes recontainerization of hazardous barrel contents;
- Packaging and containerization of hazardous waste materials collected or generated during clean-up activities;
- Transportation of all containerized hazardous contaminated soil and hazardous waste material to Temporary Storage Area;
- Collection, double bagging and disposal of Asbestos Containing Material (ACM) to the Non-hazardous Waste Landfill;
- Complete/partial excavation, or closure and regarding of 10 landfills in total;
- Development and closure of two (2) non-hazardous waste (NHW) landfills (one each Upper and Lower Sites);
- Development and closure of two (2) new Tier II Disposal Facilities (one each Upper and Lower Sites);

- Development, operation and closure of a new Hydrocarbon Contaminated Soil Treatment Area at the Lower Site.
- General site grading of contaminated soil excavation areas and existing landfill areas.

2.0 ASSESSMENT OF HAZARDOUS SUBSTANCES – STORAGE AND DISPOSAL

2.1 General

All hazardous substances will be handled, stored and disposed of in accordance with all applicable federal and territorial legislation and with Section 1560 (1 & 2) of the specifications.

2.2 PCBs (Liquids or Solids > 50 ppm)

The presence of PCBs have been identified in a number of the facilities to be demolished. A large portion of the PCBs are found in painted surfaces such as doors, interior walls and floors but are also present in millwork, furnaces, light ballasts, transformers and electrical systems. PCB-amended (or lead-based paint) will be removed and placed in approved Hazardous Waste Materials Containers before demolition of the structure commences. All measures will be taken to contain the paint chips within the work area. Where it may not be possible to remove the painted surface or other material containing PCBs from the building material, the section of building material will be removed and placed in designated hazardous waste material containers. All hazardous waste material containers will be transported to the PCB Storage Area for final disposal by DND. All hazardous waste materials will be handled, stored and transported in accordance with Federal Transportation of Dangerous Goods Act and Regulations (TDGA). This will include proper manifest documentation and use of licensed waste carriers and receivers.

Entry to the PCB storage area will be granted only to those personnel permitted by Environment Canada and it is considered an offence to enter this area without this registration and authorization. A list of SLE&C personnel has been provided to the DCC Project Engineer, for approval by Environment Canada, for permission to enter the PCB storage area. Prior to any entry to this area, the Engineer must be given notification. Once a container has been filled and properly secured in accordance with the appropriate specification section(s), all keys for that ISO barge container will become the property of the Engineer. No further entry to that unit will be granted to SLE&C personnel unless deemed necessary by the Engineer.

Buildings identified as containing PCBs include the Power and Equipment Building, Radio Terminal Building, Lower Camp Dining Hall, Warehouse (Lower Camp), Module Train C, Overhead Walkway (Upper Camp), and Switching Centre and Communications Building (Upper Camp).

2.3 Asbestos

Asbestos was used in building materials and on pipelines and electrical wiring, for its fire retardant and insulation capabilities during the mid-1900's. As an airborne particle, asbestos has since been proven to cause deterioration of the lungs (asbestosis) proving fatal in most cases. Type 1 and Type 3 asbestos is contained in a number of the buildings and their associated utilities which are scheduled to be demolished. Asbestos has been identified in

cemented wallboard, fire doors, control wall panels, pipes, vinyl floor tiles, and duct cloth. Galbestos has also been identified in two exterior billboards in the upper camp and Dew Drop Area. All asbestos will be removed in accordance with the *Nunavut Environmental Protection Act* – Guideline for the Management of Waste Asbestos; *Safety Act* and Occupational Health Regulations; and Guidelines for Removal of Materials Containing Friable Asbestos; the Asbestos Abatement Plan and the contract specifications. All painted asbestos material will be placed in properly labelled and approved Hazardous Waste Material Containers and the type and amount of material will be recorded. All containers will be taken to the temporary storage facility.

Non-painted asbestos wastes will be double-bagged (heavy duty 0.15 polyethylene bags) or other suitable impermeable containers and transported to the Non-Hazardous Waste Landfill for disposal. PCB-painted asbestos materials will be placed in containers suitable for Hazardous Waste Material and transported to the Temporary Storage Area to await shipment off-site.

Asbestos has been identified in the Power and Equipment Building, Radio Terminal Building, TACAN Warehouse, Module Train "C", Switching Centre and Communications Building, and Abandoned Powerhouse at the Upper Camp; the Dining Hall and Warehouse (B-13D) at the Lower Camp.

2.4 Lead

Most indoor and outdoor paints produced before 1950 contained substantial amounts of lead. Lead was identified at the following locations at the DYE-M Cape Dyer site:

- Switching Centre (floor, exterior cladding);
- Abandoned Powerhouse (exterior cladding);
- Upper Site Module Train C (paint on concrete floor, exterior panel, stairs, timber sill, wood support (loading platform));
- Sewer (exterior sewage pipe);
- Radio Terminal Building (exterior door, exterior double door, inside of interior door);
- TACAN Warehouse (interior wall);
- Main Station Area (extensive areas);
- Lower Site Module C (wall);
- Dining Hall (interior wall); and
- Lower Site Area (Dining Hall and Warehouse B-13D).

The removal of lead-based paint will be conducted following the Personnel Protection Requirements specified for the removal of Type 2 asbestos materials specified in the contract specifications.

2.5 Glycols, Alcohols, Fuels, Lubricating/Waste Oils

Glycol (Antifreeze), alcohols, fuels, and lubricating oils used for the servicing of various equipment and site vehicles will be stored in the laydown area north of the warehouse. Anticipated supplies and quantities include Formula Shell Bronze Gasoline (16,400 L), HD 75W-90 Automotive Gear Oil (205 L), 15W-40 Multi-grade Heavy Duty Engine Oil (1,825 L), T*SB 0W-30 Synthetic Blend Heavy Duty Engine Oil (1,620 L), TC Hydraulic/Transmission Oil (Multi-season CAT T0-4 Additive System) (2,460 L), Jet A-1 W/AWA (2,460 L), T Synthetic Blend 5W-30 Winter Engine Oil (410 L), and Extended Life Collant/Pre-diluted (2,460 L). These

materials will be shipped to site via sealift and will be stored in 205 L (45 US gal) steel drums. The materials remaining at the completion of clean-up activities will either be transported off-site or disposed of in the incinerator as per the waste management plan.

Waste glycols (antifreeze), alcohols, fuels, and lubricating oils, including waste oils, already present on-site at DYE-M Cape Dyer, are shown on the contract drawings with the exception of those quantities which are currently buried and therefore their exact locations are not known at this time. These hazardous materials were used on a daily basis in heat exchange systems, food preparation, running and servicing of site equipment and vehicles. Once identified, these materials will be containerized and temporarily stored on-site or incinerated.

2.6 Compressed Gases

The following compressed gases are known to currently exist or will be used and stored on-site during the closure phase:

Currently existing:

CO_2 - 5 – 75 lb cylinders.

These cylinders will be handled as hazardous waste and removed to the Temporary Storage Facility.

Other gases to be used and stored on-site include:

- Acetylene (cutting) - stored in the warehouse
- Medical Oxygen - stored in First Aid Stations;
- Freon - used in the refrigeration system for the accommodation complex.
- Oxygen (cutting) - Stored on-site in designated containers in the warehouse .
- Propane - is stored on-site in designated containers in the warehouse

All remaining compressed gases in cylinders at the project end will be removed off-site for re-use or disposal, as part of the site demobilization in 2010.

2.7 Petroleum Products

A total of 13 fuel storage tanks will be located at DYE-M Cape Dyer to support clean-up activities. Six (6) double-walled mobile fuel tankers and one (1) double-walled day tanker were transported to site in 2004 and an additional six (6) 83,500 L self-dyked fuel storage tanks will be transported to site in 2005. One tank will remain empty in order to provide a back-up tank if a leak is detected in any of the other tankers.

Tanks	Location
Six (6) – 50,000 L to 51,200 L	Mobile (self-dyked)
One (1) – 18,500 L	Moblie CAT day (self-dyked)
Six (6) – 83,500 L	Self-dyked

The following existing fuel storage tanks are to be decommissioned at the DYE-M Cape Dyer site in 2005 following cleaning activities scheduled in 2004.

Tanks	Location
1,800 US gal	Upper Camp (MOGAS)
Two - 250,000 US gal	Upper Camp (diesel)
500,000 US gal	Upper Camp (diesel)
1,800 US gal	Lower Camp (MOGAS)
2,500 US gal	Lower Camp (diesel)
50,000 US gal	Lower Camp (diesel)
One - 65,000 US gal	Lower Camp (JP-4)

In addition to the fuel storage tanks, approximately 18,000 m of decommissioned POL line and the associated POL pumphouses will be removed. All inspections, handling, and disposal of tanks, piping, and pumphouses will be in accordance with Sections 1560 (1 & 2), 2060 (3.7) and 2090 (1.6, 2.1, 3.1, 3.2, & 3.3).

The main fuel to be used on-site is P-50 diesel.

Approximately 3,690 L of diesel will be stored in the laydown area to the south of the warehouse. The maximum capacity of the south laydown area is 13,940 L.

Approximately 120,000 L of fuel is known to exist in three (3) of the tanks scheduled for demolition. The possibility exists for the discovery of smaller quantities of fuel in the remaining tanks. Heavy impurities will be removed from the existing fuel on-site to allow for the fuel to be burned off in the generators or at the on-site liquid waste incinerator. Prior to the demolition and disposal of site storage tanks and distribution lines (during 2005), residual fuel/sludge, and/or any un-used fuel will be pumped to either 205 L (45 US gal) or a holding tank for disposal utilizing the on-site liquid waste incinerator. The liquid waste disposal system (Westland CY-25-WO) will also be used for incineration of waste oils and lubricating oils from equipment servicing.

The incinerator system is a portable incinerator/evaporator unit that is capable of processing approximately 1,100 L/day (based on 10-hour day) of waste fuel and will comply with prescribed Canadian air emission standards. The liquid waste incinerator will be scheduled for off-site removal at the end of the project in September 2010.

2.8 Liquids

The following liquids were identified at the DYE-M Cape Dyer site although quantities and locations are not yet known.

- Heavy metal-contaminated organic liquids (Cadmium > 2ppm; Chromium .10 ppm; Lead >100 ppm);
- Liquids containing organic compounds with chlorine concentrations > 1000 ppm;
- Liquids containing organic compounds with PCB concentrations > 2ppm and < 50 ppm;
- Liquids containing organic compounds other than those described above.

When identified these materials will be handled, stored in approved, as per Project specifications, leak-proof containers and transported in accordance with *Federal Transportation of Dangerous Goods Act* and Regulations (*TDGA*).

2.9 Miscellaneous Hazardous Waste

During the clean-up activities at DYE-M Cape Dyer, there is the potential for the discovery of other hazardous materials (i.e., landfills, hillsides) not mentioned above. Information obtained from USAF records indicate the following hazardous materials may be present on-site.

- Radioactive tubes
- Lime
- AVGAS
- Sulfamic acid
- Cathode-ray tubes and screens, filtron tubes
- 1-1-1 trichloroethane
- mercury vapour rectifier tubes
- paint thinners
- corrosion inhibitors
- lye
- corrosives
- dynamite
- RF interference filters
- Rubber fuel bladders
- Solvent

Once identified, the Engineer will be notified prior to handling. These materials will then be containerized, labeled and placed in the temporary storage area for removal off-site. Only personnel authorized through SLE&C and properly trained in the handling of these materials will be granted access to areas containing the above mentioned items.

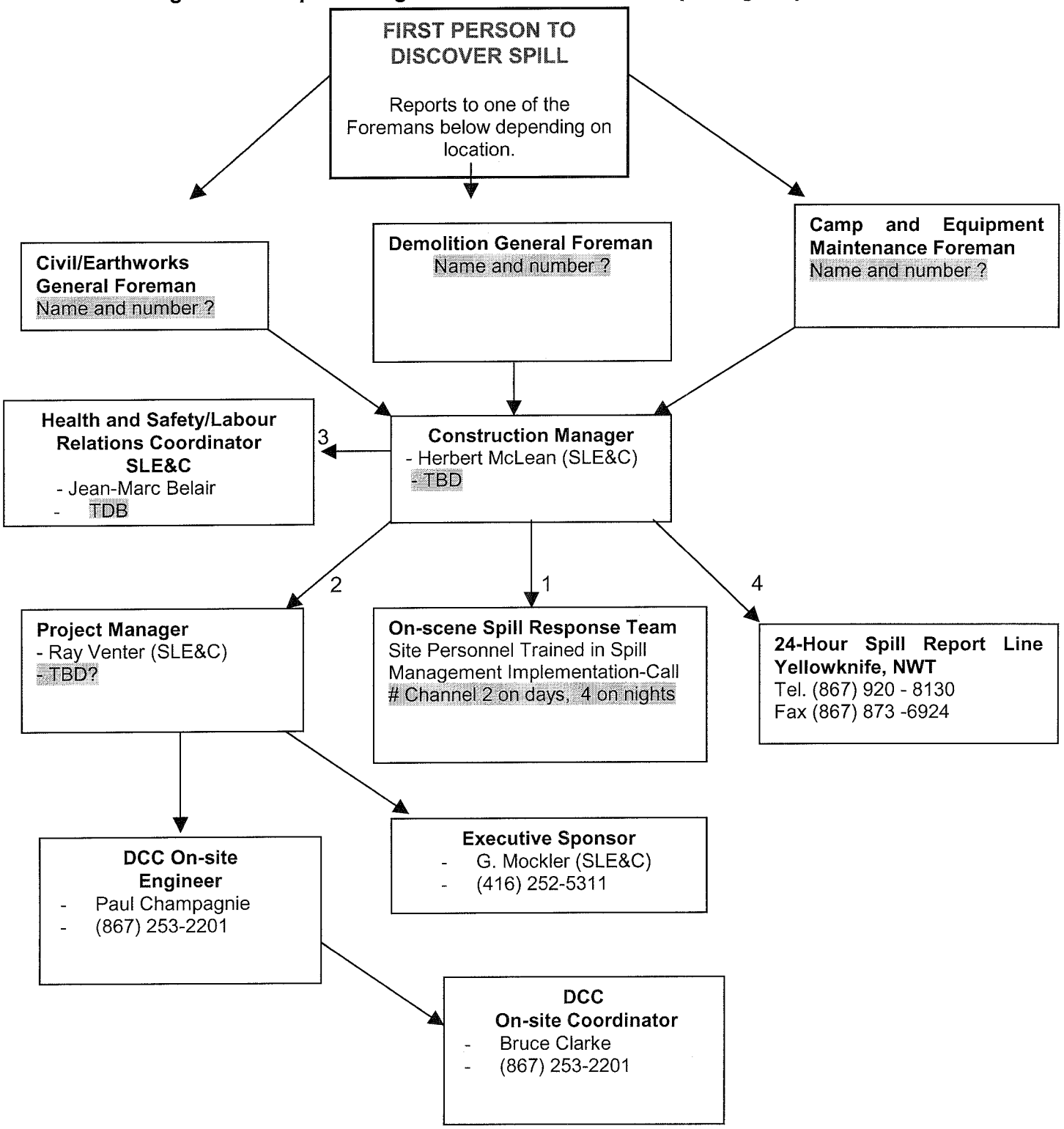
3.0 RESPONSE ORGANIZATION STRUCTURE AND REPORTING SEQUENCE

Table 1 provides the contact names and numbers for senior project management in the case of a spill emergency. Figure 2 indicates the response organization structure and their reporting protocol for a spill situation. This organization and reporting structure also includes SLE&C specialty sub-contractors.

TABLE 1
Spill Contingency
Senior Management Telephone Listing

Name	Company	Title	Telephone
Paul Champagnie	Defence Construction Canada	Site Manager	(867) 253-2201
Nahed Farah	Defence Construction Canada	Associate Project Manager, DLCU	(613) 998-7917
Ray Venter	SLE&C	Project Manager	(416) 252-5311
Gary Mockler	SLE&C	Vice President Construction	(416) 252-5311
Herb McLean	SLE&C	Construction Manager	TBD
Jean-Marc Belair	SLE&C	Health, Medical and Safety Attendant	TBD
Christine Behan	SLE&C	Field Administrator	TBD

Figure 2 - Response Organization Structure and Reporting Sequence



4.0 ORGANIZATION ROLES AND RESPONSIBILITIES

The major responsibilities and roles of key employees who will be participating in a spill response situation are presented in Table 2.

Table 2 – Responsibilities of Key Project Personnel for Spill Incident

Title	Responsibility
SLE&C Project Manager - Ray Venter Tel. **(416) 252 - 5311** *Corporate Address:* *SNC-Lavalin Engineers and Constructors Inc.* *2200 Lake Shore Blvd. West* *Toronto, Ontario* *M8V 1A4*	• Activates the Spill Contingency Plan (SCP) based on assessment of spill. • Provide liaison and maintain effective line of communication with SLE&C Executive Sponsor and DCC Engineer of spill response, containment and clean up. • Ensure that all phases SCP are appropriately implemented. • Ensure, along with the SLE&C Construction Manager and HM&S Coordinator that necessary equipment and training is in place for spill response to meet or exceed legislative requirements. • Report and provide advice/recommendations to all levels of management for the project. • Based on input from the Construction Manager and HM&S Coordinator, provide Spill Report to SLE&C and DCC Engineer . All consultation with external agencies will be conducted through the Engineer or in consultation with the Engineer. • Provide DCC Engineer with documentation, follow-up and liaison with government agencies and media. • Review all spill incidents, including any injury and/or property/environmental impact, and ensure that appropriate containment, recovery and cleanup action is initiated.
SLE&C Construction Manager Herbert McLean TBD *Address:* *DYE-M Cape Dyer, Baffin Island, Territory of Nunavut*	• Support the efforts of the Project Manager. • Evaluate spill situation and assess magnitude of spill. • Provide immediate notification to DCC Engineer and SLE&C Project Manager and provide recommendation with respect to activation of spill contingency plan. • Provide notification of spill incident to 24-hour Spill Report Line and other supportive external organizations. • Coordinate and oversee personnel and equipment resources to conduct spill containment, recovery, clean-up

Table 2 – Responsibilities of Key Project Personnel for Spill Incident

Title	Responsibility
	and disposal. • Document chronology of spill event and clean-up efforts.
DCC Site Engineer Paul Champagnie (867) 253-2201 *C/O – DYE-M, Cape Dyer, Baffin Island, Territory of Nunavut*	• Interprets Project contract and specifications on behalf of the Crown. • Responsible for approving of any changes to the manner in which contract/specification is interpreted and carried out. • Acts as the liaison between SLE&C and Inuit community should any disputes arise. • Provide advice to SLE&C and DCC senior management team for project. • Review Spill Report and actions taken for containment, recovery and clean up and recommend changes as required. • Reviews all incident/accident reports. • Act as company spokesperson with government agencies, media, and all other outside organizations..
SLE&C Health, Medical and Safety Coordinator Jean-Marc Belair TBD	• Inspects the spill area on a continuous basis to assess health and safety hazards and provide appropriate direction. • Coordinate off-site trained medical personnel and resources and secure site, if required. • Implement spill training and simulation exercise for spill response. • Support the efforts of the Construction Manager.
Subcontractors - *6237631 Canada Ltd* - (867) 979-7958 - *PTI Premium Camp Services* - (780) 718 – 1948 - *Smits Tank Services* - (905) 845-6820 - *R+ Services* - (780) 496 - 9275 - *Surveyor Services* - (780) 454 -7765 - *InfoSat* (403) 543-8185 - *NorthWest Tel* (780) 438-7162	• Report spill immediately to SLE&C Construction Manager. • Initial response and any clean up in the absence of any SLE&C supervisory direction. • Responsible for spill response training of their own personnel. • Advise all their employees of the existence of SCP • Provide manpower and equipment on a priority basis to undertake spill containment, recovery and clean-up.

4.1 Activation of Spill Contingency Plan

As specified in the above table, the SLE&C Project Manager is responsible for activation of the Spill Contingency Plan and will be in charge of its overall management and implementation. Spills will be reported in accordance with the project specifications and the amounts set out in Schedule B (i.e., 100 L for diesel) of the Nunavut *Spill Contingency Planning and Reporting Regulations* (Appendix A) following an assessment of the type and amount of material spilled. All spills will be immediately contained, where safe to do so, and appropriate remedial actions initiated for recovery, clean up and disposal.

4.2 Spill Reporting

During clean-up activities, all persons working on-site will be in a position to detect spills. Notification of any spill will be made immediately to the appropriate Area Foreman. The SLE&C Construction Manager will notify the DCC Engineer and the Project Manager. Actions to contain and clean up a spill will be initiated immediately.

4.2.1 External

Spills of petroleum products or other hazardous substances will be reported to the Nunavut/Northwest Territories 24 hour Spill Report Line, in accordance the Regulations. Upon notification of a spill, the DCC Engineer will act as the owner/company spokesperson and under their discretion will report the spill to other regulatory agencies, such as the DIAND and Federal Department of Fisheries and Oceans. All spills must be reported to the regulatory agencies as soon as possible within 24 hours of their occurrence. Telephone number is 867-920-8130. A written report is also required and is to be faxed to 867-873-6924.

The DCC Engineer will be the primary site contact person between the regulatory agencies and DYE-M Cape Dyer in the event of a spill.

In accordance with the regulations, a Spill Report will be prepared and transmitted to the Nunavut/N.W.T. spill centre by the SLE&C Construction Manager. If the Construction Manager is not available, the SLE&C Project Manager will assign the task of reporting the spill as the situation dictates.

Reporting Instructions:

1. Fill out ***"Spill Report"*** form as completely as possible (Appendix B) . This report must be filled out and submitted within 24 hours of the occurrence.

2. Report to the 24-hour Spill Report Line. All spills will be reported by telephone.

The Fax number is only to be used to transmit more detailed information and the written Spill Report.

24 Hour Spill Report Line

Telephone Number: (867) 920-8130
Fax Number: (867) 873-6924

Other important contacts are:

AGENCY/DEPARTMENT	LOCATION	PHONE/FAX NUMBER
Iqaluit Fire Department	Nunavut	(867) 979-4422
Environment Canada Enforcement Branch	Head of Enforcement – Craig Broome	(867) 669-4730
Renewable Resources Officer Stations – Baffin Region Environmental Protection Service Department of Sustainable Development Government of Nunavut Iqaluit, NU	Iqaluit	(867) 979-5017
	Broughton Island	(867) 927-8966
Indian and Northern Affairs Canada Environment and Contaminants	Stephan Traynor Director of Operations Iqaluit Office	(867) 975-4546
Indian and Northern Affairs Canada Water Resources	Iqaluit	(867) 975-4298
GN Environmental Protection	Iqaluit	(867) 975-5900
Defence Construction Canada (Ottawa)	Nahed Farah Associate Project Manager	(613) 998-7917
	Scott Munn Deputy Project Manager	(613) 990-9641
	Daniel Parquet Project Manager	(613) 998-9523
North Warning System Operations (Ottawa)	Major A.D. Cameron	(613) 998-8602

5.0 SPILL RESPONSE AND ACTION PLANS

5.1 Potential Spills

During the clean-up activities a spill of petroleum products, contaminated solids or liquids containing organic compounds, materials containing PCBs/asbestos/lead or demolished waste material could occur on land, in a water body and/or on ice/snow. Many variables, such as weather and staff preparedness, play an important role in a spill response operation. A spill from an overflowing fuel tank or breaking of a hydraulic hose is likely the most common spill to potentially occur on-site. The worst case spill scenario would involve a rupture of a fuel storage tank or spill during bulk offloading of fuel from the marine carrier. Spills may be caused by a check valve set in the wrong position, an open valve after a fuel transfer or overfilling of receiving vessels. However, such situations are expected to be successfully avoided by having preventative and mitigative measures in place and by using of Spill Action Plans (SAP) presented in the following sections.

5.2 Prevention

Prevention is the critical element to avoid a release of hazardous substances. Effective on-site preventative measures can ensure protection of the environment, prevent injury to personnel and ultimately avoid expensive clean-up costs. Good housekeeping measures will entail regular maintenance and routine inspection/monitoring of equipment, storage facilities/tanks and incinerator system, as well as detailed record keeping.

Key spill prevention practices will include the following:

- On-site storage facilities for hazardous materials will use secondary containment measures (i.e., double-walled containment, berms, liners)
- All storage areas will be provided with well maintained equipment and appropriate containers to be handled only by authorized personnel familiar with proper handling;
- Where practical, site transfer and transportation will be performed using secondary containment systems;
- Good housekeeping practices in areas along the shoreline during bulk fuel unloading and storage tanks facilities;
- Accessories such as transfer hoses with camlock mechanisms, drip pans and pumps will be inspected and monitored on a regular basis to ensure they are good working order;
- Supervision and auditing of material transfers; and,

- Compliance with all federal, territorial, and local legislation.

The SLE&C Health, Medical, and Safety Coordinator will audit and document the existing condition of equipment and storage facilities and will make recommendations for repairs should problems be encountered. Designated personnel will inspect storage vessels and transfer piping on a regular basis and record/list in a log all items inspected. This task will include recording the amount and compatibility of materials stored, levels of fluids and inventory of personnel protective and spill kit equipment.

Other preventative measures will include spill response and awareness training for personnel to identify sensitive areas/features, potential spill locations required, location of site clean-up kits and proper initial response action. Training of personnel, as well as simulating practice drill exercises, will help ensure an effective and efficient spill response in order to minimize potential impacts. Further details on spills training and exercises are contained in Section 6.0.

It should be noted that as decommissioning of the site progresses, quantities of hazardous materials on-site will change (decrease) however the preventative procedures and spill response plans will remain unchanged throughout the project.

5.2.1 Petroleum Storage Tanks

In the case of a fuel storage tank rupture the impact from a potential spill would be high. Although fuel tanks will be progressively decommissioned through the closure period, the probability of rupture of active tanks will be reduced by comprehensive training of personnel, regular maintenance, frequent inspections and use of impervious geomembrane liners and berming, if required. The fuel tanks to be used for the clean-up of the DYE-M Cape Dyer site will be double-walled and/or self-dyked. The use of existing tanks on-site is prohibited. Any new tanks required to complete clean-up activities will be placed in a bermed area (110% of tank capacity).

A protective bollard will be installed to prevent vehicles from colliding with the tanks.

5.2.2 Open Valves or Pipe Failures

Although tanks and distribution pipelines will be progressively decommissioned, spills will be prevented by:

- Locking off all valves that are not in use;
- Providing double locking fuel transfer hoses, mark and tag valves or use a lock out system;
- Installing markers to delineate all active distribution lines;
- Training of personnel; and
- Providing spill kits in vehicles and at all key locations.

5.2.3 Hydraulic Hose Examinations

Preventative measures to be undertaken to avoid an equipment hydraulic hose leak

- Check/Inspect for wear and leaks;
- Regular maintenance schedule;
- Training of personnel; and
- Providing spill kits in vehicles, where practical.

5.2.4 Fuelling Equipment

Preventative measures to be undertaken to avoid overfilling of equipment tanks and overflows:

- Record all fuel transfers and log.
- Do not leave filling device unattended.
- Measure the content of fuel in tanks prior to filling to estimate the amount of fuel required to fill.
- Visually check vessel fluid levels while filling.

5.2.5 Spills from Vehicle/Equipment Accidents

The following preventative measure will be exercised to avoid spills from vehicle/equipment accidents:

- Strict enforcement of speed limit;
- Site signage and warning devices for moving equipment;
- Training of personnel; and
- Providing spill kits in vehicles where practical.

5.2.6 Chemicals

The probability of a chemical spill is low although the contents of the landfills and barrels located throughout the sites to be excavated are not entirely known. The preventative measures to reduce the risk of a chemical spill include:

- Barrels excavated from landfills or excavation areas will be handled as hazardous materials until the contents are confirmed.
- SLE&C personnel trained in the handling of hazardous materials (including CEPA contaminated soils), as per the Project specifications, will supervise all landfill excavation activities where the potential exists for encountering unknown substances. They will instruct and direct workers with respect to the approved waste management plan, health and safety procedures, and Project specifications to be followed when conducting work activities in these areas. If containers with fluids are discovered or fresh visual staining of the ground is observed in the area being excavated, work will stop immediately and appropriate remedial action taken.

- Oxygen, acetylene, and propane will be stored in appropriate storage containers;
- Storage facilities will be weather and fire protected; and
- Training, inspection and inventory control.
- Empty drums to be sent to the non-hazardous waste landfill shall have hazardous material labels removed.

5.2.7 Fires

Diesel and other hydrocarbons are combustible and therefore smoking and/or ignition sources will be prohibited within 7.5 m of fuel storage areas. Signs will be posted to notify all personnel of this requirement. Compressed gas cylinders (oxygen, acetylene) will be stored in accordance with safe storage regulations to minimize the possibility of ignition and resultant explosions.

All heavy equipment, shops and occupied buildings will be adequately equipped with dry chemical fire extinguishers.

5.2.8 Material Safety Data Sheets (MSDS)

To provide information with respect to potential contact with hazardous and flammable substances and information on their safe handling, SLE&C will provide MSDS sheets for all materials to be transported, stored and used on-site. The MSDS sheets will be kept on file in the project site office, at other strategic locations on-site, and near hazardous substances storage areas. MSDS sheets are in accordance with WHMIS standards.

5.3 First Aid Capabilities

All field supervisors are required to have Standard First Aid Certificate training as required by the Worker's Compensation Board in Nunavut. All site rescue and emergency response team members will have Advanced First Aid training.

5.4 Initial Action

This section outlines the initial actions to be taken by the first person(s) discovering a hazardous materials spill. Following the initial action, the appropriate Spill Action Plan will be immediately implemented. Initial actions to be taken by the first person arriving/witnessing a spill include:

- Ensure ones own personal safety and that of anyone else in the area. If possible, identify the product spilled;
- Immediately contact SLE&C Construction Manager and report the spill;
- Assess whether the spill can be readily stopped or brought under control, ie. shutoff valve. If you are ***sure*** it is safe to do so, try to stop the flow of material;

- If the spill of material cannot be stopped safely, attempt to contain the spill material. The prime objective is to minimize risk to personnel and to prevent any spills from reaching the ocean;
- If unsure whether it is safe to approach the spill, ***remain clear of area***. Report the spill to the SLE&C Construction Manager and then ensure that no one else accidentally approaches the spill; and
- Record all relevant information for reporting purposes. i.e. who, what, when, volume, weather, where.

5.5 Spill Action Plans

The following sections describe the procedures/protocols for containment, clean-up and disposal to be implemented in the event of a spill.

5.5.1 Spill Off-Shore - Unloading of Bulk Fuel Delivery

Offloading Operations:

Offloading operations are the responsibility of the captain and crew of the vessel. Involvement in their operations will be at the discretion of the Construction Manager at the time of off-loading.

Surveillance

- Determine spill limits by visual observations from tanker or boat. Identify containment to limit the drainage.

Range of Spill

- Immediate detection and normal cessation of pumping should limit a spill to not more than 15,000 litres.

Deployment of Equipment

- All vessels will have a Spill Kit available

- Set out booms located in containers adjacent to the off-loading operation. A boat will be located at the DCC landing area and available to assist, if necessary. All containers shall be marked to identify the items contained within.

- A skimmer will be available at the same location as the 60/70 gallon Spill Kit to be located at the Beach Area.

Recovery

- Pump recovered oil/water mixture into an empty hold of the tanker.
- If spill exceeds available storage capacity, then line low areas with impermeable plastic sheeting for temporary storage.

Disposal

- Transfer recovered oil that is not contaminated with significant quantities of water and debris to oil storage tanks for future use.
- Pump recovered oil that is contaminated to incinerator system holding tank for controlled burning.

Diesel Line Breakage:

Frequency of Diesel Line Use

- Tank filling will be done once per year.

Preventive Measures

- Visual inspections of lines will be carried out prior to each transfer. Any line damage will be repaired prior to use of the line. Inspection will note the valve positioning.

Detection

- Pressure can be used to detect line breakage. This can be accomplished by having gauges on the discharge of fuel transfer pumps. Upon sensing a drop in line pressure, transfer of fuel will be stopped manually by fuel transfer personnel.
- Limits of spill will be visible.

Immediate Action

- Cease pumping immediately.
- Inspection of the broken line will be done immediately to determine the cause and location of breakage. Clean-up of spill will commence immediately.

Recovery

- Remove pooled fuel with SPATE pumps or manual double-diaphragm pump.
- Complete cleanup by use of absorbent pads from spill kit containers.

5.5.2 Diesel, Hydraulic/Transmission Fluids and Waste Oil

Spill On Land

- Secure area and restrict access to unnecessary personnel.
- Provide containment by digging cut off trenches and berming.
- Stop or cover entrance of spilled material to prevent flow into watercourse or ditches/drains.
- Stop a tank leak/overflow by the following actions;
  - Cease filling operations
  - Turn off valve(s)
  - Utilize patch kit to seal leak(s) These are located at the Heavy Equipment Shop for fuel tank repairs or in close proximity of the tanks located a distance from the Heavy Equipment Shop.
  - Contain spill
  - Close drains
- Build dykes or berms with earth, sand or other blocking media to contain spill.
- Remove/clean-up small spill by applying absorbents and place contaminated material in marked containers/drums.
- Recover large quantity spill with pump and transfer to drum(s) or storage tank for re-use or disposal at on-site incinerator. For large spill seek assistance from external environmental unit.
- Remove soil material affected by spill using shovels, backhoe or other mechanical method, when safe to do so.
- Contaminated soil material is to be temporarily stockpiled with protective plastic liner placed under and over stockpile.
- Segregate and dispose of contaminated soil material and absorbents to off-site licensed disposal facility or, if approved, to on-site location (landfarm).

Spill On Snow and Ice

- Stop or cover entry of spill material to prevent flow into watercourse, ocean or ditches/drains.
- Build dykes with snow and water to make impermeable barrier for containment.
- Cut or excavate slots or trenches in ice/permafrost as a secondary containment measure for spill.
- Remove small spills by applying absorbent or snow.
- Remove large spills with pump and transfer to drums or storage tank.
- Remove spill material collected in trench by pumping and/or applying snow and absorbents.
- If spill is under ice, drill through ice and pump out spill to storage tank or drums for reuse or disposal at on-site liquid waste incinerator.
- Dispose of contaminated absorbents to off-site licensed disposal facility or incinerate on-site.

- ***Spill On Water***

In addition to the specific procedures detailed in Section 5.3.1 for an off-shore spill, the following general procedures will be followed for spills on water.

- Deploy boom to contain the floating product.
- Use skimmer to collect contained product.
- Use absorbent pads to recover small spills on water. For large spill seek assistance from external environmental unit.
- Pump recovered material to tank for storage and disposal.
- Recovered product is to be recycled for use or transferred to liquid waste incinerator for disposal.

5.5.3 Chemicals

Chemicals remaining on-site after demobilization will be handled in accordance with WHMIS and *TDGA* legislation. Some of these chemicals are identified in section 2.1 of this document. These will be stored and handled as per the waste management plan.

5.5.4 Compressed Gases (Oxygen, Acetylene, Propane)

Actions to be taken in the event of a compressed gas spill include:

- Notify Area Foreman/Construction Manager;
- Refer to product properties MSDS, First Aid;
- Eliminate Ignition sources; ie. electrical power, lights, smoking, running vehicles
- Do not try to contain vapours when released;
- Personnel should withdraw immediately from area unless the leak is contained;
- Keep away from ends of tank/cylinder;
- If cylinders are damaged, gas should be dispersed and contained; and
- Shut off leak source, if safe to do so;
- If a small fire has occurred, extinguish with dry chemicals or CO_2.; and

Use water to cool containers exposed to fire, if safe to do so.

6.0 TRAINING

All key SLE&C personnel and its speciality subcontractors, who will be supervising, handling, transferring and/or disposing of hazardous materials, or supervising personnel, will be formally trained. Training will be comprised of all pertinent spill emergency response issues and will include, but not necessarily limited to:

- Internal/external communication networks and required spill reporting and notification procedures;
- Response procedures including initial action, clean up procedures and disposal.
- Response organization;
- Individual Spill Action Plans;
- Available internal/external resources (spill clean-up equipment);
- Accessing and deployment of equipment;
- Dealing with seasonal diversities and adverse weather conditions in the context of spill response;
- Personnel protective equipment;
- Properties of hazardous materials handled, stored and used on-site;
- On/off site transportation of dangerous good;
- Supervisors shall have completed the training requirements as per Section 2090 (1.6.4)
- Environmental legislation; and
- Company Policy.

Training records will be maintained at the DYE-M Cape Dyer site office by the SLE&C Health, Medical and Safety Coordinator.

Exercises

A simulation program will be undertaken prior to the commencement of clean-up activities to measure the effectiveness of the Spill Contingency Plan. The exercise program will include classroom and field simulations and will describe a range of spill scenarios from minor spill situations to larger complex spill response and management

7.0 RESOURCE INVENTORY AND LOGISTICS

This section details the resources such as equipment, machinery and tools that will be available to respond to a spill and clean-up situation, as well as general site logistics.

Land

Equipment available for a land spill includes the following:

CAT 345BL II Excavator
CAT 735 Articulating Truck
CAT 735 Articulating Truck (add.)
CAT 980GII Loader
CAT D8RII with Ripper
CAT 966GII Loader
CAT D5NXL
CAT140H Grader

CAT CB-434-D
CAT 330 CL Excavator
CAT 446 IT
1991 – International Fuel Tank Truck - 6922
Garner Denver Drill
Leroy Compressor
1999 Mack - CL 753 Truck Tractor
2004 - Terex Finlay, Hydrascreen
Trailbec 80T Float
FORD 250 + 350 Pick-up Trucks
2003 - FORD 350 XTL - 15 Person Passenger Van (incl. 1 add)
ATV - John Deer Trail Gator 6x4
2004 - ATV Arctic Cat
2004 - ATV Honda (includes + 5 additional)
2002 - RV Fleetwood Prowler Trailer
Flat Deck Trailer 45'
1996 – International Water Truck
2004 – Mobile Dollies
Terex Generator, 30 KW Trailer Mounted
Welding Machine and Trailer
Yamaha 5200 Watt Generator
320,000 BTU Herman Nelson with Trunks (1 off)
50,000 BTU Herman-Nelson heater
Triaxle dump trucks
Tandem dump trucks
Roll-off truck
Water truck for dust control
Westland waste oil incinerator, model CY 25-WO
Sprung Structure, 50 ft wide x 120 ft long.
Mobile lighting unit
Ford Cargo truck

Spill Response Kits

During the decommissioning works, six (6) Spill Response Kits will be strategically located on-site (Maintenance Shop, Fuel Containment Area, Beach Area, Screener, Upper Site. Other kits may be added as required. SLE&C will be responsible for providing sufficient spill response kits and speciality spill items. These kits will be in marked packages at visible and accessible locations. Kits will be located at fuel storage and transfer areas, liquid incinerator system, key clean-up areas, and chemical storage areas. As a minimum requirement, each spill kit will include the following items:

- 1 - 45 gallon (205 L) gauge open top drum with cover, bolt ring and gasket
- 1 - 48" x48" x1/16' neoprene pad (drain stop/plug)

- 2 - Splash protective goggles
- 2 - PVC oil resistant gloves
- 1 - Package polyethylene disposable bags (5 mm) 10 per pack
- 1 - Shovel (spark proof)
- 1 - Case (T-12) 3" x 12' mini booms/case
- 1 - bag (HP – 256) 17" x19"x1/2" pads, 100 pads/bail
- 1 - bag of Sphag Sorp TM

Ocean

A Spill Response Kit described above will be stored in close proximity to the boat. All ocean vessels will be equipped with the appropriate Ocean Response Spill Kit.

Boat

- 1 – 4 man Zodiac (7 hp)

Oil Boom/Skimmer

- Oil Boom/Oil Skimmer up to a maximum of 1000 feet

This skimmer is only intended for initial and supplementary recovery of spilled oil. The fuel ships carry spill equipment which would be used as the primary recovery unit should a spill occur.

Safety Equipment/Special Clothing

- 10 - Oil Proof Clothing (Tyvek Suits)
- 2 - D.O.T. Approved Flotation Suits
- 10 - Splash Protective Goggles
- 10 – PVC Oil Resistant Gloves

These items will be located in the SLEC safety office.

Generators/Lights

- Spot Lights
- Portable Generators of various capacities.
- Diesel Powered Portable Lighting Plant

Other Oil Spill Control Equipment/Materials

- Anchors, Ropes, Absorbents, Miscellaneous Small Items

7.1 Resource Inventory of Fuel Supplier

Oil Tanker

Woodwards is the prime supplier of fuels to the DYE-M Cape Dyer clean-up activities.

FedNav ships are equipped with a "PAGE" (Petroleum Association for the Control of the Environment) package.

Such a package contains:

- Boom: Length 750 ft.
- Oil Skimmer
- Pumps with Floating Suction

7.2 Logistics

7.2.1 Sea Transportation

Shipping Season

- The normal shipping season is between end-July and end-September. Exact dates vary due to sea-ice conditions.

- No situation is likely in which ship movements will have to be made at other times of the year. As such, vessels of full ice breaking capacity are not required.

Shipping Route

- Access to the DYE-M Cape Dyer from the Atlantic Ocean is via Labrador Sea through Davis Strait /Baffin Bay to Exeter Bay.

Vessel Movements

- There will be approximately one (1) material/equipment sealift and one (1) fuel delivery sealift each season from 2005 to 2010.

- All ships are at least of a Type B Class having ice strengthened hulls.

7.2.2 Air Transportation

Seasonal Factors

- Fog and blowing snow restrict flights on occasion.

Site Facilities

- The landing strip at DYE-M Cape Dyer is 1600 m with a gravel surface. It is capable of handling DC-3, Twin Otter, Dash-7 type aircraft and Hercules aircraft.
- The strip is not lighted.
- Approximately 34-36 flights via Twin Otter every construction season or an average of 2 flights/week to supply fresh food, parts, and allow for staff turnaround.

Scheduled Air Access

- Flights will travel from Edmonton/Montreal/Ottawa/Toronto to Iqaluit.

Local Air Service (Charters)

- Flights will travel between Iqaluit and DYE-M Cape Dyer.

Heavy Cargo Service

- The majority of heavy cargo will arrive at site via sealift although, if necessary, cargo may arrive on scheduled/chartered flights to site.

- The Canadian Armed Services have Hercules aircraft based in Edmonton that can provide service in emergency situations.

7.2.3 Ground Transportation

Seasonal

- DYE-M Cape Dyer is a remote, isolated site with air and sea access only.

On-Site

- Two-lane gravel roadways exist have been constructed to most facilities. These will be upgraded/extended, as necessary, with prior approval from the Engineer and all government authorities having jurisdiction.

7.2.4 Communications

External

- The main communications system (telephone and internet) will be via satellite. The system is to be provided by Northwest Tel. A satellite telephone has been purchased **(AS A BACK-UP)** and is located in the SLE&C site office and is tested bi-weekly.

Local

- There is no local communications system available in the DYE-M Cape Dyer area. An emergency telephone is located at the NWS Site.

Marine

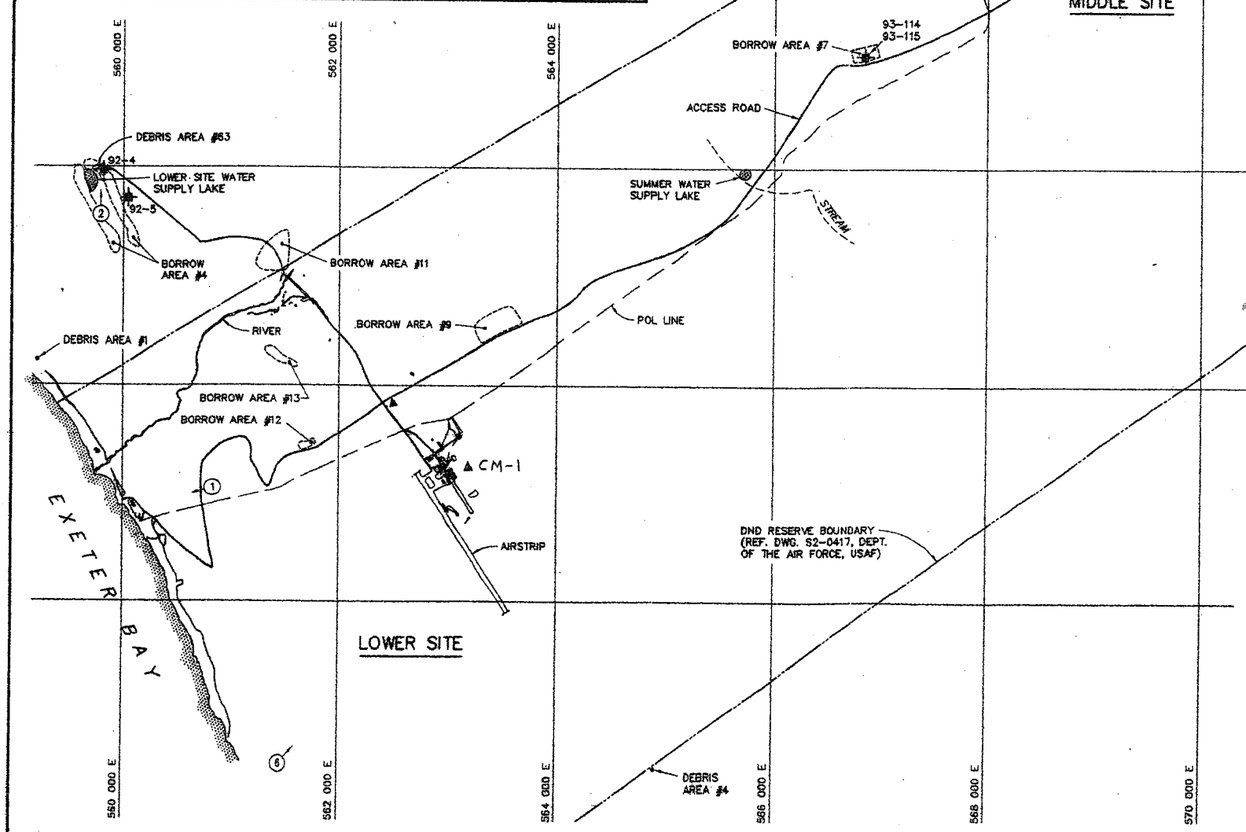
- SSB is available for long range communications over 100 km.
- VHF is used for shorter ranges and emergency communications with Iqaluit in the event of problems with the NorthwesTel system.

Mobile

- Mobile (two-way) radios shall be used for all communications on-site.

LOCATION OF CAPE DYER WITHIN NUNAVUT TERRITORY

N.T.S.



POTENTIAL SOURCES FOR GRANULAR MATERIALS

BORROW AREA	GRANULAR TYPE (SEE SECTION 02226 IN SPECIFICATION)					
	TYPE 1/1A	TYPE 2	TYPE 3	TYPE 4	TYPE 5	TYPE 6
1	✓	✓*	✓*			
2		✓	✓			✓
3		✓	✓			✓
4		✓	✓			
5	NOT AVAILABLE					
6		✓	✓			✓
7		✓	✓			
8	NOT AVAILABLE					
9	✓	✓				
10	✓	✓				
11			✓	✓		
12		✓	✓			✓
13		✓	✓			
ABANDONED AIRSTRIP						✓

* LIMITED QUANTITIES OF TYPE 2 AND TYPE 3.

National Defence / Défense nationale

Headquarters
Quartier général

General Notes:

1. ALL COORDINATES ARE REFERENCED TO UTM ZONE 20N, NAD83.
2. ALL NON-HAZARDOUS DEBRIS FROM SOURCES WEST OF BORROW AREA #7 TO BE PLACED IN LOWER SITE NON-HAZARDOUS WASTE LANDFILL. ALL NON-HAZARDOUS DEBRIS FROM SOURCES EAST OF BORROW AREA #7 TO BE PLACED IN UPPER SITE NON-HAZARDOUS WASTE LANDFILL.
3. REFER TO TABLE 02219-1 IN SPECIFICATIONS FOR DESCRIPTION OF DEBRIS AREAS.

Legend:

- PHOTOGRAPHIC VIEWPOINT
- TEST PIT LOCATION
- BODY OF WATER
- APPROXIMATE EXTENT OF DEBRIS AREAS
- APPROXIMATE EXTENT OF BORROW AREAS
- APPROXIMATE LOCATION OF PROPERTY BOUNDARIES

No.	DATE	REVISION	REVISION	APPR.

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS and GEOPHYSICISTS OF THE NORTHWEST TERRITORIES
PERMIT NUMBER P 057
UMA ENGINEERING LTD.

UMA

SCALE – ECHELLE 400 200 0 400 800 1200m

PROJECT – PROJET
DYE-M CAPE DYER

DEW LINE CLEAN UP

TRADE – METIER SITING

DATE 2003-12-16

SUBJECT – SUJET
OVERALL SITE PLAN

PRODUCTION	CONCURRENCE – ASSENTIMENT
DESIGNED – ETUDIE BWT/CY	DES OFF AGENT CONCEPT
DRAWN – DESSINE KC/CNE	SECT HD CHIEF SECT
CHECKED – VERIFIE BSM	DES MGR CEST CONCEPT
COORDINATION SMT	REVIEWED – REVU

DWG. NO. – DESSIN NO.
H-C75/1-9101-101

Canada

Appendix A

Consolidation of the Nunavut Spill Contingency Planning and Reporting Regulations

ENVIRONMENTAL PROTECTION ACT

CONSOLIDATION OF SPILL CONTINGENCY PLANNING AND REPORTING REGULATIONS

R-068-93

LOI SUR LA PROTECTION DE L'ENVIRONNEMENT

CODIFICATION ADMINISTRATIVE REGLEMENT SUR LES EXIGENCES EN MATIERE DE DEVERSEMENTS

R-068-93

AS AMENDED BY

MODIFIÉ PAR

This consolidation is not an official statement of the law. It is an office consolidation prepared for convenience of reference only. The authoritative text of regulations can be ascertained from the *Revised Regulations of the Northwest Territories, 1990* and the monthly publication of Part II of the *Northwest Territories Gazette* (for regulations made before April 1, 1999) and Part II of the Nunavut Gazette (for regulations made on or after April 1, 1999).

La presénte codification administrative ne constitue pas le texte officiel de la loi; elle n'est établie qu'à titre documentaire. Seuls les règlements contenus dans les *Règlements révisés des Territoires du Nord-Ouest (1990)* et dans les parutions mensuelles de la Partie II de la *Gazette des Territoires du Nord-Ouest* (dans le cas des règlements pris avant le 1er avril 1999) et de la Partie II de la Gazette du Nunavut (dans le cas des règlements pris depuis le 1er avril 1999) ont force de loi.

ENVIRONMENTAL PROTECTION ACT

SPILL CONTINGENCY PLANNING AND REPORTING REGULATIONS

The Commissioner, on the recommendation of the Minister, under section 34 of the *Environmental Protection Act* and every enabling power, makes the *Spill Contingency Planning and Reporting Regulations*.

1. In these regulations,

"above ground facility" means a facility that is stationary for a period of 30 days or more and is not an underground facility; (*installation en surface*)

"Act" means the *Environmental Protection Act*; (*Loi*)

"facility" means any thing capable of storing or containing contaminants and includes any thing used in the transfer of contaminants to and from the facility; (*installation*)

"PCB" means the chlorobiphenyls that have the molecular formula C_{12} H_{10-N} Cl_N in which N is greater than 2; (*BPC*)

"spill" means a discharge of a contaminant in contravention of the Act or regulations made under the Act or a permit or licence issued under the Act or regulations made under the Act; (*déversement*)

"storage capacity" means the aggregate capacity of all facilities placed together in one location; (*capacité d'entreposage*)

"TDGA Class" means a class of dangerous goods set out in the Schedule to the *Transportation of Dangerous Goods Act, 1992* (Canada), and any division of a class established in regulations made or continued under that Act; [*classe (LTMD)*]

"underground facility" means a facility having more than 10% of its structure beneath ground level. (*installation souterraine*)

LOI SUR LA PROTECTION DE L'ENVIRONNEMENT

RÈGLEMENT SUR LES EXIGENCES EN MATIÈRE DE DÉVERSEMENTS

Le commissaire, sur la recommandation du ministre, en vertu de l'article 34 de la *Loi sur la protection de l'environnement* et de tout pouvoir habilitant, prend le *Règlement sur les exigences en matière de déversements.*

1. Les définitions qui suivent s'appliquent au présent règlement.

«BPC» Désigne tout biphényle polychloré caractérisé par la structure moléculaire $C_{12}H_{10-N}Cl_N$, où N est supérieur à 2. (*PCB*)

«capacité d'entreposage» Capacité d'entreposage de l'ensemble des installations réunies en un lieu. (*storage capacity*)

«classe (LTMD)» Classe de marchandises dangereuses prévue à l'annexe de la *Loi de 1992 sur le transport des marchandises dangereuses* (Canada), ou toute division d'une classe établie par un règlement pris ou maintenu en vertu de cette loi. (*TDGA Class*)

«déversement» Rejet de tout contaminant en contravention de la Loi ou de ses règlements ou en contravention d'un permis ou d'une licence délivré en vertu de la Loi ou de ses règlements. (*spill*)

«installation» Désigne tout objet dans lequel il est possible d'entreposer des contaminants ou qui peut contenir des contaminants, et comprend tout objet utilisé dans le transfert de contaminants en provenance ou à destination de l'installation. (*facility*)

«installation en surface» Désigne toute installation qui demeure stationnaire pendant 30 jours ou plus et qui n'est pas une installation souterraine. (*above ground facility*)

«installation souterraine» Toute installation dont plus de 10 % de la structure est située sous le niveau du sol. (*underground facility*)

«Loi» La *Loi sur la protection de l'environnement*. (*Act*)

2. (1) Sections 3 to 8 of these regulations do not apply to the following:

(a) a motor vehicle, as defined in the *Motor Vehicles Act*, unless that motor vehicle is an above ground facility;

(b) sewage and sewage sludge.

2. (1) Les articles 3 à 8 du présent règlement ne s'appliquent pas :

a) à un véhicule automobile au sens de la *Loi sur les véhicules automobiles*, à moins que le véhicule automobile ne soit une installation en surface;

b) aux eaux usées ni aux boues d'épuration.

(2) Contaminants used solely for domestic purposes and discharged from within a dwelling-house are exempt from the requirements of these regulations.

(2) Le présent règlement ne s'applique pas aux contaminants utilisés uniquement à des fins domestiques dont le rejet provient de l'intérieur d'une maison d'habitation.

(3) In Schedule A, the amounts set out in column 3 under the heading "STORAGE CAPACITY" refer to liquids, where the amount is expressed in litres, and to solids, where the amount is expressed in kilograms.

(3) Les quantités prévues à la troisième colonne de l'annexe A, sous l'intertitre «CAPACITÉ D'ENTREPOSAGE», visent les matières liquides lorsque la mesure se fait en litres, et les matières solides lorsque la mesure se fait en kilogrammes.

(4) In Schedule B, the amounts set out in column 4 under the heading "AMOUNT SPILLED" refer to liquids, where the amount is expressed in litres, and to solids, where the amount is expressed in kilograms.

(4) Les quantités prévues à la quatrième colonne de l'annexe B, sous l'intertitre «QUANTITÉ DÉVERSÉE», visent les matière liquides lorsque la mesure se fait en litres, et les matières solides lorsque la mesure se fait en kilogrammes.

SPILL CONTINGENCY PLAN

PLAN DE CONTRÔLE DES DÉVERSEMENTS

3. (1) No person shall store contaminants in a facility where the storage capacity of the facility equals or exceeds the storage capacity shown in Schedule A unless a spill contingency plan has been prepared and filed in accordance with these regulations.

3. (1) Il est interdit d'entreposer des contaminants dans une installation dont la capacité d'entreposage est égale ou supérieure à celle indiquée à l'annexe A, à moins d'avoir établi un plan de contrôle des déversements et de l'avoir soumis en conformité avec le présent règlement.

(2) Where the storage capacity of a facility is less than the storage capacity shown in Schedule A and where, in the opinion of the Chief Environmental Protection Officer a spill contingency plan is necessary for the protection of the environment, the Chief Environmental Protection Officer may require the owner or person in charge, management or control of a facility to prepare a spill contingency plan.

(2) Dans le cas où la quantité de contaminants entreposés est inférieure à la capacité d'entreposage indiquée à l'annexe A, le directeur de la protection de l'environnement peut exiger du propriétaire ou du responsable d'une installation l'établissement d'un plan de contrôle des déversements, si le directeur est d'avis qu'un tel plan est nécessaire aux fins de protection de l'environnement.

(3) Where the Chief Environmental Protection Officer is satisfied, on reasonable grounds, that a person uses a means of storing contaminants and a

(3) S'il est convaincu, pour des motifs raisonnables, que la méthode qu'utilise une personne pour l'entreposage des contaminants et celle qu'elle

method of dealing with the spill of contaminants, that provide a level of environmental protection at least equivalent to that which would be provided by compliance with these regulations, the Chief Environmental Protection Officer may, in writing, subject to such conditions as the Chief Environmental Protection Officer considers necessary,

(a) exempt a person from the requirement to file a spill contingency plan under subsection (1); or

(b) exempt a person from the requirement to include in a spill contingency plan information required in one or more of paragraphs 4(2)(a) to (j).

4. (1) The owner or person in charge, management or control of a facility shall ensure that a spill contingency plan is prepared.

(2) A spill contingency plan for a facility must contain the following information:

(a) the name, address and job title of the owner or person in charge, management or control;

(b) the name, job title and 24-hour telephone number for the persons responsible for activating the spill contingency plan;

(c) a description of the facility including the location, size and storage capacity;

(d) a description of the type and amount of contaminants normally stored at the location described in paragraph (c);

(e) a site map of the location described in paragraph (c);

(f) the steps to be taken to report, contain, clean up and dispose of contaminants in the case of a spill;

(g) the means by which the spill contingency plan is activated;

(h) a description of the training provided to employees to respond to a spill;

(i) an inventory of and the location of response and clean-up equipment available to implement the spill contingency plan;

(j) the date the contingency plan was prepared.

utilise pour faire face au déversement de contaminants offrent un degré de protection de l'environnement qui n'est pas inférieur à celui exigé en application du présent règlement, le directeur de la protection de l'environnement peut par écrit, sous réserve des autres conditions qu'il estime nécessaires :

a) soit soustraire cette personne de l'obligation de soumettre un plan de contrôle des déversements en vertu du paragraphe (1);

b) soit soustraire cette personne de l'obligation d'inclure au plan de contrôle des déversements l'un ou l'autre des renseignements prévus aux alinéas 4(2)a) à j).

4. (1) Le propriétaire ou le responsable d'une installation doit faire en sorte qu'un plan de contrôle des déversements soit établi.

(2) Le plan de contrôle des déversements applicable à une installation fait état des renseignements suivants :

a) le nom, l'adresse et le poste du propriétaire ou du responsable;

b) le nom et le poste des responsables de la mise en oeuvre du plan de contrôle des déversements, ainsi que le numéro de téléphone où ils peuvent être rejoints 24 heures par jour;

c) la description de l'installation, notamment le lieu, les dimensions et la capacité d'entreposage;

d) la nature des contaminants habituellement entreposés dans l'installation mentionnée à l'alinéa c), ainsi que la quantité de contaminants qui y sont habituellement entreposées;

e) une carte du lieu mentionné à l'alinéa c);

f) la procédure de rapport, ainsi que les mesures de confinement, de nettoyage et d'élimination prévues en cas de déversement;

g) la procédure de mise en oeuvre du plan de contrôle des déversements;

h) la description de la formation donnée aux employés en matière de mesures à prendre en cas de déversement;

i) l'inventaire et le lieu d'entreposage de

l'équipement de nettoyage et de mise en oeuvre du plan de contrôle des déversements;

j) la date d'établissement du plan de contrôle des déversements.

5. (1) Subject to subsection (2), the person responsible for preparing a spill contingency plan shall file the plan with the Chief Environmental Protection Officer before making use of a facility.

(2) Where a facility is already in use on the day these regulations come into force, the person responsible for preparing a spill contingency plan shall file the plan with the Chief Environmental Protection Officer within one year after that day.

5. (1) Sous réserve du paragraphe (2), le responsable de l'établissement d'un plan de contrôle des déversements soumet le plan au directeur de la protection de l'environnement avant de faire usage d'une installation.

(2) Dans le cas où une installation est déjà en usage à la date d'entrée en vigueur du présent règlement, le responsable de l'établissement du plan de contrôle des déversements doit soumettre le plan au directeur de la protection de l'environnement dans l'année qui suit cette entrée en vigueur.

6. (1) The Chief Environmental Protection Officer shall review each spill contingency plan after it is filed.

(2) The Chief Environmental Protection Officer may require the person who filed the spill contingency plan to make changes to it.

(3) Where the Chief Environmental Protection Officer requires changes under subsection (2), he or she may indicate a reasonable period of time within which the changes must be filed.

(4) The person who filed a spill contingency plan shall make and file any changes required under subsection (2).

6. (1) Le directeur de la protection de l'environnement révise chaque plan de contrôle des déversements qui lui est soumis.

(2) Le directeur de la protection de l'environnement peut exiger que la personne qui soumet un plan de contrôle des déversements y apporte des modifications.

(3) Dans le cas où le directeur de la protection de l'environnement exige, en vertu du paragraphe (2), que des modifications soient apportées au plan de contrôle des déversements, il peut fixer un délai raisonnable pour la soumission de ces modifications.

(4) La personne qui soumet un plan de contrôle des déversements doit apporter et soumettre toute modification exigée en vertu du paragraphe (2).

7. (1) The person responsible for preparing a spill contingency plan shall review the plan annually.

(2) The person responsible for preparing a spill contingency plan shall, in writing, notify the Chief Environmental Protection Officer when a review under subsection (1) has been completed and shall immediately file with the Chief Environmental Protection Officer any changes made to the plan.

7. (1) Le responsable de l'établissement d'un plan de contrôle des déversements doit le réviser annuellement.

(2) Le responsable de l'établissement d'un plan de contrôle des déversements doit aviser par écrit le directeur de la protection de l'environnement de la révision du plan en vertu du paragraphe (1), et lui soumettre immédiatement toute modification apportée au plan.

8. Once a spill contingency plan has been filed, the

8. Après avoir soumis un plan de contrôle des

person responsible for preparing the plan shall implement the plan.

SPILLS

9. (1) The owner or person in charge, management or control of contaminants at the time a spill occurs shall immediately report the spill where the spill is of an amount equal to or greater than the amount set out in Schedule B.

(2) Where there is a reasonable likelihood of a spill in an amount equal to or greater than the amount set out in Schedule B, the owner or person in charge, management or control of the contaminants shall immediately report the potential spill.

10. A person reporting a spill shall contact the 24 Hour Spill Report Line by calling **(867) 920-8130.**

11. (1) A person reporting a spill shall give as much of the following information as possible:

(a) date and time of spill;
(b) location of spill;
(c) direction spill is moving;
(d) name and phone number of a contact person close to the location of spill;
(e) type of contaminant spilled and quantity spilled;
(f) cause of spill;
(g) whether spill is continuing or has stopped;
(h) description of existing containment;
(i) action taken to contain, recover, clean up and dispose of spilled contaminant;
(j) name, address and phone number of person reporting spill;
(k) name of owner or person in charge, management or control of contaminants at time of spill.

(2) No person shall delay reporting a spill because of lack of knowledge of any of the factors listed in subsection (1).

déversements, le responsable de l'établissement du plan le met en oeuvre.

DÉVERSEMENTS

9. (1) Lorsque survient le déversement d'une quantité de contaminants au moins égale à celles stipulées à l'annexe B, le propriétaire ou le responsable du contaminant au moment du déversement est tenu de le signaler sur-le-champ.

(2) Le propriétaire ou le responsable de contaminants a l'obligation de signaler sur-le-champ un déversement potentiel lorsqu'il est raisonnablement possible que la quantité déversée soit au moins égale à celle stipulée à l'annexe B.

10. La personne qui signale un déversement le fait à toute heure en téléphonant à SOS Déversement, au **(867) 920-8130**.

11. (1) La personne qui signale un déversement doit indiquer, dans la mesure du possible :

a) la date et l'heure du déversement;
b) le lieu du déversement;
c) la direction dans laquelle le déversement s'étend;
d) le nom et le numéro de téléphone d'une personne vivant à proximité des lieux du déversement et qui peut être contactée;
e) la nature des contaminants et la quantité déversée;
f) la cause du déversement;
g) le fait que le déversement soit terminé ou non;
h) les moyens de confinement déjà en place;
i) les mesures prises pour confiner, ramasser et éliminer les contaminants et nettoyer les lieux;
j) le nom, l'adresse et le numéro de téléphone de la personne qui signale le déversement;
k) le nom du propriétaire ou celui du responsable des contaminants au moment du déversement.

(2) Il est interdit de retarder le signalement d'un déversement en raison d'un manque de connaissance des éléments d'information indiqués au paragraphe

(1).

12. No person shall knowingly make a false report of a spill or a potential spill.

13. (1) For the purposes of evaluating the effectiveness of the spill contingency plan, the Chief Environmental Protection Officer may require, in writing, the owner or person in charge, management or control of a facility at the time a spill occurred to prepare and file a written report concerning the spill.

(2) The person required to prepare the report described in subsection (1) shall provide all information required by the Chief Environmental Protection Officer.

12. Il est interdit de faire sciemment un faux signalement d'un déversement ou d'un déversement potentiel.

13. (1) Le directeur de la protection de l'environnement peut, à des fins d'évaluation de l'efficacité du plan de contrôle des déversements, exiger par écrit du propriétaire ou du responsable d'une installation au moment d'un déversement qu'il présente un rapport écrit relatif au déversement.

(2) La personne à qui le directeur de la protection de l'environnement demande de présenter un rapport sur un déversement doit fournir tous les renseignements exigés par le directeur.

SCHEDULE A *(Section 3)*

ANNEXE A *(article 3)*

(1)	(2)	(3)	(1)	(2)	(3)
ITEM NO.	TYPE OF FACILITY	STORAGE CAPACITY	Nº	TYPE DE DÉPÔT	CAPACITÉ D'ENTREPOSAGE
1.	Above ground facility	20,000 ℓ or 20,000 kg	1.	Installation en surface	20 000 l ou 20 000 kg
2.	Underground facility	4,000 ℓ or 4,000 kg	2.	Installation souterraine	4 000 l ou 4 000 kg

SCHEDULE B *(Section 9)*

(1) ITEM NO.	(2) TDGA CLASS	(3) DESCRIPTION OF CONTAMINANT	(4) AMOUNT SPILLED
1.	1	Explosives	Any amount
2.	2.1	Compressed gas (flammable)	Any amount of gas from containers with a capacity greater than 100 ℓ
3.	2.2	Compressed gas (non-corrosive, non flammable)	Any amount of gas from containers with a capacity greater than 100 ℓ
4.	2.3	Compressed gas (toxic)	Any amount
5.	2.4	Compressed gas (corrosive)	Any amount
6.	3.1, 3.2, 3.3	Flammable liquid	100 ℓ
7.	4.1	Flammable solid	25 kg
8.	4.2	Spontaneously combustible solids	25 kg
9.	4.3	Water reactant solids	25 kg
10.	5.1	Oxidizing substances	50 ℓ or 50 kg
11.	5.2	Organic Peroxides	1 ℓ or 1 kg
12.	6.1	Poisonous substances	5 ℓ or 5 kg

ANNEXE B

(article 9)

(1)	(2)	(3)	(4)
N°	CLASSE (LTMD)	CONTAMINANT	QUANTITÉ DÉVERSÉE
1.	1	Explosif	Toute
2.	2.1	Gaz comprimé (inflammable)	Toute quantité de gaz provenant d'un contenant d'une capacité supérieure à 100 l
3.	2.2	Gaz comprimé (non corrosif, ininflammable)	Toute quantité de gaz provenant d'un contenant d'une capacité supérieure à 100 l
4.	2.3	Gaz comprimé (toxique)	Toute
5.	2.4	Gaz comprimé (corrosif)	Toute
6.	3.1, 3.2, 3.3	Liquide inflammable	100 l
7.	4.1	Solide inflammable	25 kg
8.	4.2	Solide sujet à l'inflammation spontanée	25 kg
9.	4.3	Solide réagissant au contact de l'eau	25 kg
10.	5.1	Matière comburante	50 l ou 50 kg
11.	5.2	Peroxyde organique	1 l ou 1 kg
12.	6.1	Matière toxique	5 l ou 5 kg

13.	6.2	Infectious substances	Any amount
14.	7	Radioactive	Any amount
15.	8	Corrosive substances	5 ℓ or 5 kg
16.	9.1 (in part)	Miscellaneous products or substances, excluding PCB mixtures	50 ℓ or 50 kg
17.	9.2	Environmentally hazardous	1 ℓ or 1 kg
18.	9.3	Dangerous wastes	5 ℓ or 5 kg
19.	9.1 (in part)	PCB mixtures of 5 or more parts per million	0.5 ℓ or 0.5 kg
20.	None	Other contaminants	100 ℓ or 100 kg

13.	6.2	Matière infectieuse	Toute
14.	7	Matière radioactive	Toute
15.	8	Matière corrosive	5 l ou 5 kg
16.	9.1 (en partie)	Matière diverse ou produit divers (mélanges contenant des BPC exclus)	50 l ou 50 kg
17.	9.2	Matière nocive pour l'environnement	1 l ou 1 kg
18.	9.3	Déchet toxique	5 l ou 5 kg
19.	9.1 (en partie)	Mélange contenant 5 parties ou plus de BPC par million	0,5 l ou 0,5 kg
20.	Aucune	Autre contaminant	100 l ou 100 kg

Appendix B

Nunavut Spill Report Form

NUNAVUT SPILL REPORT (Oil, Gas, Hazardous Chemicals or other Materials) **24-Hour Report Line 24**

Phone (867) 920-8130
Fax (867) 873-6924

A Report Date and Time	**B** Date and Time of Spill(if known)	**C** ☐ Original Report ☐ Update No. _____	Spill Number

D Location and Map Coordinates (if known) and Direction (if moving)

E Party Responsible for Spill (Full Name and Address)

F Product(s) Spilled and Estimated Quantities(provide metric volumes/weights if possible)

G Cause of Spill

H Is Spill Terminated?	**I** If Spill is Continuing, give Estimated Rate	**J** Is Further Spillage Possible?	**K** Extent of Contaminated Area(in square metres if possible)
☐ Yes ☐ No		Yes ☐ No ☐	

L Factors Affecting Spill or Recovery(weather conditions, terrain, snow cover, etc.)	**M** Containment(natural depression, dykes, etc.)

N Action, if any, taken or Proposed to Contain, Recover, Clean up or Dispose of Product(s) and Contaminated Materials

O Do You Require Assistance? ☐ No ☐ Yes, describe:	**P** Possible Hazards to Persons, Property or Environment e.g. fire, drinking water, fish or wildlife

Q Comments and/or Recommendations	**FOR SPILL LINE USE ONLY**
	Lead Agency ..... Spill Significance ..... Lead Agency Contact and Time .... Is this file now closed?.....

Reported By	Position, Employer, Location	Telephone

Reported To	Position, Employer, Location	Telephone